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### 7th Congress of the Tunisian Society of Medical Oncology Sousse, Tunisia, 26-27 April 2024

### Abstracts

### **Breast Cancer**

001 : Comparison of 4 prognostic risk scores for Tunisian patients with early luminal breast cancer

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**Introduction :** For endocrine receptor positive breast cancer patients relapse often occurs after the end of 5 years of adjuvant endocrine therapy. Given the high propensity of distant relapse for patients with early luminal breast cancer, stratifying patients based on their risk of late distant recurrence is a necessity. Prolonging Endocrine therapy lowers the incidence of relapse. Gene assays can identify patients with higher risk. But they are expensive and unavailable for most patients. Other prognostic scores exist. They are easily available. Our aim was to validate and identify the most accurate score for a Tunisian population.

**Materials and Methods :** We retrospectively evaluated the validity of 4 different prognostic scores: CTS 5, NPI, IHC 4 and Predict UK; in 350 patients diagnosed with early ER+ breast cancer at Salah Azaiz Institute from the year 2008 to the year 2014 and who were alive and distant recurrence-free at the 5-year mark. These scores are available online and were calculated for each patient in our population. Patients were stratified according to their scores into different risk groups of late distant recurrence. We compared the results given by each score to real life data to find the most accurate score.

**Result :** CTS 5, NPI and IHC stratified patients into 3 risk groups: high, intermediate and low risk. For CTS5 stratification was: high 34.29% (120patients), intermediate: 36.57% :128 patients; and low risk group: 29.14%: 102. For the NPI score: good prognosis: 124 patients: 35.43% of the population; intermediate: (156:44.6%) and poor: (70: 20%. For IHC4 score: high: 25.14%: 88 patients, intermediate 32.9%: 115 patients; and low: 42% 147 patients. Predict gives an estimate for PFS with the added benefit of each therapy strategy. When compared all 4 scores using the AUC method: CTS 5' area is 72% considered fair. Predict UK had an area of 70%. For NPI, the area is 67.7%, considered poor. For IHC4 score the score is 49%: fail.

**Conclusion :** Thus CTS 5 score is the most accurate prognostic score to predict LDR followed by predict UK for the Tunisian population. IHC 4 is cannot be applied on a Tunisian population and therefore should not be used.

### 002 : Validation of the clinical treatment score at 5 years for patients with early endocrine receptor postive breast

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**Introduction :** Clinical treatment score at 5 years is a prognostic tool developed to estimate the risk of relapse for patients treated with early endocrine receptor positive breast cancer. It stratifies patients into risk groups: low, intermediate and high. Early ER+ breast cancer is associated with higher risk of late distant recurrence than other molecular sub types. Prolonging adjuvant endocrine therapy beyond 5 years lowers this risk. The score uses 4 variables and is easily accessible online.

**Materials and Methods :** We retrospectively evaluated the CTS 5 score for 350 patients treated for early luminal breast cancer at the Salah Azaiz Institute from 2008 to 2014. Only patients who were disease free 5 years after diagnosis were included. CTS 5 score was calculated to stratify patients into risk groups and estimate PFS. We compared the real PFS to the estimated PFS. Survival curves were calculated using the Kaplan Meir method. We studied its accuracy using the AUC method.

**Result :** Patients in the low, intermediate and high-risk groups represented 29.1%; 36.6% and 34.3% respectively. Relapse occurred in 2.29% of the cases, 3.43% and 8.86% of the cases for the low, intermediate and high-risk groups respectively. A khi deux de Pearson test studied the correlation between the risk estimation and the relapse: p was under 0.05. Average PFS for patients in the low risk was 10.6 years, 10.523 for the intermediate and 9.588 years for the high-risk group. As for its accuracy with the menopausal status: p for pre-menopausal patients was 0.0002 and for postmenopausal patients: 0.008. The AUC for this test was 72%.

**Conclusion :** CTS 5 applied to the Tunisian population is a fairly accurate test for predicting late distant recurrences. However, it does not discriminate between the low and the intermediate groups. It overestimates relapse for patients with intermediate risk and is more accurate for premenopausal patients.

#### 003 : Adenoid Cystic Carcinoma of the breast : About 5 cases and review of the literature, Current issues in radiotherapy for anal cancer

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**Introduction :** Adenoid cystic carcinoma (ACC) is an extremely rare type of breast cancer with the incidence of less than 0.1.It is distinguished by a favorable prognosis .Our study aims to analyze clinical manifestations and pathological characteristics of this disease and report in combination with a literature review to boost comprehension, diagnosis, and treatment of this disease.

**Materials and Methods :** We collected five breast ACC cases pathologically diagnosed and treated in the Department of Surgical Oncology of Salah Azaiez Institute from January 2015 to December 2022. **Result :** Our identified patients had a median age of 68,6, three with early-stage cancer (T2), and two with locally advanced stage T4b, T4d (ulcer and inflammatory signs). The average time between discovering the lesion and consulting was 11,2 months. The average size of the breast lesion was 4,4\*3,3 cm.The nodal status was negative for two patients. Four patients had resection as primary therapy, two lumpectomy and lymph node dissection, two total mastectomies, and only one had neoadjuvant chemotherapy followed by radical mastectomy. The postoperative course

of all patients was simple. The Histology report objectified one solid basaloid ACCB (SB-ACCB); the rest of the cases were classic ACCB, Ki-67 median rage was 24 %, and lymph nodes were free from tumor invasion. Vascular involvement was seen in two patients. Two patients had external radiotherapy and one adjuvant chemotherapy. No one received hormonal therapy (Hormonal receptors were absent). Median follow-up was 39,1 months, with a range of 7-105 months, with all patients being disease-free at the last follow-up; only one patient was lost of sight.

**Conclusion :** Due to the rarity of the disease and the lack of studies, guidelines for treatment have not been established. Because of these distinct clinicopathologic features that set it apart from the other triple negative breast cancers, an understanding of ACC of the breast is essential for surgical pathologists, breast surgeons, and oncologists.

#### 004 : Predict UK and the risk of Late distant recurrence for early luminal breast cancer patients Medico-legal aspects of radiotherapy

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**Introduction :** Early luminal breast cancer has a continued risk of relapse, particularly after five years of endocrine therapy. To prolong BC survival, some patients are given additional endocrine therapy beyond the five-year mark. However, ET can have many adverse events and may not be well tolerated for all patients. Patients should thus be selected based on their risk profile. The aim of this study is to evaluate whether Predict UK can be used to determine risk of LDR in early ER+ BC.

**Materials and Methods :** Patient files from the Institute Salah Azaiz, spanning from 2011 to 2014, were meticulously reviewed. Predict UK was calculated for the population of 350 patients. The results were compared to the real-life data. Survival curves were estimated using the Kaplan Meir method. To study the accuracy of the test we used the area under the curve method.

**Result :** The overall estimated survival for the population at 10 years averages at 72.25% [min: 5%- max:95%]and a median of 80%. At 15 years, predict UK estimates an average OS of 60.72% and a median of 69% with a minimum of 1% and a maximum of 91%. Standard deviation is 22.49460. A correlation analysis studied the existence of a relation between predict UK's estimated overall survival and actual overall survival for the population. P value was highly significant with r=0.151. meaning the higher the percentage predicted by calculating the score, the higher the OS. For the predict UK an area under the curve of 70% shows this test's accuracy is considered fair.

**Conclusion :** Predict UK can be used to estimate the risk of relapse for Tunisian patients treated with early endocrine receptor positive breast cancer. Its accuracy is considered fair and thus can be safely used to determine the patients that warrant prolongation of adjuvant ET.

# **005** : A population-based evaluation of the Immunohistochemical 4 score for early luminal breast cancer Watch and Wait approach: the organ preservation strategy for lower rectal cancer

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**Introduction :** Immunohistochemical 4 score is a prognostic tool developed and currently being used to estimate the risk of recurrence for breast cancer patients. ER+BC is known for high incidence of late relapse. ET beyond 5 years can lower the risk of relapse in patients with high risk tumors. This study aims to validate the IHC 4 score's prognostic abilities in a Tunisian population of early ER+ breast cancer patients.

**Materials and Methods :** We retrospectively studied 350 patients diagnosed at the salah Azaiz institute with early ER+ breast cancer. Patients were followed after 5 to 10 years after initial diagnosis. The score was calculated for all patients to estimate the risk of recurrences after completion of treatment. IHC4 classifies patients into 3 risk groups. PFS was calculated for each group and survival curves were drawn using the Kaplan Meir method. To study the accuracy of the test of predicting LDR we used the area under the curve method.

**Result :** Patients were stratified into low: 24%, intermediate: 30.6% and high risk: 45.4% groups. Relapse occurred in 12.9%; 20.9% and 8.1% and of the groups respectively. Average PFS was 10.4694 for the low, 9.9913 for the intermediate and 10.3295 for the high-risk group; compared to the actual average PFS of the population of 10.6 years. An intergroups analysis studied the difference between the risk groups: p value was under 0.05 only between the low and the intermediate risk groups. The same results were found regardless of the menopausal status of the patients: p value was above 0.05 for both groups. The AUC for the test was 49%.

**Conclusion :** IHC4 is thus considered a failure and cannot be used to estimate LDR for Tunisian patients with early ER + breast cancer. The IHC 4 score does discriminate between the low and high-risk group regardless of the menopausal status of the patients.

### 006 : The Nottingham prognostic index and the 5 to 10 year relapse risk for Luminal Breast Cancer Patient information and consent in Radiotherapy: legal and ethical aspects

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**Introduction :** The Nottingham prognostic index is an established readily available tool that has been used as a prognostic tool for breast cancer patients. It uses three pathological variables: nodal status, tumor size and histological grade. These 3 factors are combined into an equation to calculate a score, stratifying patients into 3 groups according to their risk of relapse. The aim of this study is to externally validate the NPI score in a population of Tunisian patients diagnosed with early ER+ BC.

**Materials and Methods :** We collected Data for patients diagnosed with early endocrine receptors positive breast cancer treated at the Salah Azaiz Institute. The study included 350 patients. The score was calculated for each. PFS for the population was evaluated and compared to the actual PFS of each group. The test's accuracy was assessed through the area under the curve technique, while survival curves were derived using the Kaplan Meir approach.

**Result :** NPI stratified patients into 3 risk groups: low with 20% of the population; intermediate: 44.6 and high with 35.4%. these groups experienced relapse in 6.5%, 15.4% and 27.1 for the low, intermediate and high-risk groups respectively. The AUC for the NPI score was 67%. Average PFS was 10.774 for the low, 10.141 for the intermediate and 9.7 years for high risk group. No statistical difference was found between the intermediate and the high-risk groups. A khi-deux de Pearson test studied its accuracy based on the menopausal status, p value for the premenopausal patients was 0.002 and 0.017 for post-menopausal.

**Conclusion :** NPI is considered poorly accurate in estimating Late distant recurrence. It does not however discriminate between the high and the intermediate risk groups, which suggests that this group could be merged. It underestimates the risk of recurrence for the intermediate group. NPI should not be used solely to guide treatment decisions.

### 007 : BREAST CANCER AND PREGNANCY: A STUDY OF 12 CASES Sexual Health and self-esteem in Prostate cancer

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**Introduction :** Breast cancer is a major public health issue, being the most common cancer in women in Tunisia and worldwide. The occurrence of breast cancer during pregnancy is rare and is defined as the diagnosis of breast cancer during pregnancy or up to one year after delivery. Breast cancer is the most common type of cancer associated with pregnancy. The aim of this study was to describe the clinical, radiological, histological, and therapeutic characteristics of breast cancer diagnosed during pregnancy.

**Materials and Methods :** This is a retrospective, descriptive, and singlecenter study including 12 patients in whom breast cancer was diagnosed during pregnancy or within one year postpartum over an 11-year period (2012-2023) and managed at Hedi Chaker University Hospital of Sfax.

**Result :** The average age of the patients was 32 years. Most cases of breast cancer associated with pregnancy were diagnosed in the postpartum period. Invasive ductal carcinoma was the major histological type (91.7% of cases), with one rare case of secretory carcinoma observed. Clinical staging was dominated by T2 forms. Hormone receptors were negative in 33.4% of cases, and HER2 receptor was positive in 25% of cases. Cancer was discovered in the third trimester of pregnancy in 4 cases and in the second trimester in 3 cases. These 7 patients underwent surgical treatment and chemotherapy during pregnancy, delivering by scheduled cesarean section between 34 and 37 weeks of gestation, with a 3-week interval after the last chemotherapy session. In 2 cases, the diagnosis was made in the first trimester, leading to termination of the pregnancy. Disease progression included distant recurrence in 2 cases, contralateral recurrence in 3 cases. The average survival was 34.3 months.

**Conclusion :** Although rare, breast cancer should be systematically considered by clinicians or radiologists in the presence of any clinical or functional symptoms in pregnant or postpartum women. This approach allows for early diagnosis and optimal management.

# 008 : Pregnancies after breast cancer: Contraception delay, obstetric and neonatal outcomes

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**Introduction :** Breast cancer is the most common cancer in women, with approximately 7% of breast cancers diagnosed in women under 40 years of age. We are increasingly faced with the follow-up of young patients with a history of breast cancer who have a desire for pregnancy. There is currently a limited number of studies on this topic.

**Materials and Methods :** This is a retrospective, descriptive, singlecenter study conducted at the Department of Obstetrics and Gynecology at CHU Hedi Chaker in Sfax, over a period of 3 years from January 1, 2020, to December 31, 2022. We studied the conception delay after breast cancer, obstetric and neonatal outcomes of pregnancies in a cohort of young patients under 43 years of age previously treated at our center for breast cancer.

**Result :** 28 patients were included in the study. The median age was 34.8 years. The conception delay for patients after breast cancer was 13 months. The majority of pregnancies were successful, with a live birth in 71.5% of cases, a rate of spontaneous miscarriages of 10.7%, and a rate of pregnancy termination of 7.1%. Among patients with a successful pregnancy, 30% underwent cesarean section and 40% delivered prematurely. The median birth weight was 3150g, with the majority of newborns (90%) having an Apgar score >7 at birth. No malformations were reported, and 15% of newborns were breastfed.

**Conclusion :** It is essential to provide information and address fertility and maternity issues from the diagnosis of breast cancer and throughout follow-up. Patients can be reassured regarding obstetric and neonatal risks. **009 : Predective factors of success of breast cancer conservative treatment** 

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**Introduction :** Breast cancer represents a major public health issue. Conservative treatment is on the rise, thanks to early-stage diagnosis and advancements in neoadjuvant treatments. However, despite the documented equivalence in terms of overall survival between radical treatment and conservative treatment, the risk of local recurrence remains higher after breast conservation. The objective of our study was to evaluate factors influencing overall survival, locoregional recurrence-free survival, metastasis-free survival, and disease-free survival after conservative treatment.

**Materials and Methods :** This was a retrospective, descriptive, and analytical study conducted over a 10-year period, from January 1, 2010, to December 31, 2020, at the departments of obstetrics and gynecology, radiotherapy at Hedi Chaker University Hospital in Sfax, and the medical oncology department at Habib Bourguiba University Hospital in Sfax. We included cases of confirmed invasive carcinoma on histological examination, with clear surgical margins, and who received adjuvant radiotherapy.

Result : Our sample size consisted of 320 patients. We observed a significant increase in the rate of conservative treatment, from 18.1% in 2010 to 53.1% in 2020. In univariate analysis, age under 40 years was found to significantly decrease locoregional recurrence-free survival and disease-free survival. Menopausal status did not have a statistically significant impact on survival outcomes after conservative treatment. Clinical tumor size over 3 cm significantly decreased disease-free survival post conservative treatment. Lobular carcinoma decreased overall survival and disease-free survival. High SBR grade decreased metastasis-free survival and disease-free survival. "Luminal A" tumors had better metastasis-free survival, and lymph node involvement significantly impacted overall survival and recurrence-free survival. The number of histologically involved lymph nodes did not significantly impact survival rates. The presence of lymphovascular invasion led to lower survival rates, although not statistically significant. Response to neoadjuvant chemotherapy and time between surgery and radiotherapy did not significantly impact survival rates. In multivariate analysis, no independent predictive factor for overall survival after conservative treatment was identified. Age was the only independent predictive factor for locoregional recurrence-free survival. Molecular subtype and histological lymph node involvement were independent predictive factors for metastasis-free survival. Additionally, histological type and molecular subtype were independent predictive factors for better metastasis-free survival.

**Conclusion :** An improvement in the prognosis of breast cancer is currently possible thanks to a better understanding of risk factors, the development and promotion of early diagnosis, as well as disease screening.

#### 010 : Conservative treatment of breast cancer: A study of 280 cases

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Department of Obstetrics and Gynecology at CHU Hedi Chaker, Sfax, Tunisia **Introduction :** Breast cancer represents a major public health issue and is increasingly affecting young women. Screening and early diagnosis have expanded the indications for radio-surgical conservative treatment. However, despite documented equivalence in terms of overall survival between conservative treatment and radical treatment, higher rates of local recurrence have been reported after breast conservative treatment of breast cancer.

**Materials and Methods :** This was a retrospective study including 280 patients treated with conservative modalities and managed by the breast tumor committee the gynecology and obstetrics department in Sfax between 2012 and 2022.

**Result :** Among the patients treated with conservative modalities, 280 patients were included in our study. The rate of conservative surgery showed a significant increase, from 17,5% in 2012 to 38.2% in 2022. Conservative surgery was performed upfront in 235 patients (83.9%) and was preceded by neoadjuvant chemotherapy in 45 patients (16.1%). The conservative surgery consisted of wide local excision in 270 patients (96,4%) and quadrantectomy in 10 patients (3,6%). All patients received adjuvant radiotherapy. The average time between surgery and radiotherapy was 6.54 months with a standard deviation of 2.23 (ranging from 1 to 14 months). The most common histological type was invasive ductal carcinoma (89,3%). The most frequent molecular subtype was Luminal B (67.8% of cases). Histological lymph node involvement was observed in 45.4% of patients. At the end of our study, 235 patients (83,9%) were alive and in complete clinical-radiological remission.

**Conclusion :** The use of conservative treatment is significantly increasing due to the diagnosis of cancer at early stages and the advent of neoadjuvant treatments.

#### 011 : Management of subclinical breast lesions

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**Introduction :** Mammography serves as the primary screening tool for detecting subclinical breast lesions. For lesions categorized as ACR4 and ACR5 on the BI-RADS scale, histological confirmation is imperative. Hook wire localization is the technique of choice for facilitating surgical excision of these lesions. The objective of this study is to ascertain the positive predictive value (PPV) for the various radiologically suspicious lesions.

Materials and Methods : This retrospective study includes 108 patients who underwent hook wire localization for subclinical breast lesions at the Department of Gynecology and Obstetrics in Sfax over a four-year period. **Result :** The mean age of the patients was 49 years. All patients underwent both mammography and breast ultrasound. The combined modalities exhibited a sensitivity of 100% and a specificity of 85%. Lesions classified as BI-RADS4 accounted for 81.2%, followed by BI-RADS5 at 18.7%. Opacities were found in 24 lesions, and 3 lesions presented with architectural distortion, which accounts for 10-20% of subclinical cancers according to existing literature. All lesions were successfully localized using the hook wire technique, with 67.3% visualized by ultrasound and 32.7% by mammography. A post-excision radiograph of the surgical specimen was conducted in cases of microcalcifications to confirm complete excision. Intraoperative frozen section analysis was utilized in 15 cases where a solid lesion was identified. The study identified malignant lesions including 2 cases of carcinoma in situ, 2 cases of microinvasive carcinoma, and 15 cases of infiltrating ductal carcinoma. The PPV for malignancy among microcalcifications was 18.18%, and 50% for BI-RADS5 lesions. For BI-RADS4 lesions, the PPV was 7.69%, aligning with Benani et al.'s study (7.12%), yet below the rates reported in wider literature. The overall PPV for malignancy across all masses was 41.67%, with BI-RADS5 at 100% and BI-RADS4 at 37.5%. Among all BI-RADS5 lesions, the PPV for malignancy was 66.6%, whereas for BI-RADS4 lesions it was 6.54%.

**Conclusion :** The findings suggest that the current BI-RADS classification may overestimate the risk of malignancy, indicating a need to revise certain guidelines. Hook wire localization demands a collaborative effort among gynecologists, radiologists, and pathologists to ensure accurate diagnosis and effective treatment. Further research is warranted to refine the BI-RADS classification and to enhance the predictive accuracy for malignancy in subclinical breast lesions.

# **012 : Pathological margins after breast-conserving surgery for breast cancer: the role of reoperation**

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**Introduction :** Despite documented equivalence in terms of overall survival between radical treatment and breast-conserving treatment for breast cancer, the potential need for re-excision due to involved or close surgical margins remains one of the challenges of breast-conserving surgery, with a re-excision rate ranging from 20 to 60%. The aim of this study is to evaluate the role of reoperation for pathological surgical margins after breast-conserving surgery for breast cancer.

**Materials and Methods :** A descriptive, analytical retrospective study including 101 patients who underwent breast-conserving surgery and had involved or close (less than 2 mm) surgical margins on final histological examination between January 2008 and December 2018. Data were analyzed using SPSS 23.0 software.

**Result :** 101 patients had involved or close surgical margins on final histological examination. The rate of reoperation for margins was 43.56%. The procedures performed included mastectomy in 39 cases, resection of the tumor bed in 4 cases, and quadrantectomy in 1 case. Histological examination revealed residual disease in 34 cases (77.3%), including invasive carcinoma in 20 cases and carcinoma in situ in 14 cases. The reexcision margins were clear in 41 cases and positive in 3 cases. There was no statistically significant impact of tumor size greater than 3 cm (OR=3.3 (0.7-14), p=0.11), the presence of associated in situ carcinoma with invasive components (OR=1.9 (0.34-10.6), p=0.46), histological lymph node involvement (OR=1.5 (0.4-6.3), p=0.6), and triple-negative molecular status (OR=0.25 (0.03-2), p=0.18) on the presence of residual disease in the surgical specimen.

**Conclusion :** The presence of pathological surgical margins after breastconserving surgery for breast cancer increases the risk of residual disease persistence, leading to the risk of local and distant recurrence.

#### 013 : Breast Cancer Arising from Ectopic Breast Tissue: A Case Study

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**Introduction :** Ectopic breast cancer is a rare tumor that accounts for approximately 0.2 to 0.6% of breast cancer cases. Ectopic breast tissue can be found along the primitive milk line, but mainly in the axillary region. The carcinomatous degeneration of this tissue can present significant diagnostic and therapeutic challenges.

**Case Report:** This is a case of a 57-year-old patient with no personal or family history of breast cancer, who presented with a left axillary nodule evolving over 2 months. Physical examination revealed a well-defined, hard, non-painful left axillary mass measuring 5x4 cm, adherent to the

skin, and mobile relative to the deep planes. Examination of both breasts was normal, and the axillary and supraclavicular lymph nodes were free. No other abnormalities were noted on physical examination. Further investigations are underway. A dense, rounded left axillary mass with irregular contours measuring 4 cm was classified as ACR5, with no abnormalities in both breasts. MRI of both breasts confirmed the ultrasound findings, particularly the absence of suspicious lesions in both breasts. Staging tests were negative. The patient underwent a biopsy of the axillary mass, which revealed infiltrating breast carcinoma on histopathological analysis. A lumpectomy with left axillary lymph node dissection was performed. The final histopathological examination confirmed a multicentric infiltrating breast carcinoma with medullary differentiation, triple-negative subtype, involving 10 out of 22 resected lymph nodes and presence of vascular emboli.

**Conclusion :** Breast cancer arising from ectopic breast tissue is rare and presents both diagnostic and therapeutic challenges. It should be considered in the differential diagnosis of any subcutaneous mass near the primitive milk line. The treatment protocol should be discussed in a multidisciplinary tumor board meeting, especially regarding the extent of radiation fields.

# 014 : Experience with the use of cyclin-dependent kinase (CDK) inhibitors 4/6 in a Tunisian population

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**Introduction :** Anti(CDK) 4/6 in combination with hormone therapy is the standard treatment for first- and second-line HER2neu-negative Hormone receptor (HR) positive metastatic breast cancer. The aim of this work is to evaluate the efficacy and toxicity of CDK4/6 inhibitors available in Tunisia.

**Materials and Methods :** We conducted a retrospective study of 23 patients with RH+ and Her2neu(-) metastatic breast cancer treated at the departments of medical oncology of Jendouba and of Tunis Main Military Hospital with CDK4/6 inhibitors in combination with hormone therapy in the first or nth line of treatment between May 2021 and November 2023.

**Result :** We counted 22 women and 1 man. The mean age was 58 years (range: 40-82 years). The majority of patients (75%) had both bone and visceral metastases at the start of treatment. Anti-CDK4/6 were combined with antiaromatase in 15 patients and fulvestrant in 8 patients. CDK4/6 inhibitors were given in first line for 12 patients, in second line for 7 patients and in third line for 4 patients. Progression-free survival (PFS) at 12 months was 90% and at 24 months 80%. The mean overall survival (OS) (since initiation of anti-CDK4/6) was 22 months (18.7 and 26.3 months). Grade $\geq$ 3 neutropenia was observed in 16 patients. Two patients experienced QT prolongation, one of them required discontinuation of treatment.

**Conclusion :** Anti-CDK4/6 drugs (ribociclib or palbociclib in our experience) have been shown to improve PFS and OS in patients with RH+ metastatic breast cancer and are generally well tolerated.

### 015 : Breast Sarcomas

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**Introduction :** Breast sarcomas are rare malignant tumours that arise from breast mesenchymal tissue, forming a diverse group of breast neoplasia united by their connective origin. Mammary angiosarcoma (MA) is a rare

form of malignant mesenchymal tumour that develops from mammary vascular tissue. Rhabdomyosarcoma is also a rare malignant tumour affecting skeletal muscle, with predominant locations in the head and neck (40%), genitourinary tract (25%) and limbs (20%).

**Materials and Methods :** The aim of our study is to examine the epidemiological, clinical, paraclinical, histological, therapeutic, evolutionary and prognostic characteristics of breast sarcomas through the analysis of four cases diagnosed and treated in our department.

**Result :** There was no family or personal history of breast neoplasia in any of the patients. The main reason for consultation was breast swelling (measuring 10 cm in two patients and self-palpation of a nodule measuring 1 cm and 1.5 cm in two others). The diagnosis was confirmed by histological analysis. Treatment consisted of radical mastectomy in two patients and a conservative approach in the other two. Only one patient required adjuvant treatment, while neoadjuvant chemotherapy was given to the fourth patient, with a mean recurrence-free survival of 5.6 years. Discussion: Breast sarcomas often present with varied and confusing clinical symptoms, leading to diagnostic delays. They represent a small fraction of malignant tumours of the breast, but a significant proportion of sarcomas. Histological diagnosis is often complex and requires exhaustive analysis of the surgical specimen. Treatment differs significantly from classic breast carcinomas, often involving mastectomy without axillary curage. Radical surgery with complete resection (R0) remains the treatment of choice for non-metastatic breast sarcoma, although adjuvant chemotherapy is often warranted due to the risk of metastasis.

**Conclusion :** Among breast tumours, angiosarcoma has the poorest prognosis, with an often rapid course and fatal outcomes associated with multiple metastases.

### **016 :** Prognostic factors in breast cancer and factors predictive of lymph node involvement

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**Introduction :** Breast cancer remains the most common form of cancer in women worldwide. The aim of our study is to evaluate the relationship between axillary lymph node involvement and various clinical, anatomopathological and molecular factors associated with breast cancer. **Materials and Methods :** This study, conducted over a two-year period, is both analytical and descriptive. 85 patients were examined to explore the correlation between several clinical and histological parameters and the presence of axillary lymph node metastases. Variables studied included patient age, tumour size, clinical lymph node involvement, histological type of tumour, histological SBR grade, hormone receptors, presence of vascular emboli, HER2 neu overexpression, Ki-67 level, molecular type and presence of peri-tumour carcinoma in situ.

**Result :** Of the 85 patients studied, 51 (61%) had axillary lymph node involvement at initial diagnosis. Univariate analysis revealed a strong correlation between axillary involvement and the presence of vascular emboli (p=0.0001), tumour size (p=0.015) and SBR grade (p=0.025). However, no correlation was observed between lymph node involvement and other factors such as hormone receptors, HER2 neu overexpression, Ki-67 levels, molecular type or the presence of peri-tumour carcinoma in situ.

**Conclusion :** These results suggest that tumour size, SBR grade and vascular invasion are crucial factors in the metastatic spread of breast cancer. These data could facilitate therapeutic decisions concerning axillary curage or the sentinel lymph node.

017 : Clinical and prognostic study of breast cancer in patients from Northwestern Tunisia: comparison between triple negative and her2 positive Fehri R1, Ayari J2, Abulebda A1

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**Introduction :** Breast cancer is a real public health problem due to its frequency and mortality. The objective of this work is first to establish a comparison between HER2-neu-positive breast cancer (Group A) and Triple-negative breast cancer (Group B) based on their clinical, histological, therapeutic and evolutionary profiles, and second to evaluate the prognosis of HER2-Neu positive versus triple-negative breast cancer. **Materials and Methods :** This was a retrospective study involving 48 patients followed for breast cancer in the medical oncology department of the Jendouba Oncology Center between January 2014 and December 2018. We conducted a descriptive study of the sample and compared the two groups A and B.

**Result :** The average age was 49 years. Patients under 35 years of age were 8 (16.7%). The comparison of the two groups A and B according to young age and hormonal risk factors did not show a statistically significant difference. In contrast, 41.7% of triple-negative patients had previously developed benign mastopathy, while only 4.2% of HER2-Neu positive patients had it as a history. This difference was statistically significant (p=0.004). No statistically significant differences were found for clinical and histological features between the two groups A and B. Only histological lymph node invasion pN was validated as a prognostic factor for metastatic relapse-free survival and overall survival. Age and tumor size were tendentially correlated with metastatic relapse-free survival. We found no statistically significant difference in survival between HER2-neu positive and triple-negative groups.

**Conclusion :** Despite the considerable evolution that breast cancer management has undergone over the past fifteen years, clinical, histological and molecular prognostic factors have changed little overall and are insufficient to account for the evolutionary heterogeneity of the disease. Molecular biology seems to be the tool of the century for the global management of neoplasic breast pathology.

#### 018 : Breast cancer screening in the governorate of Manouba

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**Introduction :** There are 379,518 inhabitants in the governorate of Manouba. The governorate is part of Greater Tunis which comprises the governorates of Tunis, Ariana and Ben Arous. As for health structures, the governorate has 2 university hospitals RAZI hospital and the National Institute of Orthopedics, a district hospital in Tebourba, a regional family planning center in Douar Hicher, a basic health care group, a hemodialysis center, a university health center in Manouba and a school health center and 40 basic care centers.

**Materials and Methods :** The current study is a retrospective descriptive study conducted during the month of October 2023 "Pink October" among women who were approached for breast cancer screening in the governorate of Manouba.

**Result :** We raised awareness among 16,146 women of whom 8,438 received physical examination, that is 52.3%. The most contributing constituency was that of Tborba, i.e. 57% (n=706/994). Basic health centers provided 58.5% (n=3161/5397). Women were aged 35 and over in 65% of cases (n=5475/8438). The examination revealed an anomaly in 8.8% of cases (n=744/8438). Women had a breast ultrasound at the same time in 2.4% of cases (n=202/8438). The lesions were classified ACR3 in 20.7% of cases (n=42/202) and ACR4-5 in 12.3% (n=25/202). They were referred for a mammogram in 12.1% of cases (n=1022/8438).

**Conclusion :** Breast cancer will represent particular challenges to the Tunisian health system in the coming years. Hence, the guarantee of quality, the effectiveness of early detection, and equality of opportunity in the provision of care, can only be achieved with widespread awareness and information with the help of technology.

### 019 : Role of Cancer Antigen 15-3 (CA15-3) in the initial extension assessment and follow-up of breast cancer (BC)

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**Introduction :** The objectives of this work are to determine the usefulness of the CA 15-3 assay in the initial assessment of BC, to evaluate its interest in the early detection of recurrence and in the monitoring of therapeutic efficacy during metastatic disease.

**Materials and Methods :** This is a retrospective study of 118 patients treated for BC in the Medical Oncology Department of Jendouba between 2017 and 2019.

**Result :** Average age was 48 years. Eight patients were metastatic at diagnosis. The most common histological type was invasive ductal carcinoma (88%). Average tumor size was 3 cm. Eighty percent of patients were hormone receptor+ and 16% Her2+. Surgery was done in 110 patients. All patients underwent adjuvant or neoadjuvant chemotherapy. Radiotherapy was done in 28% of cases. Seventy patients received hormone therapy. Twelve percent of patients received Herceptin. Among non-metastatic patients, 29 relapsed within a median of 22 months. Metastatic relapse occurred in 27 cases. Baseline value of CA 15-3 was determined in 64 patients. Fourteen patients had high baseline concentrations. There was no correlation between initial CA 15-3 and classic prognostic factors. There was no relationship between baseline CA 15-3, relapse and death from BC. The number of patients with a relapse documented by a CA 15-3 assay was 28. The positive predictive value of a high CA 15-3 preceded the clinical revelation of relapse by 45 days to 10 months. Nineteen of the 28 patients (68%) had a high CA15-3 level at relapse. Of the patients who did not relapse, 17% had high CA15-3 level.

**Conclusion :** This study confirms the value of CA 15-3 as a tool for early diagnosis of metastatic recurrence. It identifies situations where the sensitivity of CA 15-3 is deficient and it is appropriate to consider dynamic interpretation of the marker, which is more sensitive and earlier.

# 020 : Associated factors to physical activity among Tunisian breast cancer survivors

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**Introduction :** Breast cancer (BC) remains one of the most threatening public health concerns. Our aim was to determine associated factors to PA among breast cancer survivors (BCS), at a Tunisian university hospital. **Materials and Methods :** It consists of a cross-sectional study among BCS attending the outpatient oncology, gynecology and radiotherapy

clinics at Farhat Hached Hospital, Sousse, Tunisia, in April 2022 using: the valid Arabic version of the International Physical Activity Questionnaire short version (IPAQsf) to assess PA, conceptualized as metabolic equivalent task minutes per week (MET-minutes/week) and sitting time. Student t-test and ANOVA test were used to compare means, Mann Whitney U test and the Kruskal-Wallis test to compare medians. Correlations between medians were performed using Spearman's Rho Test. We set the statistical significance threshold p value at 0.05.

**Result :** A total of 100 BCS were recruited with a mean age of  $50.2\pm10.5$ years. Half of our population (50%) had a professional career with twothirds of them (79%) not resuming work after their diagnosis. More than half of our patients (59%) were obese, with an average BMI of  $25.55 \pm 4.7$ . Regarding the stage of their cancer, half of the participants had either a localized or locally advanced tumor, with 66% of the participants being diagnosed in less than 5 years. Most BCS (45%) tended to have overall moderate PA levels with a median MET of 1440 (IQR 680- 2400) minutes/week and a mean total sitting time of 281.79±134.36 minutes/day. Overall, patients aged 50 years and above had significantly lower levels of sitting time (231.43±129.32vs 332.14±121.63, p= 0.04). Similarly, subjects aged 50 years and above, divorced, and of rural origin had higher levels of PA (1908.5 (IQR 939.7-3268.5) vs. 1266 (IQR 471-2946); 2133 (IQR 458.5-3533) vs. 1290 (IQR (607.5-3034.5); and 1788.5 (IQR 1072.5-3252) vs. 1440 (IQR 537-3057) respectively). Likewise, BCS with locally advanced cancer and those with more than five years since cancer diagnosis reported higher levels of PA compared with other groups (1828 (IQR 791-2826) vs. 1578 (IQR 562.5-3252) and 1512 (IQR 503.25-2965) respectively).

**Conclusion :** Factors related to advanced age, advanced stage of cancer and recent diagnosis can impact the adherence to PA among BCS. More attention should be given to encourage patients at risk to practice PA.

#### 021 : Assessing the Quality of Life of Tunisian Breast Cancer Survivors in a University Hospital

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**Introduction :** Breast cancer management is difficult and has several alternatives. The alternatives are many, and decisions made have a long lasting impact on the quality of life for those who survive. This study aims at assessing health related quality of life among breast cancer survivors undergoing treatment in the outpatient clinics of medical oncology, gynecology and radiotherapy at Farhat Hached University Hospital in Sousse.

**Materials and Methods :** In April 2022, a cross-sectional study was conducted using a self-administered questionnaire among female breast cancer survivors (BCS) who were attending outpatient medical oncology, gynecology, and radiotherapy clinics at Farhat Hached University Hospital in Sousse, Tunisia. The Arabic version for short-form health survey (SF-12) with only 12 items has been found to be valid. It is divided into two components; Physical Component Summary (PCS-12): General Health (GH), Physical Functioning (PF), Role Physical (RP), and Body Pain (BP); and Mental Component Summary(MCS-12): Vitality(VT), Social Functioning(SF), Role Emotional(RE), and Mental Health(MH). A score below 30 shows severe disability while 30 -39 indicates moderate disability, 40 -49 mild disability and above or equal to 50 an average quality of life. These findings suggest that there is still much room for

improvement in both areas but generally speaking; the quality of life remains within the range of medium averages.

**Result** : In this study, BCS tended to have moderate disability in the physical component (PCS-12) with a mean score of  $39.3 \pm 7.08$  and mild disability in the mental component (MCS-12) with a mean score of  $43.94 \pm 9.23$ . Among the individual dimensions, 'VT' received the highest score ( $60.22\pm11.63$ ), followed by 'MH' ( $53.81\pm12.61$ ), 'PF' ( $43.15\pm9.71$ ), and 'GH' ( $42.06\pm11.96$ ). Conversely, the lowest scores were for 'RP' and 'RE' ( $25.94\pm4.01$  and  $18.67\pm4.54$ , respectively).

Conclusion : In this study, BCS tended to have moderate disability in the physical component (PCS-12) with a mean score of  $39.3 \pm 7.08$  and mild disability in the mental component (MCS-12) with a mean.

### 022 : Breast cancer in young women: Diagnosis, Treatment and prognosis

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**Introduction :** Breast cancer is the most common cancer and is the leading cause of cancer death in women. Occurring in young women, this cancer is often more aggressive with a worse prognosis and less survival compared to older women. The objective of our work is to study the characteristics of breast cancer in this age group and to evaluate the therapeutic particularities.

**Materials and Methods :** This is a descriptive and analytical monocentric retrospective study of 102 patients aged under 40, suffering from breast cancer, recruited from the obstetrics gynaecology department B of the Tunis maternity and neonatology center over a period of 15 years from January 1 2006 to December 31, 2020.

**Result :** The average age of our patients was 35 years old with extremes ranging from 21 to 40 years old. The tumor was bilateral in 3.92% of cases. Excluding T4 tumors, the mean clinical tumor size was 40 mm. The tumor was classified as T2 in most cases (46.23%). Patients were metastatic in 12.75% of cases. Invasive ductal carcinoma was the most frequent anatomopathologic type (87.73%). The most frequent anatomopathologic grade was SBR III (54.29%). The average anatomopathologic size was 40mm. Hormone receptors were positive in 51 patients (58.62%). The HER2 neu oncoprotein was overexpressed in 24 patients. The luminal subtype was the most common (64.37%). Overall survival was 84.1% at 2 years and 70.7% at 5 years. The average survival was 50 months after diagnosis. Disease free survival was 88.4% at 2 years, 74.6% at 5 years.

**Conclusion :** Improving the prognosis of breast cancer in young women is based on early diagnosis and therapies adapted to the particularities of these tumours. For this reason, screening campaigns are to be evaluated to detect breast cancer in earlier stages.

#### 023 : Influence of epidemic, clinical and therapeutic factors of breast cancer on overall survival and disease-free survival in women under 40 years old: a 15-year experience

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**Introduction :** Breast cancer is the most common cancer and represents the main cause of cancer mortality amongst women worldwide. According to the 2018 data from the World Health Organization (WHO), over 2 million new cases of breast cancer were diagnosed each year, and approximately 627,000 individuals died from breast cancer worldwide,

especially in underdeveloped countries. The aim of our study was to investigate the influence of epidemic, clinical and therapeutic factors of breast cancer on overall survival and disease-free survival in women under 40 years old.

**Materials and Methods :** This is a retrospective, single-center, descriptive, and analytical study spanning of 15 years, including 102 patients under the age of 40 diagnosed with breast cancer.

**Result :** The overall survival was 70.7% at 5 years. Excluding metastatic tumors, overall survival was 81.7% at 5 years. Disease-free survival was 88.4% at 2 years, 74.6% at 5 years in our series. The average disease-free survival was 53 months. Among epidemiological factors, we found that only pregnancy, breastfeeding, and hormonal contraception were significantly influenced overall survival. All clinical factors were significantly influenced overall survival. Also, surgical treatment and chemotherapy were significantly influenced overall survival. Also, surgical treatment and chemotherapy were significant, possibly due to the limited number of patients. The main factors influencing disease-free disease were advanced clinical tumor stage, clinical N stage, adjuvant chemotherapy, and ovarian castration.

**Conclusion :** The diagnosis of breast cancer at advanced stages influences significantly overall survival and disease-free disease in young women. Therefore, our diagnostic strategy for this age group needs to be revised and screening campaigns should be evaluated to detect breast cancer at earlier stages.

# **024** : Association between physical activity and quality of life among Tunisian breast cancer survivors

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**Introduction :** Since breast cancer (BC) therapeutic management is complex involving many therapeutic options, it can have lasting impacts, in the short and long term, on survivors' quality of life (QOL). This study aims to determine the association between BC survivors' health related QOL and physical activity (PA) among BC survivors (BCS) at a Tunisian University hospital.

**Materials and Methods :** It is a cross-sectional study among BCS attending the outpatient medical oncology, gynecology and radiotherapy clinics at Farhat Hached University Hospital, Sousse, Tunisia, in April 2022 using a self-administered questionnaire. The valid Arabic version of the 12-item Short-Form health survey (SF-12), conceptualized in two components: the "Physical Component Summary" (PCS-12) and "Mental Component Summary" (MCS-12), and the valid Arabic version of the International Physical Activity Questionnaire short version (IPAQsf) were used to assess the BCS' PA. Only patients older than 20 years, without metastasis or relapse, who had completed chemotherapy and were present at the outpatient clinic for a check-up, were eligible to be included. Correlations between medians were performed using Spearman's Rho Test. We set the statistical significance threshold p value at 0.05.

**Result :** One hundred breast cancer survivors (BCS) were enrolled, with an average age of 50.2 years and a standard deviation of 10.5 years. The majority of participants (66%) were diagnosed less than 5 years ago. Half of the participants (50%) had locally advanced cancer. 56% of patients underwent chemotherapy, while 73% received radiotherapy. A large proportion of patients (75%) underwent surgery. Half of the participants are not receiving any treatment, while the other half are undergoing hormone therapy. In terms of physical activity, 45% of patients are moderately active, and only 28% reported walking in the past week. Furthermore, it was found that 56% of patients are inactive during weekends, with an average sedentary time of 281.79 minutes  $\pm$ 134.36. In regard to disability, breast cancer survivors generally exhibit moderate physical disability (PCS-12 mean score of 39.3  $\pm$ 7.08) and mild mental disability (MCS-12 mean score of 43.94  $\pm$ 9.23). Quality of life (QOL) was significantly associated with physical activity (r=0.258, p=0.012). The impact of physical activity on the quality of life of breast cancer patients is significant. A positive correlation was found between physical activity and the physical component of quality of life (PCS-12) (p=0.012, r=0.258). Additionally, a positive relationship was observed between general health (GH) and physical activity (p=0.001, r=0.34).

**Conclusion :** Promoting a healthy lifestyle, which includes regular physical activity, is strongly recommended to minimize the psychological and physical impacts of breast cancer and to improve the quality of life for survivors.

#### 025 : Breast Carcinoma: Anatomo-Clinicalradiological and Therapeutic Features Mucinous

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**Introduction :** Mucinous carcinoma of the breast constitutes 1% to 4% of all breast cancers. it is defined by the presence of extracellular mucus in which mucosecreting malignant tumor cells float . Histologically, there are two types of MC: the pure MC and the mixed MC that associate foci of infiltrating ductal carcinoma next to the mucinous component.

**Materials and Methods :** Through a retrospective study of breast MC and a review of the literature, we will try to to clarify the antomo-clinical and radiological particularities of this rare form of breast cancer.

**Result :** The frequency of mucinous carcinoma of the breast in our study period was 1.9%. The average of the patients was 55 years old. The average tumor size was 40 mm. The clinical size of pure CM was lower than of mixed CM. In mammography pure CMs had an oval shape in 83% of the cases with microlobulated contours in half of the cases, mixed CM rather had an irregular shape (71%) with indistinct contours (85%). On ultrasound, pure CMs had a homogeneous hypoechogenic oval mass appearance with microlobulated contours enhancing ultrasound. The mixed CMs had an irregular shape of non-geometric contours and heterogeneous hypoechogenic appearance with posterior ultrasound attenuation. Microcalcifications were present in 37% of pure CM and 60% of mixed CM.

**Conclusion :** It is important to distinguish between the two pure and mixed forms, because the therapeutic attitude and the prognosis depend on it.

#### 026 : Breast and cervical cancer screening in military population

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**Introduction :** Breast and cervical cancer screening is mandatory to reduce cancer mortality, morbidity and cost. Cancer screening in military setting is done during all the year especially on october and january. The

aim of our study was to show the particularities of screening for breast and cervical cancer in military context.

**Materials and Methods :** We conducted a prospective study including military wemen between 1st October 2023 and 31st January 2024. Breast cancer screening was done for wemen aged more than 45 year by mammography and breast ultrasound. Cervical cancer sceening was done with cervicovaginal smear and HPV serology.

**Result :** 195 wemen were included for breast screening. Median age was 52 years. 24 % had familial cancer history. Breast examination was done in all cases and mammography and breast ultrasound were done in military hospital of Tunis in 134 cases. 25 biopsy were done, 13 of whom were malignant. 306 cervical smear were done. One low grade intraepithelial lesion and two indeterminate lesions. The remaining tests were negative. PV serology was done in 140 cases, 9 of whom were positive (HPV 16 in 1 case and oncogenic HPV other than 16 and 18 in remaining cases).

**Conclusion :** We noted a high frequency of breast cancer among our population and a discordance between cervical smear and HPV serology and the frequency of oncogenic HPV other than HPV 16/18 subtypes.

### 027 : HER2neu overexpression breast cancer treated with herceptin about 100 cases

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**Introduction:** Report the clinicopathological and therapeutic characteristics. Identify prognostic factors in patients followed for overexpressed HER2neu breast cancer and treated with herceptin.

**Materials and Methods :** This is a retrospective and analytical study involving 100 patients with primary breast carcinoma treated in the medical oncology department of the Gabes University Hospital over a period extending between January 1, 2020. until January 31, 2024. We collected clinical-pathological therapeutic data and evaluated prognostic factors using the Log Rank test.

Result : It collected 100 patients. Median age 48 years (25-82 years). 98% were women. One third of patients have a family history of breast cancer. An attack on the right side in half of the cases. The average size was 5cm (2-15cm). Patients were metastatic from the outset in 19% of patients. SBR3 grade was present in 46%. Overexpression of HER2neu receptors identified by immunohistochemistry in 89% of cases. Hormonal receptors were positive in 75% of cases. The tumors were classified T4 in 23% of cases. Regional lymph node involvement was present in 75% of cases. Bone metastatic location was the most common 84%. All patients received chemotherapy except one, aged 82. This chemotherapy was neoadjuvant in 43% of patients. According to the 3EC100-3taxotere protocol, it was in 67% of cases. The 5-year survival rate for all stages was 94.3%. Analysis of poor prognostic factors age <50 years; grade SBR3; RH- receptor; lymph node involvement; metastatic stage; the location of metastases; social coverage and herceptin discontinuation event. The significant factors were: metastatic stage; multiple metastatic locations.

**Conclusion :** Our data were consistent with those in the literature. However, among the prognostic factors that significantly influenced OS were: multiple metastatic stage and metastatic location. Improving the prognosis of breast cancer is based on early diagnosis but also on the availability of new anti-HER2neu targeted therapies.

### 028 : Bilateral breast cancer: clinicopathological profile, management and prognosis factors

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**Introduction :** The aim of our study was to define particularities on diagnosis, therapeutic management and prognosis of Bilateral breast cancer (BBC).

**Materials and Methods :** we report retrospectivety 17 cases of BBC treated on the department of medical oncology of Gabes hospital between january 2017 to 2023. All patients had synchronous BBC proven histologically. We excluded patients with metachronous controlateral breast cancer. We collected clinical-pathological therapeutic data and evaluated prognostic factors using the Log Rank test.

Result : 17 patients were included who had synchronous bilateral breast cancer at diagnosis. The average age was 47 years (28-64). Half were postmenopausal at diagnosis. One third of the patients had a first-degree family history of breast cancer. The most common histological type was invasive ductal carcinoma (88,2%) and identical of both breasts. Six patients were metastatic at diagnosis (33%). Bone metastases were the most common location. Stage T4 was the most common for the right and left sides, 40% and 47% respectively. Locoregional lymph node involvement was present on the right and left sides respectively in 90% and 67% of patients. Hormone receptors were positive and identical in 11 patients (61%). HER2 was overexpressed in 6 patients on the right side and 5 patients on the left side, all of these patients received trastuzumab, a single metastatic patient in combination with pertuzumab. All patients received chemotherapy except one metastatic to the bone received antiCD4-6. The 5-year overall survival for all stages was 53.5% and 61% for non-metastatic patients. Significant poor prognostic factors were: negative hormone receptors, regional lymph node involvement and left T4 stage.

**Conclusion :** BBC is an uncommon clinical entity. These patients require individualized treatment planning based on the tumor factors of the index lesion. Optimal results can be obtained by using a logical multimodality treatment approach of BBC.

#### 029 : Oxidative Stress in Breast Cancer

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**Introduction :** Breast cancer is a leading cause of morbidity and mortality in women's lives. In recent years, there have been enormous advances and developments in our knowledge of the mechanism and factors involved in breast carcinogenesis. The precise mechanisms of oxidative stress being induced in breast cancer cells are still not exactly understood and documented. The aim of our study was to assess the role of oxidative stress in breast carcinogenesis.

**Materials and Methods :** A case-control study was conducted in the biochemistry department at Farhat Hached Hospital, Sousse. The cases were patients followed for breast cancer at the gynecology department at Farhat Hached Hospital, Sousse. They underwent measurement of oxidant status parameters: homocysteine and TBARS and antioxidant status parameters: erythrocyte SOD activity, GPx, GR, CAT, SAT, albumin and uric acid. Controls were recruited, during the same study period, from healthcare workers. They were matched for age and gender to the patients. They underwent the same assays.

**Result :** Thirty-one breast cancer patients and 20 age-matched controls were included in our study. Our patient population ranged in age from 37 to 64 years. Twenty-four patients were classified as stage II and 7 as stage III. For oxidant status, a statistically significant difference in homocysteine and TBARS levels between patients and controls was noted ( $p \le 0.05$ ). For antioxidant status, there was a statistically significant difference in erythrocyte CAT activity, GPx, uric acid and albumin levels between cancer patients and controls ( $p \le 0.05$ ). However, no association was found

for erythrocyte SOD, GR and SAT activity between the 2 groups. Furthermore, our study reported no significant variation according to cancer stage.

**Conclusion :** Our preliminary results support the hypothesis of oxidative stress in breast carcinogenesis. Larger studies would be necessary to support our results.

#### 030 : A Two-Year-Long Neglected Phyllode Sarcoma of the Breast

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**Introduction :** Breast sarcomas are rare breast tumors. They account for less than 1% of all breast cancers and around5% of soft tissue sarcomas. They are subdivided into phyllode and non-phyllode sarcomas. Their treatment is mainly a complete extramarginal resection. Radiotherapy and chemotherapy can be used incertain cases.

Materials and Methods : We report a case of a woman with a neglected phyllode sarcoma.

Result : We report the case of a 52-year-old woman presented with a slowly progressive breast mass, neglected for 2 years. Examination revealed a large pediculated and indurated mass of the left breast measuring20-cm in circumference. Mammography and ultrasonography classified the process as ACR5. Surgical biopsy concluded to a grade 1 sarcoma. Workup with thoraco-abdominal-pelvic CT scan revealed no metastasis.A mammectomy with an advancement flap was performed. Lymph node dissection was not performed, as it is not routinely performed in mammary phyllode sarcomas. Definitive histologic examination concluded to a grade 3 phyllode sarcoma, posterior margins were negative but with tight limits <1cm.There was no evidence of dermal extension. After multidisciplinary discussion, and given the large tumor size, an adjuvant chemotherapy was indicated. Chemotherapy regimen consisted of four courses of Doxorubicine and Ifosfamid. In the light of the large tumor size and suboptimal surgical margins with no possibility of reresection, a chest wall radiotherapy was given at a total dose of 50Gy in 25 fractions, with a tumor-bed boost to 70Gy. Follow-up is on-going.

**Conclusion :** The extreme rarity of breast sarcomas represents a challenge for clinicians to produce large prospectivetrials. Thus, there's no consensual guidelines concerning the benefit and indications of radiotherapy and chemotherapy.

#### 031 : Synchronous cutaneous melanoma and breast cancer in a lady over 90 years old: A case report

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**Introduction :** Breast cancer is the most commonly occurring cancer in women. It can be associated with several other neoplasia whether in the context of a genetic mutation, common risk factors or resulting from treatments. But the occurrence of breast carcinoma with cutaneous melanoma is extremely rare. We describe the case of an elderly patient presenting a synchronous association of a melanoma of the left heel and an infiltrating ductal carcinoma of the right breast.

**Materials and Methods :** We report the case of a 94-year-old patient, with no notable medical history, who has a daughter who died of cerebral neoplasia, presenting a pigmented lesion of the left heel that had been developing for 3 months. Physical examination showed a 5.5 cm brown irregular lesion centered by a 2 cm bud with doubt on a nodule in transit

on the inner side of the left ankle. Examination of the lymph node areas found a mobile infracentimetric left groin lymph node and a 2 cm right axillary lymphadenopathy. Breast examination revealed a 3.5 cm right upper-inner periareolar mass with another 2-cm upper-outer lump in the right breast with no skin change. Breast imaging found the two lesions in the right breast measuring 30 and 23 mm respectively, classified ACR 5 and no suspicious breast abnormality on the left. ThoracoAbdominopelvic CT-scan did not find any metastases. Needle microbiopsies were performed on the two lesions of the right breast. It was an infiltrating ductal carcinoma bifocal SBR I Luminal A. The excision biopsy of the lesion on the left heel concluded to acral melanoma and the satellite nodule was a histiocytofibroma. Pathological examination concluded to a 6.5 cm ulcerated acral-lentiginous melanoma of the left heel, Clark level was V and Breslow index was 13 mm. The mitotic index was 15 mitoses / 10 CFG. There were no vascular emboli. All margins were negative and the closest one was 1 cm . 2 Sentinel lymph nodes were negative. In the breast, it is a grade II bifocal invasive ductal carcinoma with vascular emboli and perineural sheathing. The axillary lymph node dissection yielded 17 lymph nodes, 5 of which were invaded and 2 with capsular rupture. Given the advanced age of the patient, adjuvant treatment was limited to endocrine therapy.

**Result :** the association between breast cancer and cutaneous melanoma was first described in 1975 by Lokich in five cases of mammary neoplasia associated with cutaneous melanoma. Subsequently, several researchers attempted to explain this relationship from epidemiological, genetic, and biological perspectives and assess its potential impact on therapeutic management. The examination of age and gender has yielded contradictory results. Some studies have concluded that advanced age is a risk factor for the occurrence of cutaneous melanoma associated with breast carcinoma, while others suggest that younger age may favor this association. Regarding gender, some teams propose that male gender is conducive, while others suggest that female gender may play a role. Several genetic mutations are known to be associated with breast and other neoplasms, but the genetic relationship between cutaneous melanoma and breast cancer is not clearly determined. The roles of BRCA1/2 mutations and CDKN2A are clearly elucidated in breast cancer and found in cutaneous melanomas, suggesting a connection between the two. Research indicates an increased risk of cutaneous melanoma in breast cancer patients with a BRCA2 mutation. The role of CDKN2A is less studied, and its potentiating role is not established. Breast cancer is mostly favored by a hyperestrogenic environment, and melanocytes express estrogen receptors. The injection of estrogen in animals increases the number of melanocytes and stimulates melanogenesis. There are reported cases of melanocytic lesion progression in pregnant women and regression in postmenopausal women. This suggests an association between estrogen receptor-positive melanomas and breast carcinomas. A study by Giorgi et al. found a correlation between the level of beta estrogen receptors and the Breslow index of melanomas.

**Conclusion :** The association between melanoma and breast cancer is rare but on the rise. It is noteworthy due to its potential impact on therapeutic management, particularly with the emergence of immunotherapy and targeted therapies. It is compelling to further investigate this relationship as it may potentially open doors to new therapeutic avenues.

### **032** : Adherence of young patients with early-stage breast cancer BC: a challenge during follow-up

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**Introduction :** Follow-up is a critical phase in breast cancer journey, facilitating the management of treatment side effects and early detection

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of relapse. However, young patients diagnosed with early-stage breast cancer often face challenges in adhering to follow-up schedules due to the myriad of responsibilities and activities in their lives. We aimed to investigate the adherence rate to different planned follow-up procedures among this population.

**Materials and Methods :** We retrospectively selected 101 patients  $\leq$ 40 years old who finished adjuvant therapy for early-stage breast cancer. Planned follow-up visits included physical examination/3 months then/6 months for the subsequent 3 years. Mammography and CT scan were performed once a year for the first 5 years. Beyond 5 years, patients had at least yearly physical examination and mammography. We collected data about observed follow- up procedures and calculated adherence rate.

**Result :** The average age was 35 years [27-40] and 97% of patients were premenopausal. Stages were T3-4 in 35%, N+ in 56%, HER2positive in 31%, ER-positive in 78%. All the patients received chemotherapy with 20% receiving neoadjuvant chemotherapy. Adjuvant endocrine therapy with Tamoxifen was indicated in 97% with ER-positive with 37% receiving ovarian function suppression. The median total duration of ET was 5 years [1-10]. Median follow-up was of 4 years [1-13]: 68% finished 5 years and 12% finished 10 years. Patients did not show up at their first surveillance appointment in 38% and were lost to follow-up immediately after chemotherapy in 9% of cases. The median number of CT scans was 4 out of 5 [0-11], 72 % had it annually as planned and 13% had it every other year. The median number of mammographies was 5 [1-10] performed every year for the first 5 years. This recurrence was detected on surveillance CT scan in 42% of cases.

**Conclusion :** We observed that in patients who adhere to their visits, planned follow-up procedures were highly performed, however a high proportion of patients did not adhere to planned visits. There is a need to improve follow-up models and enhance patients' education through a supportive environment to optimize this phase of their cancer journey.

### 033 : Extended adjuvant endocrine Therapy for luminal early breast Cancer: Tunisian real-world experience

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**Introduction :** Early-stage hormone receptor-positive (HR+) breast cancer patients represent the largest group of cancer survivors, with a persistent risk of tumor relapse beyond 5 years. Extended adjuvant endocrine therapy (ET) tends to improve breast cancer survivorship and remerges as a promising strategy for improving patient outcomes. We aimed to describe the population of extended ET and to correlate it with CTS5 score.

**Materials and Methods :** Over a population of 253 patients with earlystage HR+ breast cancer between 2011-16, we screened 57 cases who received 5 years or longer adjuvant ET. We collected management and outcome data and calculated CTS5 score (estimating 5-10 years risk of recurrence) in each patient.

**Result :** Our study included 57 patients with a median age of 47 years [30-78], 22% were under 40 and 33 % were premenopausal. Tumors were SBR III in 38%%, HER2 positive in 28.%, Ki67>20% in 59.% of the patients. Stages were 77% were T1-T2, 23% were T3-4, with 86% N+ (40% were $\geq$ 4N+). Patients received neo/adj chemotherapy in 97%, Tamoxifen in 56 % and aromatase inhibitors in 44% with 33% receiving ovarian function suppression. The median total duration of ET was 7 years [6-10]. During extended ET, de novo osteoporosis was seen in 3 cases and endometrial hypertrophy in 1 case. After a median follow-up of 88 months, the relapse rate was 9%. Overall survival (OS) was 85% at 5 years. Treatment adherence was not evaluated in 26% of patients because of lost to follow-up. According to CTS5 score, patients were considered at low

risk in 10.8% of cases (median risk=3.9%), intermediate in 17.5% (risk 7.9%) and high in 71.7% (risk 21%). All CTS5 low risk patients were  $\leq$ 1N+ and 85% of high-risk patients were >1N+, p=0.003.

Conclusion : Extended ET was given in a high-risk population and was well tolerated. CTS5 score can be a helpful tool in decision-making of extended adjuvant ET especially in  $\leq 1N+$  population. Treatment adherence remains one of the most important challenges.

### 034 : Impact of chemotherapy on the nutritional status of breast cancer patients

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**Introduction :** Breast cancer ranks as the most frequently diagnosed malignancy and is the leading cause of cancer death among women worldwide. its management requires a comprehensive approach that goes beyond medical treatment alone. Among the various aspects to be considered, the nutritional status of patients stands out as a critical factor that can significantly influence treatment outcomes and overall quality of life. During the course of treatment, changes in eating behavior and nutritional status of the patients during chemotherapy.

**Materials and Methods :** We conducted a descriptive cross-sectional study of 31 breast cancer patients undergoing chemotherapy at Salah Azaiez Institute between november 2022 and february 2023. Data was collected using a pre-established questionnaire, which relied on medical records, a 24-hour recall, and a dietary frequency survey covering eating habits, changes in appetite, and any dietary challenges experienced during chemotherapy.

**Result :** The mean age of the patients was 51 years, with a range between 31 and 68 years. Among the participants, 64.5% were found to be in the menopausal stage. Regarding the nutritional status of the patients, 29% were classified as overweight, while 42% were obese, with an average BMI of 29.7 kg/m<sup>2</sup>. During the course of chemotherapy, 6.5% of the patients experienced weight loss and 71% reported a loss of appetite during the initial days following the treatment. Furthermore, 45% of the patients had a spontaneous dietary intake lower than their energy requirements, resulting in an average energy deficit of 73.12 Kcal. Moreover, 64.5% of the patients had a dietary protein intake below the recommended 1.2 g/kg of body weight. Assessment of micronutrient intake revealed deficiencies in essential nutrients within the patient population including the intakes of calcium, iron, folate, vitamin C, and dietary fibers.

**Conclusion :** Overall, the study highlights significant nutritional challenges faced by breast cancer patients undergoing chemotherapy. The prevalence of overweight and obesity, along with weight loss during treatment, emphasizes the need for tailored nutritional support and education. The high incidence of appetite loss and deficiencies in essential nutrients warrant the implementation of targeted interventions to address patients' eating behaviors, habits, and misconceptions about diet during hemotherapy and improve the nutritional well-being of these patients and their quality of life during this challenging period.

# 035 : Conservative treatment of breast cancer: Reliability of extemporaneous examination and influence of systematic cross-checks

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**Introduction :** Breast cancer is the most common female cancer. Conservative treatment in combination with radiotherapy aims to achieve the lowest possible local recurrence rate. The objective of our work was to study the reliability of the extemporaneous examination of the margins of the tumorectomy compared to the final results of the anatomopathological examination and to analyze the influence of the realization of systematic cross-checks on the surgical management patient.

**Materials and Methods :** This was a descriptive longitudinal retrospective study involving 47 breast cancer patients who underwent homolateral axillary dissection (TCA) with extemporaneous examination of the tumor banks and systematic cross-checks. Study conducted at our service between January 2016 and December 2021.

Result : The average age of our patients was 54.7 years. The most common medical history was high blood pressure in 13 patients and type 2 diabetes in nine patients. The most frequent reason for consultation was «palpation of a breast nodule» noted in 81% of patients. The side most frequently reached was the right side with a maximum of reach noted at the level of the upper-external quadrant (43%). The average clinical tumor size was 25.4mm. Preoperative classification of tumors showed that stage I was the most frequent stage (60%). Concerning the reliability of the extemporaneous examination for the study of the banks of the tumorectomy, the sensitivity was 63%, the specificity was 68%, the VPP was 57% and the VPN was 73%. The mean volume of tumorectomy pieces was 76.33 cm3 and that of systematic cross-checks was 29cm3. The volume difference was not statistically significant (p=0.073). The average aesthetic satisfaction of our patients was 7/10 and all our patients gave a 6/10 result. Systematic cross-checks significantly decreased the number of surgical repeats (p=0.001). Systematic cross-checking lengthened the total operating time statistically significantly (p=0.002).

**Conclusion :** The practice of systematic cross-checks at the same time as a tumor ectomy for breast cancer allows to reduce the number of surgical repeats while keeping an acceptable aesthetic result.

#### 036 : Adherence of women over 50 to breast cancer screening

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**Introduction :** A high level of participation is needed to enhance breast cancer screening. Better understanding the factors of adhesion and resistance is one of its axes. our objective is to assess adherence and resistance factors to breast cancer screening.

**Materials and Methods :** Prospective study including women aged 50 to 74 followed at consultations. The women who were screened by mammography answered a questionnaire concerning motivation, the others on the reasons for non-adherence.

**Result :** This study involved 100 patients with an average age of 57.4 years, 58% of whom were menopausal. Only 35% of our patients have ever seen for screening. The socioeconomic level was unfavourable for 30.7% of the undetected patients against only 28.5% of the screened population and 52% of the undetected women were unemployed versus 40% in the screening population. The screening population had a more frequent family history of breast cancer (11.4% versus 3%). Reasons for non-adherence: Lack of information: 30%, no priority: 18.4%, high cost: 15%, no conviction: 15%, no- screening efficiency: 12.3%, transport problem: 7.6%.

**Conclusion :** Breast cancer screening is far from being adopted. The study of resistance factors makes it possible to adopt measures to improve adherence.

#### 037 : Breast cancer in man: a case series

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Obstetrics and Gynecology Department, Maternity and Neontology Center of Monastir, Tunisia **Introduction :** Male breast cancer is a relatively rare malignancy when compared to female breast cancer with a known ratio of 1 male case to 100 in females and occurs in about 1% of all breast cancers. It represents 1% of all breast cancers. The diagnosis is usually late and lesions are treated at advanced stages.

**Materials and Methods :** we present a series of 4 cases collected at the gynecology department in Monastir. We propose to determine the epidemiological profile, anatom-clinical aspects and therapeutic approach in our country

**Result :** The average age of patients with male breast cancer in this study was 50 years old. In all cases, the disease was initially identified by the presence of a palpable tumor. Additionally, mastodynia was reported in 60% of cases. The average tumor size was 44 mm. The histological type most commonly found was non-specific infiltrative carcinoma. Hormone dependency was observed in all cases, while none of the patients showed overexpression of HER2. Approximately 40% of patients had axillary lymph node invasion. The staging distribution was as follows: 2 patients at stage T4 (50%), 1 patient at stage T2, and 1 patient at stage T1. Two patients were diagnosed at the metastatic stage. None of the patients received neoadjuvant chemotherapy. Two patients underwent mastectomy with axillary dissection. One patient received palliative chemotherapy. Radiotherapy was administered to two patients. All patients received hormone therapy.

**Conclusion :** Male breast cancer is rare, and often the diagnosis in Tunisia is delayed, leading to very high mortality. To improve outcomes, an interprofessional team approach that consists of an oncologist, surgeon, radiation therapist, dietitian, and mental health counselor is recommended.

#### 038 : Pregnancy-Associated Breast Cancer

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**Introduction :** Breast cancer diagnosed during pregnancy poses unique challenges for both the patient and her medical team. As women are increasingly delaying childbirth, the incidence of breast cancer during pregnancy is expected to rise. However, much of the available data on the diagnosis and treatment of cancer during pregnancy comes from case reports and small cohort studies, highlighting the need for further research and clinical evidence in this area

**Materials and Methods :** A retrospective study of 7 cases of breast cancer diagnosed during pregnancy treated and followed in the MNCM

**Result :** The average age of patients with breast cancer in this scenario is 34 years old. One patient had a previous history of breast cancer. The primary reasons for consultation were the discovery of a breast lump by self-examination in 6 patients and pregnancy with a peripartum diagnosis. The average clinical size of the breast nodules was 4 cm, with a range from 2.5 to 9 cm. All patients underwent breast ultrasound combined with mammography. Staging included systematic chest radiology, abdominopelvic ultrasound, and bone scintigraphy. Guided biopsy was performed in all patients to confirm the nature of the cancerous nodule. Pathological examination confirmed the diagnosis of breast cancer in all cases.

**Conclusion :** breast cancer during pregnancy presents complex clinical and emotional challenges, requiring a multidisciplinary approach to optimize treatment decisions and support the well-being of both the mother and her child. Increasing awareness among healthcare providers and pregnant women about the possibility of breast cancer during pregnancy is crucial for early detection and improved outcomes.

039 : Breast cancer retrospective study from 2014-2016 : About 151 cases

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**Introduction :** To report the epidemiologic, anatomo-clinical and molecular subtypes about a retrospective serie of breast cancers in Tunisian patients.

**Materials and Methods :** We collected retrospectively, from Jan 2014 to Jan 2016, patients presenting an histologically confirmed breast cancer.We analyzed the epidemiologic, anatomoclinical and biomolecular data. Patients were explored by classic imagery

**Result :** We collected 151 cases, having a mean age of 51,8 years(30 to 70 years) in premopausal patients in 64 cases and pot-menopausal in 87 cases. Patients were married in 138 cases and single in 13 cases with a mean age at first pregnancy of 24 years. BC was localized in the right breast in 77 cases, left in 70 cases and bilateral in 4 cases. Lesions unifocal in 110 cases and multifocal in 41 cases. Molecular subtypes were Lum Her 2+ in 16 cases(10.6%), Lum A in 34 cases(22.5%), Lum B in 80 cases(53%), Her 2 + in 8 cases(5%) and triple negative in 13 cases(8%). Mean Ki 67 index was at 26.6%, higher than 20% in , while grade 2 and 3 BC represented 89% of cases. Clinical stages were cT1 in 26% of cases, cT2 in 58%, cT3 in 7% and IBC in 7%, while 10% of patients have initial metastases in 7 Lum B, 2 TN, 2 Lum A and 2 lum B her 2 positive patients. Mean histologic tumor size was 21mm varying from from 0 to 75mm, while 59 patients(39%) were histologically node positive. Surgery was radical in 51 cases and conservative for the resting 100 patients.

**Conclusion :** Our findings are similar to literature with more aggressive features

#### 040 : Angiosarcoma of the breast: about two cases

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**Introduction :** Angiosarcomas are rare malignant tumours of vascular origin, usually occurring in soft tissues, but their location in the breast is exceptional. This tumour occupies an important place in breast cancerology.

**Materials and Methods :** Based on the two cases of breast angiosarcoma reported in our department, we reviewed the literature

**Result :** Ms A aged 40 with no particular history, unmarried, consulted for tumefaction of the right breast which had appeared 2 months previously.the examination found an inflammatory aspect and a firm mass of 10 cm in the lower quadrants of the right breast.the echomammography concluded ACR5.the biopsy concluded an angiosarcoma.The extension work-up was normal.the treatment was mastectomy with axillary curage The postoperative course was simple.The second case was that of a 51 year old female patient with a 1 cm well limited nodule and echomammography concluded that it was an ACR5 vascular tumour with angiosarcoma biopsy.The extension work-up was normal.The treatment was a wide lumpectomy with a normal border.

**Conclusion :** Angiosarcoma of the breast is a clinically rare and highly malignant tumor with a poor prognosis. Both clinical and radiological presentations lack specificity, which can lead to misdiagnosis or missed diagnosis.

# 041 : Local recurrences after breast conserving surgery : characteristics and risk factors

Walha R, Ben Msarra R, Chaker F, Khanfir F, Derbel M, Chaabane K Obstetrics and Gynecology Department, Hedi Chaker University Hospital, Sfax, Tunisia **Introduction :** Although equivalent overall survival rates were reported between radical and breast conserving surgical management of breast cancer, patients undergoing breast conservation were more likely to present with local recurrence. In fact, the risk of local relapse vary between 4 and 20% after breast conserving therapy versus 2 to 5% after radical mastectomy. The aim of our study was to evaluate the characteristics and risk factors of local recurrences after breast conserving therapy .

**Materials and Methods :** we undertook a retrospective study including 348 patients who underwent breast conserving therapy for a histologically confirmed, non metastatic breast cancer, between January 2008 and December 2018.

**Result :** The median age of patients was 51 years [19 - 81 years]. The median tumor size was 3 cm [1-9 cm]. Neoadjuvant chemotherapy was performed for 42 patients (12.6%). All patients with pathological surgical margins (12.6%) underwent a complementary surgery. After a mean follow up of 62.86 months [8 – 152 months], 29 patients (8.3%) presented a local recurrence. The 5-year local recurrence free survival was 91.9% and the 10-year local recurrence free survival was 87.9%. The mean time to the first recurrence was 26.79 months [3 - 124 months]. The location of recurrences was homolateral breast in 24 patients, homolateral axillary lymph node in 4 cases and homolateral supraclavicular lymph node in one case. Analytic statistics showed that the only factor associated with a shorter LFRS was age under 40 years old (p=0.03). Therefore, tumor size and molecular subtype had no statistically significant association with local recurrence (respectively p=0.12 and p=0.59).

Conclusion : Local recurrences remain a major concern associated with breast conserving therapy. Thus, patients at high risk of developing local relapse must be informed before the surgery.

#### 042 : Male breast cancer : Experience of Jendouba Onco-Radiotherapy Center

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**Introduction :** Breast cancer is a malignant tumor that is more common in women. In men, it represents less than 1% of cases of male neoplasia and 1 to 2% of all breast cancers.

**Materials and Methods :** This is a retrospective observational study over a period of 2 years from January 1, 2018 to December 31, 2020, focusing on men with breast cancer followed in the Jendouba onco-radiotherapy center.

Result : The study included 11 male patients with breast cancer. The average age was 61 years with a range of 41 to 82 years. The circumstances of discovery were mainly self-palpation of a breast nodule in 36.4% of cases, cutaneous change of the skin in 18.2% of cases. Axillary involvement was observed in 5 patients, only one had supraclavicular lymphadenopathy confirmed histologically. Infiltrating ductal carcinoma was the most common histological type (90.9%). The predominant histological grade was SBR III in 72.7% of cases. Hormone receptors were positive in 81.8% of cases. Overexpression of HER2 neu was observed in 3 patients (27.3%). The extension assessment was carried out in all patients, three patients were metastatic. Surgical treatment was carried out in 9 patients: Eight had undergone radical treatment and one patient had a clean mastectomy. Adjuvant chemotherapy was indicated in 7 patients (63.6%). Locoregional radiotherapy was performed in 8 patients. Eight patients had received anti-aromatase hormone therapy. After an average follow-up of 28 months, eight patients (72.7%) were in complete

remission, one patient was undergoing treatment with palliative chemotherapy with radiological stability of their tumor disease and two patients died. The overall 5-year survival was 81.8%.

**Conclusion :** Although breast cancer in men is rare, it has a worse prognosis than in women. To do this, it is important to know the symptoms, encourage early detection and appropriate treatment.

### 043 : Risk factors associated with late relapse in early luminal breast cancer patients

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**Introduction :** Early endocrine receptor positive breast cancer carries a risk of late distant relapse. After achieving complete remission patients are still at risk of developing recurrences. Endocrine therapy for a period of 5 years lowers this risk significantly. But still, it lingers beyond the 5-year mark. Potential therapies exist that can further lower this risk such as adjuvant targeted CDK inhibitors.

**Materials and Methods :** We retrospectively studied the files of 350 patients treated at the medical oncology department at the Salah Azaiz Institute for ER+ EBC. Only patients who did not experience early relapse were included. Patients were followed for five to ten years after the diagnosis. The aim of this study is to describe the histological, epidemiological and tumor's intrinsic characteristics associated with relapse after 5 years from initial diagnosis.

**Result :** The population was divided equally of pre- and post-menopausal patients. The average tumor size for the population was 2.55cm. lymph node status was negative in 54.86% of the cases. Out 350 patients, 14.57% experienced relapse after 5 years of ET. Patients with N0 lymph node status relapsed in 8.3% compared to 60% of the patients with N3 lymph node stage. A Khi-deux de Pearson test evaluated the relationship between relapse and menopausal status. P value was 0.065. as for SBR grading and ki67, p value was above 0.05. Tumors under 2 cm relapsed in 4.8%, those above 5 cm relapsed in 66.7% of the cases. Patients with positive her2 status relapsed in 33.8% compared to 23.5% for patients with her2 negative status.

**Conclusion :** In our population, the factors that seem to influence relapse rates are lymph node staging, tumor size and her 2 status. Contrary to research finding, menopausal status did not impact progression free survival. Overall patients with advanced lymph node staging and higher tumor size warrant more treatment and close follow up.

### 044 : Adverse events related to endocrine therapy in breast cancer patients

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**Introduction :** Endocrine receptor positive breast cancer patients undergo 5 year of adjuvant endocrine therapy. A selective estrogen receptor modulator: tamoxifen is the most common drug used for pre-menopausal patients. Aromatase inhibitors are given only to post-menopausal patients. These drugs are usually well tolerated and patients carry out their 5 years course with no trouble. But for some patients several adverse events are reported.

**Materials and Methods :** This study focused on the tolerance of endocrine therapy given to 350 patients treated for endocrine receptor positive breast cancer. We retrospectively analyzed the files of patients treated at the salah Azaiz institute and received endocrine therapy. The aim of the study is to describe the side of the endocrine therapy reported at our institute.

**Result :** The majority of the patients received tamoxifen in 63.71% of the cases. Letrozole was given to 26% of the population. Anastrozole was given to 9.14% and exemestane to 1.14% For patients who received tamoxifen the most commonly reported adverse event was hot flashes in 25.7% of the cases. Usually well tolerated and did not to lead to interruption of the therapy. Thromboembolic event was reported in 9.4%. these patients were later switched to an aromatase inhibitor. uterine carcinoma was only reported 5.6%, uterine hyperplasia in 19.6% and uterine atrophy in 14.3% Aromatase inhibitors' most common adverse event was abdominal discomfort in 28.8% followed by joint pain in 25.6% and myalgia in 9%. All were not debilitating and did not lead to drug cessation. Osteoporosis was found in 13.8% and osteopenia in 12.3%. fatigue was found in 17% of the cases. Tachycardia was the least common and observed only in 3 patients.

**Conclusion :** Even though endocrine therapy is generally well tolerated, some patients report debilitating adverse events. Screening these side effects can help clinicians improve the symptoms and help patients adhere to their treatment.

### 045 : Survival Impact of Cycline dependant kinase (CDK) 4/6 Inhibitors discontinuation in patients with metastatic breast cancer : A retrospective tunisian experience

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**Introduction :** Standard of care for patients with metastatic hormone receptor (HR) positive, HER2 negative breast cancer is CDK4/6 inhibitors in association with endocrine therapy. In Tunisia, CDK4/6 inhibitors are often discontinued due to unavailability and economic reasons. Few data are available to show if CDK4/6 inhibitors can be safely discontinued in those patients with an on/off scheme.

**Materials and Methods :** We conducted a monocentric retrospective study including 75 women treated with Ribociclib for luminal metastatic breast cancer (MBC) from 2017 to 2022. Kaplan Meier was used to evaluate PFS and prognosis factors.

Result : Mean age was 50.3 years [29-70]. We observed 65% of De Novo MBC, in relapsing patients median time to relapse was 25.5 months [9-96]. Visceral metastases were registered in 62% of patients and 37% had bone-only disease. Ribociclib was given in first line in 63%, second line in 23% and as maintenance after first line chemotherapy for visceral crisis in 14%. Associated endocrine therapy was in 57% Letrozole, 32% Exemestane, 8% Anastrozole, 2% Fulvestrant and 1% Tamoxifen. The median number of Ribociclib cycles was 8 [3-40]. Sixty two percent of patients received treatment thanks to the National Tunisian Health Insurance Fund, 22% through an access program and 15% by both. Median time to obtain Ribociclib was 123 days [0-42], with 31% waiting for 5 months or more to obtain it. Therapy was interrupted due to delivery delay in 56% of cases with a median time of therapy cessation of 135 days. After a median follow up of treatment with Ribociclib of 12 months,mPFS was 16 months. mPFS was significantly lower for patients who had CDK4/6 inhibitors discontinued for more than 240 days (mPFS 17months vs 6 months, p=0.018), while any interruption less than 240 days didn't impact mPFS. For patients who had their treatment discontinued, type of radiologic response (stability vs partial response) when treatment was interrupted did not impact mPFS (p=0.621). Overall survival could not be evaluated yet.

**Conclusion :** Discontinuation of CDK4/6 inhibitors appears to be safe in patients with luminal MBC if it doesn't exceed 8 months, especially in countries with economic struggles. This strategy could also be considered

in patients with long-lasting disease stabilization. Randomised prospective trials are needed to assert our results.

### 046 : Breast Cancer Screening: Knowledge, Attitudes, and Practices among Female University Students in the cap bon, Tunisia

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**Introduction :** In Tunisia, breast cancer is the first female cancer and represents the leading cause of cancer-related deaths (19.7%). Moreover, in the North African countries breast cancer is characterized by an earlier age, an advanced stage at presentation and more aggressive subtypes. In light of this, we conducted a study to assess the knowledge, attitude, and practice of breast cancer screening among female university students.

**Materials and Methods :** We conducted an institutional cross-sectional study involving 361 randomly sampled female university students. Data collection was done using a pretested, self-administered questionnaire. We utilized descriptive statistics to describe the prevalence and burden of breast cancer screening among the participants.

**Result :** Our study revealed good knowledge regarding breast cancer screening among female university students, yet 82.8% had a negative attitude about the disease. More than three-quarters (76.6%) of the respondents had never practiced any form of breast cancer screening. Notably, there was a significant association between knowledge of breast cancer screening and attitude (p = 0.027), and factors such as level of study (p = 0.041), ethnicity (p = 0.026), parity (p = 0.018), and faculty of study (p = <0.001) influenced the participants' knowledge.

**Conclusion :** It is crucial to implement comprehensive awareness campaigns to address the negative attitude and poor screening practices among female university students regarding breast cancer. Additionally, providing free and widespread breast cancer screening services to students should be considered as a means to combat this disease.

#### 047 : Prognostic Value of N3c Involvement in Breast Cancer Patients: A Retrospective Analysis

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**Introduction :** Breast cancer remains the most common malignancy among women worldwide and is the major cause of most cancer-related deaths. Its prognosis is influenced by multiple clinical and pathological factors . Among these factors, the involvement of supraclavicular lymph nodes: N3c disease, represents an advanced stage of breast cancer associated with poor outcomes. In this study, we aim to understand the implications of N3c involvement in the prognosis of breast cancer patients **Materials and Methods :** We performed a retrospective study that analysed 24 patients, with histologically confirmed breast cancer at Salah Azaiez Institute between 2011 2023 with N3c disease indicating metastases to the ipsilateral supraclavicular lymph nodes ( at the time of diagnosis or relapse ) to elucidate the clinical implications of this advanced stage of disease.

**Result :** The average age was 54 years old [33-81]. 58% of patients were postmenopausal. 37.5% had a history of breast cancer. The most frequent histological type was invasive ductal carcinoma (79%), followed by invasive lobular carcinoma(8%). Tumors were SBR III in 50%, and SBR II in 30%. HER2 was overexpressed in 17%. Molecular subtypes were as follows: luminal B in 69%, triple-negative in 8%, and luminal A in 4%. Stages were 38% cT1-T2, and 62% were cT3-4. At the diagnosis, 25% of patients were cN1,67% were cN3 and 8% were cN0. 5% of the patients

were metastatic at the time of diagnosis with 100% of these patients having sus clavicular involvement (N3c) .Among the patients that were cN3 at the time of diagnosis: 75% were T4 with an SBR III in 50%, and KI67 >50% in 43 %. We performed a biopsy of supraclavicular lymph nodes present in 87% of cases: supraclavicular lymph nodes were positive in 56% of cases, negative in 25% of cases, and nonconclusive in 6% of cases. During follow-up, Among the 33% of patients who were not N3c at the time of diagnosis, 87.5% experienced relapse by the appearance of a supraclavicular lymph node with an average delay of 2 years [1-7 years] with a molecular profile change observed in biopsy samples from 33% of patients: from luminal B to triple-negative. Based on the latest available data after a median follow-up of 2 years [range: 1-5], 37% of the patients were deceased, 25% were lost to follow-up and 31% are still undergoing treatment.

**Conclusion :** Supraclavicular lymph node involvement counts as a significant prognostic indicator in breast cancer with a correlation with unfavorable histoprognostic features. our results highlight the importance of confirming initial N3c involvement through biopsy to ensure accurate diagnosis and treatment decisions.

#### 048 : Knowledge of women about self-palpation of the breast

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**Introduction :** Early detection of breast cancer through mammogaphy, clinical examination and breast self-examination can reduce morbidity and mortality. Breast self examination is useful for screening women at low risk of breast cancer. The correlation between women's knowledge of breast cancer risk factors and the practice of breast self examination has already been evaluated in other countries.

Materials and Methods : Observational study by questionnaire conducted from 01/01/2023 to 31/12/2023 among women >18 years of age, with no personal history of breast cancer. It included questions on knowledge of breast cancer risk factors, screening, and practices and technique. A score for knowledge of breast cancer risk factors (scale from 0 to 15) and a score for the technique (scale from 0 to 9) were established. **Result :** 500 responses were analyzed. The mean age was 26 (+/- 6) years. 98 patients (19.6%) were health professionals. The average level of knowledge was  $8,3 (\pm 2.1)$ . The breast cancer risks cited were personal/familial history of gynaecological cancer (84%), age >50 (62%), smoking (6%), overweight/obesity (46,4%) and sedentary lifestyle (36,4%). 46,2% of women (231) practiced breast self examination, 13,4% once a month, 8,2% at the beginning of the cycle, 51,9% standing/sitting, 43,7% in front of a mirror, 57,1% with arm raised, 59,3% palpated the 4 quadrants and 42,4% the axillary zone. Regular gynecological follow-up had a positive influence on the level of knowledge (p=0.03), the practice of breast self examination (p<0.001) and its technique (p=0.02).

**Conclusion :** The level of knowledge of breast cancer risks, women's perception of the breast self examination technique were discordant, even among healthcare professionals.

### **049** : Unveiling the Forgotten Aspect of Recovery: Sexual Quality of Life in Breast Cancer Survivors

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**Introduction :** Breast cancer is a widespread, severe, chronic, and expensive health challenge, posing a significant public health concern. Its

unique nature is manifest in its visible impact on a secondary sexual organ. Known as relational cancer, its broad physical and psychological effects profoundly influence both the general and sexual quality of life (QoL).

**Materials and Methods :** A cross-sectional, descriptive, analytical, and single-center study was conducted at the Department of Gynecology and Obstetrics in the Maternity and Neonatology Center of Monastir. The study spanned 2 years, with data collection occurring from January 1, 2019, to December 31, 2021, utilizing standardized EORTC questionnaires: the QLQ-C30 and QLQ-BR45.

Result : This research investigates the intricate links between sexual and overall quality of life (QoL) among breast cancer survivors, revealing how age, education, and treatment choices affect body image, sexual satisfaction, and emotional well-being. Key observations include lesser body image concerns among those over 60, while 20 to 40-year-olds reported decreased sexual pleasure and increased dysfunction. A notable correlation was found between lower education levels and higher sexual activity. Surgical interventions had diverse impacts: women undergoing radical surgery reported dissatisfaction with their body image, despite being pleased with their breast appearance, whereas those avoiding mastectomy enjoyed higher sexual satisfaction. Hormone therapy recipients faced more severe endocrine-related sexual issues. Multivariate analysis highlighted the complex interactions between body image, sexual activity, fatigue, emotional state, and future outlook, significantly affecting overall QoL. Body image, particularly, was strongly linked to breast satisfaction and future outlook, with emotional well-being acting as a crucial intermediary. Sexual activity was intricately tied to both pleasure and fatigue, illustrating the balance between engaging in sexual activities and managing their physical repercussions. Future outlooks were significantly influenced by the emotional dimension, specifically anxiety and depression, and were also associated with fatigue levels. The study underscores the multifaceted nature of recovery, pointing to the need for holistic care approaches that address the wide spectrum of survivorship challenges in breast cancer patients to enhance their quality of life, both sexually and overall.

**Conclusion :** The management of the sexual dimension of quality of life for breast cancer survivors in remission requires a multidisciplinary approach involving gynecologists, oncologists, plastic surgeons, psychiatrists, and sexologists, aiming to improve their well-being.

### 050 : Anatomopathological profile of breast cancer in cape bon, Tunisia

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**Introduction :** Breast cancer is the most common cancer among Tunisian women and worldwide. In Cape Bon, Tunisia, the anatomopathological features of this cancer have not been established in previously published studies. Knowledge about these features is needed for the cultural adaptation of prevention and health care systems in the region. The aim of our study was to determine the pathological profile of breast cancers in the only public health anatomic pathology regional laboratory.

**Materials and Methods :** We conducted a retrospective descriptive study of 230 patients who were diagnosed with breast cancers in our laboratory over a 5-year period, from July 2010 to July 2020.

**Result :** The average age was 51 years. The mean histologic tumor size was 31 mm. The initial diagnosis has been based on lumpectomy in 83% of the cases. Nonspecific invasive cancer was the most frequent histological type. SBR grade III was most prevalent. Lymphovascular invasion was detected in 33% of cases. Axillary lymph node dissection was performed in 72% of cases. Hormone receptors were positive in 73% of cases. Her2-Neu receptors were overexpressed in 19% of cases. The

ki67 was  $\geq$  14% in 38% of cases. Luminal A was the most common molecular subtype.

**Conclusion :** In Cap Bon region breast cancer is characterized by an early onset, a large tumor size and pejorative histologic prognostic factors.

# 051 : The Ribociclib in Metastatic Breast Cancer Patients : Covred by the National Health Insurance Fund in Tunisia

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**Introduction :** The advent of CDK4/6 inhibition has constituted a pivotal milestone in the realm of targeted breast cancer therapy. The combination of CDK4/6 inhibitors with endocrine therapy has emerged as the foremost therapeutic modality for patients afflicted with hormone receptor-positive (HR +) /HER2-negative advanced and metastatic breast cancer. Ribociclib (Kisqali©) is a CDK4/6 inhibition which considered a first-line treatment option. It is also effective in extending survival when combined with hormone therapy. The objectives of the study are to study the epidemiological profile of Ribocilib beneficiaries, to estimate survival under treatment before disease progression, and to evaluate the fund's expenditure on Ribocilib (Kisqali©) from 2021 to 2023.

**Materials and Methods :** It is a retrospective descriptive study including patients with metastatic breast cancer witch receive Ribociclib (Kisqali©) treatment, supported by the National Health Insurance Fund and provided by the CNSS polyclinic of Sfax during the year 2023.

Result : Our study included 67 menopausal women benefiting from Ribociclib during the year 2023. The study shows that the age group most affected was between 41 and 50 years old (31%), followed by that between 51 and 60 years old (27%). The age extremes are 31 and 84 years and the median is equal to 54 years. Ribociclib was indicated as the first line in 38% of cases and the second line in 61% of cases. This cyclin-dependent kinase (CDK) 4/6 inhibitor was combined with endocrine therapy drugs: 22 % of cases with tamoxifen. 60% of cases with antiaromatase, and 18 % of cases with Fulvestrant. The study of the response of patients to Ribociclib shows that the majority of cases were treated for a period less than or equal to 12 months (i.e. 63%), with extremes ranging from 3 months to 30 months and a median of 14 months. 20 patients (i.e. 30 %) have progressed sous Ribociclib. And 3 patients have changed to another cyclin-dependent kinase (CDK) 4/6 inhibitor (palbociclib). For the expenses of the fund in (Kisqali<sup>©</sup>) dispensed at the CNSS policlinic of Sfax, they increased from 351149.4 dT in 2021 (since its approval in Tunisia) to 2 838555.33 dT in 2023. As well, the number of boxes of (Kisqali©) has increased from 31 boxes in 2021 to 447 boxes in 2023. In Tunisia, Kisqali tablets can cost around 6350.235 dT per month in 2023. **Conclusion :** Since its coverage by the National Health Insurance Fund in

Tunisia, Ribociclib (Kisqali©) has become a great treatment option for advanced and metastatic breast cancer menopausal patients. And it significantly improves overall survival meanly when used as a first-line treatment. Also, it can improve survival without progression and the quality of life for patients.

#### 052 : Periductal stromal tumor of the breast. A case report

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**Introduction :** Benign and malignant biphasic lesions of the breast are distinguished by the presence of a dual epithelial and stromal cell population. Based on stromal composition, there are two categories. They are made up of a specialized stroma of intralobular origin, such as fibroadenoma or phyllodes tumor, or non-specialized stroma of

interlobular origin, such as hamartoma or pseudoangiomatous stromal hyperplasia.

**Materials and Methods :** We describe the case of a rare variant of intralobular origin, called « periductal stromal tumor ».

**Result :** Patient M k, 63 years old, consulted for a nodule of the right breast discovered on autopalpation. On clinical examination, it was a 10 cm mass covering the entire left breast and adhering to the skin. On echomammography, it was a multilobulated tumoral mass measuring 9\*8 cm in the left areolar region and classified as ACR4. She underwent microbiopsy, which showed a histological appearance and immunohistological profile of deep desmoid fibromatosis. In view of the radio-histological discrepancy, we decided to perform a mastectomy. On definitive anatomy, the tumour was a periductal stromal tumour of the left breast measuring 16cm long axis. This tumor belongs to the WHO subtypes of phyllodes, of which the absence of the foliaceous aspect is one of the main differential characteristics. All margins were healthy. Surveillance was decided and after a 24-month follow-up, the evolution was favorable.

**Conclusion :** Periductal stromal tumor is a rare tumor, distinct by its morphological character. Its clinical evolution and prognosis are similar to those of a phyllodes tumour.

#### 053 : Carcinomatous Meningitis in Patients with Breast Cancer

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**Introduction :** Carcinomatous meningitis(CM) is a late and serious complication of cancer. Breast cancer is the leading nonhematologic cause of meningeal carcinomatosis.

**Materials and Methods :** A retrospective analysis of eight patients with carcinomatous meningitis from breast cancer was conducted at the department of Medical oncology of Mohamed Taher Maamouri university hospital

**Result :** The diagnosis of CM was confirmed by the presence of carcinomatous cells in a cerebrospinal fluid(CSF) sample or by the association of suggestive clinical signs and meningeal contrast on cerebrospinal MRI. The management of carcinomatous meningitis involved a combination of lumbar intrathecal chemotherapy, systemic treatments, and supportive care. All patients received lumbar intrathecal chemotherapy (IT) (methotrexate) and Symptomatic treatment (corticosteroids andAntiepileptic Drugs). Three patients died during the treatment of carcinomatous meningitis due to the progression of the systemic disease.

**Conclusion :** Despite advances in treatment, carcinomatous meningitis carries a poor prognosis, However, ongoing research into novel treatment approaches and improved supportive care measures may offer hope for improved outcomes in the future.

### 054 : Characteristics of triple negative breast cancer in The Tunisian Cap Bon region

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**Introduction :** Triple-negative breast cancer (TNBC), an aggressive malignancy with a poor prognosis, refers to a subtype of breast cancer that lacks expression of estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER2). The aim of the study was to analyze the clinicopathologic features and clinical outcomes of TNBC in the population of Tunisian Cap Bon.

**Materials and Methods :** We conducted a retrospective study of 58 patients diagnosed with TNBC between 2015 and 2019. Clinicopathologic features and clinical outcomes have been analyzed. The overall survival (OS) and the disease-free survival (DFS) were calculated using Kaplan-Meier method.

**Result :** A total of 58 women were identified as having TNBC (16.3% of all breast cancer). At diagnosis, 19% of patients had distant metastases. The median age was 50 years. The median histological tumor size was 40 mm. The majority of patients had nonspecific invasive carcinoma (95%) and 71% of them were grade III SBR. Nodal metastasis was detected in 64% of the patients .Patients with advanced tumors or inflammatory breast cancer (28%) received neoadjuvant chemotherapy followed by surgery. Patients with metastatic disease were treated by palliative chemotherapy. OS and DFS at 3 years were 74% and 68% respectively. Among 58, three patients experienced local relapse (5.1%) and 18 (31%) patients presented with distant metastasis. The predominant localization of the first relapse was in visceral organs (60.%).

**Conclusion :** Triple-negative breast cancer is associated with advanced stage at diagnosis, high grade tumors, high incidence of lymph node metastases, and shortest survival.

# 055 : Mucinous carcinoma of the breast: an epidemiological and histopathological study in the center of Tunisia

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**Introduction :** Mucinous carcinoma of the breast (MCB) is a rare breast tumor with peculiar morphological features and generally a good prognosis. Its presentation on mammography often mimics a benign lesion and can be misleading. Thus, histological examination is essential for the diagnosis and to identify prognostic factors. Our objective is to study the clinical and pathological features of this entity.

**Materials and Methods :** We conducted a retrospective study including 45 cases of MBC diagnosed between 2014 and 2023.

**Result :** The mean age was 65 years with a range from 34 to 83. In all cases, tumors were unilateral with multifocality detected in 8 cases. Tumorectomy was performed in 40 patients while mastectomy was undertaken in 25 patients. At gross examination, the mean tumor size was 2 cm, ranging between 1 and 4cm. All tumors were well circumscribed with a gelatinous cut surface. Histologically, MCB was associated with no specific carcinoma in 8 cases. Tumors were characterized mostly SBR modified grade I (33 cases), followed by grade II (9 cases), and grade III (3 cases). Lymphovascular invasion and perineural sheathing were detected in only 11 cases. Lymph node metastases were observed in 7 cases. Immunohistochemical study showed, in all cases, positivity for estrogen and progesterone receptors, negativity for Her2, and a ki67 proliferation index below 20%, classifying all tumors as luminal A. Evolution was marked by recurrence in 7 cases with survival observed in all patients.

**Conclusion :** MCBs are rare specific histological subtype of breast carcinomas, accounting for 2% of all breast tumors. They occur generally in older women with a median age of 60 years. On clinical and radiological presentation, they mimic benign lesions. Histological and immunohistochemical studies are essential for the diagnosis. Frequently, they were categorized as luminal A and they have a good prognosis.

### **056 : Does Tumor size influence outcomes ater breast conserving surgery ?**

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**Introduction :** Radical mastectomy used to be the sole surgical management of breast cancer, regardless the clinical size of the tumor. However, with advances in early diagnosis and adjuvant treatments, breast conserving therapy became the gold standard for the management of early stage breast cancer. This type of surgery concerned essentially tumors with a clinical size under 3 cm. Nevertheless, recent studies showed the possibility of performing BCT for larger tumors. The objective of our study was to evaluate the impact of the tumor size on overall survival , distant metastasis free survival and local recurrence free survival after breast conserving therapy .

**Materials and Methods :** We undertook a retrospective study including 348 patients who underwent breast conserving therapy for an unilateral, non metastatic, histologically confirmed breast cancer between january 2008 and december 2018.

**Result :** At the moment of diagnosis, the median tumor size was 3 cm [1-9cm]. The tumor was not clinically palpable in 5.9% of cases. Breast conserving surgery was performed after neoadjuvant chemotherapy in 12.6% of cases. The 5 –year overall survival was 89.9% for tumors with a size of 3 cm or less versus 93% for tumors sized over 3 cm (p=0.3). The 5-year local recurrence free survival was 92.9% for a tumoral size of 3 cm or less versus 85.2% for tumors larger than 3 cm (p=0.12). As to 5-year distant metastasis free survival, it was 86.9% for tumors of a 3 cm or less size versus 80.1% for tumors larger than 3 cm (p=0.16).

**Conclusion :** Our results showed no statistically significant association between tumor size and the different outcomes after breast conserving therapy . However, results reported in the literature are controversial and further studies are required to determine wether breast conserving therapy can be performed for large tumors or not.

### 057 : Epidemiological Profile of Breast Cancer in Young Women Under 35 Years at the Salah Azaiez Institute

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**Introduction :** Young women account for 2-25% of breast cancer cases. It differs with respect to etiology, clinical features and outcome, when compared with breast cancer in older women.

**Materials and Methods :** This is a retrospective study of a series of 413 cases of breast cancer in women under 35 years old collected at the Salah Azaiez Institute from January 2010 to December 31, 2018. Our objective was to determine the epidemiological and clinical characteristics of breast cancer in young women under the age of 35.

Result : During the period, 9583 patients were treated for breast cancer at the Salah Azaiez Institute, among them, 614 women were under 35 years old (6.4%). Our study included 413 files. The mean age was 31 years and the median age was 32 years with extremes ranging from 21 to 35 years. According to the location, the left breast was affected in 201 cases (48.7%) and the right breast in 212 cases (51.3%). The average consultation delay was 3.6 months with extremes ranging from 1 to 24 months. Self-palpation of a nodule was the most frequent reason for consultation with 70.9% of cases, while a skin alteration was the circumstance of discovery in 6.3% of cases. The tumor was located in the upper outer quadrant in 53.5% of cases, followed by the upper inner quadrant with 13.1% of cases. The mean clinical size was 4.4 cm with extremes ranging from 1 to 20 cm. Tumors were classified as T2 in 45.3% of cases, T4 in 24.2% of cases, T3 in 17.2% of cases, and T1 in 12.3% of cases. Lymph node involvement was present in 88.3% of cases, with supraclavicular involvement in 4.1% of cases. In 7.5% of cases, patients were metastatic from the outset.

**Conclusion :** Breast cancer is increasingly common in women under 35 years old. This cancer requires particular attention in terms of diagnosis, treatment, and psychological support, in order to help these women improve their quality of life for as long as possible.

### 058 : T4 breast cancer tumors in Young Women Under 35 Years Old at the Salah Azaiez Institute

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**Introduction :** Locally advanced inflammatory and non-inflammatory breast cancer in Tunisia has a higher frequency compared to developed countries, especially in women under 35 years of age. Through this study, we investigated the characteristics of T4 tumors in breast cancer for this age group.

**Materials and Methods :** This study retrospectively analyzed a cohort comprising 100 cases of T4 breast cancer occurring in women under the age of 35, gathered at the Salah Azaiez Institute between January 2010 and December 31, 2018. Our objective was to determine the epidemiological and clinical characteristics of Inflammatory breast cancer in young women under the age of 35.

**Result :** The median age was 32 years old, with an average consultation delay of 5.7 months. Tumors were classified as T4b in 52% of cases and T4d in 48% of cases. Lymph node involvement was observed in 100% of cases, with N1 in 86% of cases and N3c in 13% of cases. These tumors were metastatic from the outset in 24% of cases. In 99% of cases, the metastatic site was bones . Histopathological analysis concluded that all these tumors were of the non-specific ductal type, with SBR grade 2 in 68% of cases and SBR grade 3 in 31% of cases. These tumors had an intraductal component in 41.6% of cases and positive lymphovascular emboli in 36.7% of cases. The most frequent molecular profile for these tumors was Luminal B, present in 48% of cases, followed by triple-negative tumors (26% of cases) and HER2 overexpressed tumors in 13% of cases.

**Conclusion :** Inflammatory breast cancer is a specific and rare form, first described in 1924 by LEE and TANNENBAUM. It is primarily characterized by its clinical presentation and extreme severity. It represents approximately 1 to 5% of breast cancers .Diagnosis is based on clinical evaluation and histology.

### 059 : Breast Carcinoma Metastases to the Sphenoid Sinus: a case report

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**Introduction :** Paranasal breast cancer metastasis is extremely rare and often misdiagnosed. Our objective is to describe its clinical, radiological and therapeutic features.

**Materials and Methods :** We report the case of a breast cancer metastases to the sphenoid sinus in a 58-year-old patient consulting our cervico-facial surgery department at Salah Azaiez Institute in 2022.

**Result :** A 58-year-old female with a history of grade 3 invasive ductal carcinoma of the left breast was referred to our department for a left-sided non-specific mild headache associated with left proptosis and left facial paralysis. However, there was no history of nasal obstruction or visual defects. Clinical examination revealed grade 3 left-sided facial paralysis, left proptosis, and left sixth cranial nerve palsy. Nasal endoscopy was normal. A computed tomography (CT) scan and magnetic resonance imaging (MRI) of the brain and paranasal sinuses were requested, which demonstrated an enhancing soft tissue lesion occupying the left sphenoid sinus and bone expansion in the left side of the sphenoid bone with evidence of bone erosion, along with mild proptosis. An endonasal biopsy was performed and the diagnosis of breast carcinoma metastasis was

considered. The patient was referred to oncology department for palliative chemotherapy

**Conclusion :** Metastatic carcinoma to the paranasal sinuses, particularly from breast cancer, is rare. Symptoms can mimic sinusitis, leading to delayed diagnosis. Treatment is mainly palliative, given the poor prognosis and low life expectancy.

#### 060 : Spectrum of BRCA1/BRCA2 and Non-BRCA Mutations in Tunisian Patients with Breast and/or Ovarian Cancer: Insights from Next-Generation Sequencing Multigene Panel Screening

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**Introduction :** Breast and/or ovarian cancers rank among the most prevalent cancers affecting women worldwide. In Tunisia, the healthcare challenges of breast and/or ovarian cancers has been progressively rising, thus stressing the urgency for early detection, surveillance, and effective disease management measures. However, the burden linked to hereditary mutations remains inadequately understood.

**Materials and Methods :** We sequenced 50 unrelated patients from the south region of Tunisia with an indication of breast and/or ovarian cancers, using OncoRisk Cancer panel which includes 31 genes, strongly associated with inherited cancers. Genetic variations were identified and interpreted using the Basespace platform and verified with the clinVar database.

**Result :** A few number of pathogenic variants were detected in the BRCA1/2 genes. Amongst the BRCA negative patients, new variants in RAD51, ATM, and TP53 genes were identified. We also identified many different polymorphisms and unclassified variants.

**Conclusion :** In Tunisia, socioeconomic disparities that restrict access to treatment is a major factor towards the growing cancer burden. Therefore, integrating of a cost-effective and comprehensive multi-gene test could facilitate the widespread implementation of genetic screening in the clinical practice for hereditary breast and/or ovarian cancers.

### 061 : Under the Microscope: Phyllodes Tumors of the Breast: A Review of 30 Cases

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**Introduction :** Phyllodes breast tumors are composed of connective tissue and epithelial elements similar to those found in fibroadenomas, but are distinguished by increased cellularity in the connective portion. These tumors are quite rare and present two main challenges: the first is the differential diagnosis between benign, malignant, and borderline forms of the tumor, and the second concerns therapeutic strategy, particularly determining the extent of surgical resection.

**Objective:** To specify the diagnostic, therapeutic, and prognostic peculiarities of phyllodes tumors of the breast.

**Materials and Methods :** This is a descriptive analysis conducted in our department over four years involving 30 cases. Collected data include age, parity, clinical characteristics of the tumor, results of additional examinations, and applied treatment.

**Result :** At diagnosis, the average age was 39 years, ranging from 16 to 67 years. The average size of the tumors was 9.3 cm, varying between 1

cm and 32 cm. The majority of patients, representing 80% or 24 cases, were nulliparous. Among our group, two patients had metastases at the onset. The treatment adopted was surgery, supplemented or not by radiotherapy, depending on the tumor grade.

**Conclusion :** Phyllodes tumors are rare entities, with diagnosis confirmed solely through histological analysis. Their management relies on surgical intervention that requires extensive resection to ensure tumor-free and healthy margins. This approach is crucial to minimize the risk of local recurrence.

## $062: \mbox{Desmoid-type}\xspace$ fibromatosis of the breast: case report and literature review

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**Introduction :** Desmoid fibromatosis of the breast is a rare and benign mesenchymal tumor arising from the musculoaponeurotic structures of the breast. It accounts for only 0.2% of all breast tumors and 4% of extraabdominal fibromatoses. The diagnosis is not always straightforward because of clinical and radiologic similarities with breast carcinomas, making pathological and immunohistochemical analyses essential for an accurate diagnosis. Despite being non-metastasizing, it is a locally aggressive tumor with a high rate of recurrence. Surgical excision with clear margins is the primary treatment modality. Incomplete resection increases the risk of local recurrence, but distant metastases do not occur. In this Poster, we will review the clinical presentation, diagnostic evaluation, and treatment options for desmoid fibromatosis of the breast, based on a comprehensive analysis of the current literature.

Materials and Methods : Case presentation A 26-year-old female patient with no notable medical history was referred to our clinic after discovering a right breast mass during postpartum. Clinical examination revealed a well-defined, non-painful, retro-areolar mass measuring 5 cm in the right breast, which was immobile in relation to the deep plane with no associated inflammatory signs. There were no palpable lymph nodes or nipple discharge. Examination of the left breast was normal. Breast ultrasound and mammography revealed a 6.5 cm solid retro and peri-areolar mass in the right breast classified as ACR4c, as well as liquid cysts in both breasts classified as ACR2. Biopsy of the breast mass showed histological and immunohistochemical features consistent with a benign tumor composed of spindle cells, consistent with nodular fasciitis, fibromatosis, or pseudoangiomatous stromal hyperplasia (PASH) in its fascicular form. The recommended course of action was to perform a right segmentectomy, during which it was noted that the tumor was adherent to the muscular plane. The pathological report concluded that the right breast mass was a desmoid fibromatosis with incomplete resection, with tumor involvement of the superior, internal, external, superficial, and deep margins.

**Result :** Macroscopic examination revealed a fibro-fatty mass measuring 8 x 7 x 5.5 cm, which was whitish and contained micro-cysts. Microscopic examination showed a spindle cell proliferation with a light to moderate cell density and a rich vascularization. The spindle cells were fibroblast or myofibroblast-like, arranged in diverging bundles separated by collagen tracts, sometimes wavy. These cells had round or oval nuclei, nucleoli, showed few or no atypia, and rare mitoses (mitotic index estimated at 2 mitoses/10 high-power fields). The vessels were often small, surrounded by a clear space with hemorrhagic ruptures and small lymphoid aggregates. This proliferation was present within areas of breast parenchyma, sometimes without lesions and sometimes with proliferative fibrocystic changes without atypia. It focally infiltrated the striated muscle, which appeared atrophic at this level. The superior, internal, superficial, and deep margins were all involved by the tumor. The case was presented at the multidisciplinary team meeting (including

gynecology, oncology, etc.) and the patient was proposed for re-excision and resection of the superior, inferior, internal, external, and deep margins. The final pathological examination revealed a 2mm residual desmoid tumor located 3mm from the deep muscular limit. The patient's clinical course has been unremarkable, with no tumor recurrence to date.

**Conclusion :** This case, along with the reviewed literature, points to the necessity for heightened awareness among clinicians about this rare entity, advocating for a meticulous diagnostic protocol to differentiate it from malignant tumors of the breast. The positive outcome following the second surgery underscores the potential for successful management with careful surgical planning and execution. Future research should aim at better understanding the molecular underpinnings of desmoid fibromatosis, which may open avenues for targeted therapies, reducing the reliance on surgical options and possibly decreasing the recurrence rate. Additionally, long-term follow-up studies are needed to establish the efficacy of different treatment modalities and to define standardized management protocols for this unpredictable disease. In conclusion, desmoid-type fibromatosis of the breast presents significant challenges in diagnosis and management, necessitating a multidisciplinary approach to ensure optimal

### 063 : Advanced consultation for cancer patient in Tozeur: experience of 2023

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**Introduction :** The incidence of breast cancer is increasing yearly; it represents the leading cancer in women in Tunisia. Salah Azaiez Institute is the reference center associated with the three oncological specialties: surgery, medical oncology, and radiotherapy. It is located in the capital, distant from the south, where cancer care access is difficult. To minimize the constraints of the distance (455 km) between the south, specifically the governate of Tozeur and Salah Azaiez Institute, and to maintain a regular follow-up of our patients, an advanced cancer consultation was carried out every two months at the Tozeur Regional Hospital as part of a medical agreement between the two institutions under the aegis of the Ministry of Health and the Regional Department of Health in Tozeur.

**Materials and Methods :** The staff comprised three oncological surgeons, one radiologist, and one Otorhinolaryngologist. With the collaboration of Rabta Hospital radiologists, the staff performed complete clinical examinations, ENT examinations, breast screenings, and CT scans. This convention covered 180 patients from January 2023 to December 2023.

Result : The average age is 46, ranging from 18 to 79, and most of the population is women. 41.7% of patients are postmenopausal, 12.8 % are hypertensive and diabetic 20.4% of patients had a family history of breast cancer, and 3.2% had a history of gynecological cancer. 25.7% are already patients of the Salah Azaiez Institute, including 32 known patients diagnosed with breast cancer. 72.4% consulted for breast cancer screening, including 4 % returning positive with histologically confirmed breast cancer. The ENT consultation covered 5 to 8 patients every two months, and the surgical oncology consultation covered 60 to 120 patients every two months. Breast ultrasound and mammography screening presented benign lesions in 70.4% of cases, 8.6% were ACR 4, and 7.5% were highly suspicious ACR 5 lesions. Patients detected by screening had an average of 267.2 days of symptom progression before the day of consultation. The most common clinical signs are edema, skin ulceration with inflammatory signs, and the accidental discovery of a mass. All patients are not metastatic; they were referred to receive primary chemotherapy. No deaths were reported, the average follow-up was 11.1 months, and five cases with locoregional recurrences were reported, including two detected during the advanced consultation.

**Conclusion :** Our Country has implemented multiple efforts for years in the fight against breast cancer; this advanced consultation, along with the training of the paramedics, helped in better selecting the population at risk, maintaining monitoring of Salah Azaiez patients as well, and strengthening screening efforts to detect breast cancer at an early stage.

### **064** : Anatomoclinical particularities and evolution of breast cancer metastases in young women

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**Introduction :** Breast cancer in young patients is rare. Metastatic recurrence is more frequent than in older women. Our objective is to study the anatomoclinical particularities and the evolution of breast cancer metastases in young women in south-eastern Tunisia

**Materials and Methods :** This was a single-institution, retrospective review of young breast cancer patients treated in the medical oncology department of Gabès between 2015 and 2022. We collected patients aged 40 and under, with a complete immunohistochemical study and non-metastatic breast cancer at diagnostic. These patients were followed regularly.

**Result :** Thirty patients presented metastases (32% of young patients). The average age of patients at the time of occurrence of metastases was 36.3 years. Bone and liver metastases were noted in 55% and 37% of cases respectively. Analysis of the characteristics of the primary tumor showed that the average tumor size was >5 cm. The tumor was T4 in 23% of cases. Lymph node involvement was noted in 77% of cases. The triple negative molecular profile was the most common. Seventeen patients had chemotherapy, three treated with hormonal therapy and 7 had radiotherapy of metastatic sites. The evolution was marked by the death of 89% of patients

**Conclusion :** Our results are similar to the literature: tumor size, lymph node involvement and molecular profile were significantly linked to the occurrence of metastases in young breast cancer. Mortality in these patients is higher than in older patients.

### **Digestif Cancer**

# 065: Prognostic value of Tumor infiltration lymphocytes (TILS) and gastric carcinoma

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**Introduction :** Tumor-infiltrating lymphocytes (TILs) are considered as a manifestation of the host immune response against cancer. The prognostic value of TILs is still controversial. This study aims to assess the prognostic value in gastric cancer (GC) and to observe the correlation among TILs and clinicopathological characteristics in GC.

**Materials and Methods :** We conducted a retsospective study including patients with GC. Data from 64 patients were included into analyse. TILs were assessed by morphology (optical microscope), immunohistochemistry (CD3+,CD8+), and accompanied by clinicopathological analysis from 64 gastric cancer patients. The patients were classified into high-TIL and low-TIL subtypes based on their immune cell profiles.

**Result :** Median age was 52 years (37-78). Fifty five per cent (55%) of patients had localised disease and 45 % have metastatic disease. With a median follow up of 55.8 months , disease-free survival (DFS) was 31% and progression free survival (PFS) was 4%. Histological subtypes were adenocarcinoma in 67.4 % of cases and kitten ring cell carcinoma in 27.5%. High Tils were correlated with this histological subtype (p=0.012).

We found no significant difference in sex (p = 0.15) and stage (p = 0.58) between the two subtypes. Yet, low Tils was associated with lymphatic invasion (p=0.015). The proportion of high Tils was higher in the localised group Vs the metastatic (42%, 37% respectively) but insignificant (p=0.123). In a univariate analysis, High Tils was significantly associated with longer PFS (P = 0.048) and DFS (P = 0.004), which wasn't the case of the overall survival (OS) (P = 0.187). In a multivariate analysis using a Cox proportional hazard model adjusted for age, pTNM stage, lymphatic invasion, high Tils was independently associated with favorable PFS (HR=0.62, 95% CI : 0.69-0.95, P = 0.002). Our findings showed that the profiles of TILs have the potential to be predictive markers of patients responses but not for overall survival outcomes.

**Conclusion :** TILs are promising prognostic indicators for DFS and PFS and may be considered as a coindicator of prognosis of gastric cancer. The evaluation of TILs is simple, inexpensive and should be assessed routinely in pathological diagnosis.

### 066 : The place $\alpha 1\mbox{-}Antitrypsin and Alpha-Fetoprotein in the detection of the HCC$

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**Introduction :** Hepatocellular carcinoma (HCC) is defined as a primary hepatic malignancy showing hepatocellular differentiation, and it accounts for 75-85% of primary liver cancers. Despite its prevalence, the diagnostic efficacy of Alpha-Fetoprotein (AFP), the most common protein marker for HCC detection, is hindered by a high incidence of negative results and limited accuracy in identifying small tumors and early-stage HCC. This led us to pursue a novel biomarker that offers enhanced effectiveness and accuracy in detecting liver cancer at its primary stage.

Materials and Methods : The current study employed a case-control design and involved the enrollment of 200 individuals. The subjects were divided into two groups : Group (A) : comprises 100 HCC patients, with 91 males and 9 females, diagnosed with a mean age of  $59.97 \pm 7.85$  years. These donors had no previous history of cancer or genetic disorders and were also free from any chronic illnesses. Group (B) : The control group comprised 100 healthy volunteers. Among them, there were 78 males and 22 females, recruited from unrelated healthy blood donors residing in the same geographical area. These volunteers were free of any chronic diseases, underwent normal abdominal ultrasonography, and had no history of liver disease. AFP : COBAS CORE was used to measure the serum AFP levels. This method consists of a two-step, solid-phase enzyme immunoassay based on the sandwich principle. The assay utilizes highly specific monoclonal mouse antibodies to human AFP. Measurement of a1-Antitrypsin (A1AT) : Plasma A1AT concentration was determined by nephelometry using commercially available antibodies (MININEPH, Birmingham, UK) and an ArrayTM Protein System autoanalyzer (Beckman Instruments, Brea, California, United States

**Result :** AFP levels were significantly higher in the HCC group (p < 0.001), with values between 1192.2  $\pm$  3180.6, compared to 6  $\pm$  1 in the control group. The A1AT concentration was significantly higher in the HCC group (p < 0.001), with A1AT levels in HCC patients ranging between 166.6  $\pm$  27.28, compared to 129.8  $\pm$  15.87 in the control group. There was a significant relationship found between the transition from stage I to stage II, AFP levels, and A1AT concentrations. AFP levels were significantly higher in stage II compared to stage I, as were A1AT concentrations.

**Conclusion :** Our study highlights the limitations of AFP in early HCC detection and suggests A1AT as a potential alternative biomarker. Elevated levels of both markers in HCC patients indicate their diagnostic

potential. Further research is needed to improve early detection and management of HCC.

# 067 : Correlation between clinicopathological features of hepatocellular carcinoma and the alpha-1 antitrypsin promoter methylation

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**Introduction :** The epigenetic regulation of gene expression, particularly through DNA methylation, plays a significant role in tumorigenesis. The SERPINA1 gene in Hepatocellular Carcinoma (HCC) tumors which encodes the Alpha-1 Antitrypsin (A1AT) is a diagnostic and prognostic marker for HCC. The aim of this study is to assess the promoter methylation status of SERPINA1 in HCC tumors and healthy subjects.

**Materials and Methods :** A case-control design where subjects were divided into two groups : Group A included a sample of 100 patients diagnosed with hepatocellular carcinoma (HCC). The sample consisted of 91 men and 9 females, with a mean age of  $59.97 \pm 7.85$  years. And group B included the control group that contains 100 healthy blood donors consisted of 78 males and 22 females. The two groups were matched in terms of age, sex and geographical location. The status of promoter methylation of the SERPINA1 gene was determined in all patients by using DNA and Methylation-Specific PCR (MS-PCR) technique after bisulfite treatment.

**Result :** The analysis revealed that SERPINA1 promoter was fully methylated in 8 (8%) and partially methylated (hemimethylated) in 91 (91%) of tumors. Interestingly, the frequency of fully methylated SERPINA1 promoter in healthy subjects was significantly higher compared to tumor tissues (51% versus 8%, p < 0.001). Furthermore, associations between SERPINA1 promoter methylation and clinicopathological characteristics of HCC patients were explored. Notably, no full methylation was observed in tumor stage I, while four patients were more prevalent in stage I compared to stages II and III (p < 0.001). Additionally, fully methylated patients displayed higher levels of AFP and A1AT concentration compared to hemimethylated patients (p < 0.001). However, no significant association was observed between SERPINA1 gene methylation and other clinicopathological features of HCC patients.

**Conclusion :** In conclusion, our findings highlight the intricate relationship between SERPINA1 promoter methylation and HCC characteristics, emphasizing its potential as a biomarker for HCC diagnosis and prognosis. Further studies are needed to clarify the underlying mechanisms and to explore the clinical implications.

#### 068 : Biliary Tract Carcinomas (BTC): A Retrospective Study of 30 Cases Followed at the Jendouba Oncology Center

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**Introduction :** BTC accounts for only 0.7% of all cancers. The aim of this work is to study the clinical, therapeutic and prognostic aspects of this pathology.

**Materials and Methods :** This is a retrospective study of 30 patients followed for bile tract cancers in the Medical Oncology Department of Jendouba from 2016 to 2020.

Result : The tumor involved the intrahepatic bile duct (IVB) in 8 patients, the extrahepatic bile duct (HBEV) in 8 patients, the hepatic hilum in 4 patients, the gallbladder (BV) in 6 patients, and the VATER ampoule in 4 patients. The mean age was 63.4 years. The sex ratio of M/F was 1.14. Histopathological examination showed adenocarcinoma in all patients. The treatment received was: palliative chemotherapy (70%), surgical resection (13.3%), surgical resection supervised by chemotherapy (16.6%). Nine patients were operated for curative purposes (30%) with an R0 resectability rate of 44% (n=4). The primary first-line protocol was Gemzar-oxaliplatin in 16 patients. Six patients received second-line chemotherapy and 3 patients received third-line chemotherapy. Complete remission was observed in 2 patients (6.7%), partial remission in 6 patients (20%) and progression in 14 patients (46.7%). Five patients had a recurrence (16.7%): local recurrence in 4 patients and metastatic in one. The mean overall survival was 27 months for all treatments. The overall survival rates at 12 months and 20 months were 70% and 55%, respectively. For patients treated with first-line chemotherapy, the mean survival was 14 months. The mean survival for recurrence was 8 months. The survival rate for recurrences at 6 months and 8 months was 80% and 40%, respectively. Poor prognostic factors were elevated ALP (p=0.024), extrahepatic invasion (p=0.043) and vascular invasion (p=0.013) and stages 3 and 4 (p=0.001).

**Conclusion :** Recently immunotherapy combined with chemotherapy improved survival of Biliary Tract Adenocarcinomas and has become the standard of treatment.

# 069 : Pancreatic adenocarcinoma (PADK): a retrospective study of 25 cases followed at the Jendouba Medical Oncology and Radiotherapy Center

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**Introduction :** PADK has a poor prognosis with an increasing incidence. The aim of this work is to study the epidemiological, clinical, therapeutic characteristics and prognosis of the PADK.

**Materials and Methods :** This is a retrospective study of 25 patients with PADK followed at the medical oncology department of Jendouba between 2018 and 2020.

Result : The mean age was 60.2 years with 18 males and 7 females. The histological type in all patients was adenocarcinoma. Abdominal pain was the most frequent reason for consultation (15 patients). CA 19-9 was elevated in 17 patients. Computed tomography (CT) detected locoregional or distant extension in 17 patients (73.9%). Twenty patients (80%) received chemotherapy: 15 patients (75%) received palliative chemotherapy, 4 patients adjuvant chemotherapy (20%) and only 1 patient neoadjuvant chemotherapy (5%). Eight patients had received first- and second-line chemotherapy. Two patients have had third-line chemotherapy. The most commonly used protocols were: Genzaroxaliplatin, Folfirinox, xeloda. At evaluation, there was a progression (65% of patients undergoing chemotherapy), 6 patients had stability, and only one had complete remission. Four cases of relapse were noted. Curative cephalic duodenopancreatectomy (CPD) was performed in 6 patients. Palliative surgery was attempted in 4 patients. The mean overall survival was 8.25 months. The mean overall survival of patients treated with adjuvant chemotherapy was 12 months. The mean overall survival of patients treated with palliative chemotherapy was 10.5 months. The mean overall survival of patients in whom treatment abstention was decided was

24 days. The prognostic factors identified are the presence of metastases, lymph node involvement, initial CA19-9 level, cephalic or caudal location. **Conclusion :** Hope rests in scientific research for the discovery of new targeted therapies or immunotherapies to improve the survival of metastatic or locally advanced tumors. Palliative care should not be forgotten to improve the quality of life of these patients.

#### 070 : Gastric adenocarcinoma: Epidemiology and prognostic factors

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**Introduction :** Gastric adenocarcinoma is a serious public health problem because of its late diagnosis and rapid metastasis. Despite multidisciplinary treatment, the overall survival at 5 years does not exceed 30%. The aim of this work is to describe the epidemiological aspects and identify the prognostic factors of GA.

**Materials and Methods :** This is a retrospective study conducted between 2017 and 2020 that collected 30 gastric adenocarcinoma patients treated in the medical oncology department of Jendouba.

**Result :** The mean age was 60 years [35-82] years with a sex ratio M/F= 2.4. The warning signs were often deterioration in general condition (87.7%) and stomachache (70%). Hypoalbuminemia was found in 72% of cases. The tumor was predominantly antral (53.33%). kitten ring cells were present in 10% of cases. Tumor was locally advanced in 30% of cases and metastatic in 50%. Nine patients (30%) underwent surgery. It was curative surgery in 88.88% of cases and palliative surgery in 11.11% of cases. Neoadjuvant chemotherapy was performed in only 25% of cases and adjuvant therapy was performed in all patients treated with curative surgery. Palliative chemotherapy was performed in 66.66% of patients. After a mean follow-up of 11.5 months [2 - 62], mortality rate was 40%. Overall survival is estimated at 30 months. At the end of our study, we identified 8 prognostic factors: Personal history of diabetes (p: 0.03), partial gastrectomy (p: 0.045), albuminemia (p: 0.039), carcinoembryonic antigen levels (p: 0.01), presence of vascular emboli (p: 0.05), perinervous sheathing (p: 0.015), secondary bone location (p: 0.01) and type of lymph node dissection (p: 0,042).

**Conclusion :** GA remains a tumor with a poor prognosis and its management remains late and insufficient. Thus, hopes are turning to immunotherapy and targeted therapy.

# **071 :** retrospective monocentric study about total neoadjuvant treatment for rectal cancer

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**Introduction :** Since the publication of the RAPIDO and PRODIGE 23 trials, preoperative chemotherapy as part of a "Total Neoadjuvant Treatment" has become a new standard of care for locally advanced rectal cancers. To evaluate the effectiveness and tolerance of this approach in real-life settings, we conducted a retrospective monocentric study at the Medical Oncology Department of EHU Oran.

**Materials and Methods :** The primary outcome measure was disease-free survival. Twenty-three patients diagnosed with locally advanced rectal cancer between January 2022 and December 2023, who received neoadjuvant chemotherapy with FOLFOX or FOLFIRINOX followed by radio(chemo)therapy, were included. The majority (98%) of patients had a tumor stage of iT3-T4, and 87% had nodal involvement (iN).

Result : During neoadjuvant chemotherapy, 9% of patients experienced grade 3-4 toxicities (such as diarrhea, asthenia, neutropenia...). 66% of

patients underwent surgery with an R0 resection rate.With a median follow-up duration of 5.7 years, the disease-free survival was 58% (95% CI 42-62), and the overall survival was 76% (95% CI 66-84). The rate of local recurrence was 29%.

**Conclusion :** In real-life settings, total neoadjuvant treatment appears to be a feasible therapeutic option, with acceptable toxicity and good compliance. However, oncological outcomes are lower than those reported in trials, possibly due to patients having more advanced diseases at diagnosis and a less intensified therapeutic regimen than in the studies. Keywords: locally advanced rectal cancer, neoadjuvant chemotherapy, "Total Neoadjuvant Treatment".

## **072 :** Colorectal cancer among young patients : Prognosis and evolutive modalities

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**Introduction :** Colorectal cancer is a major public health problem. The incidence increased among young patients and it has many particularities. Whereas the treatment remains the same, based on curative surgery combined with neoadjuvant and adjuvant therapies; the prognosis seems to be worse . Our aim is to study the particularities of colorectalcancer in young patients in order to identify the factors affecting the prognosis .

**Materials and Methods :** A retrospective study of 40 cases of operated colorectal adenocarcinomas, in patients aged under 50 years old, collected in general surgery department of Bizerte University Hospital for a period of six years from 2014 to 2020. A descriptive analysis was made and a qualitative analysis tried to identify risk factors affecting the prognosis.

**Result :** Our study included 27 women and 13 men with an average age of 43 years . Preoperative colonoscopy was performed in 31 patients. The tumor was located in the right colon in four cases , the transverse colon in three cases , left colon in four cases , the sigmoid in 12 cases and the rectum in eight cases . Thirty-one patients underwent elective surgery and nine patients emergency surgery. The tumor was classified pT1 in nine cases , pT2 in three cases , pT3 in 21 cases and pT4 in seven cases . A lymph node invasion was found in 16 cases . Preoperative radio-chemotherapy was performed in five cases. Adjuvant chemotherapy was performed for 28 patients. Postoperative morbidity was 7.5%. Mortality was 2.5%. Overall survival rates were 83% at one year and 45% at three years . Recurrence was noted in nine cases. Only one predictor of overall survival was found: lymph node invasion (p=0.048).

**Conclusion :** Colorectal cancer is nowadays frequent among young patients and appears to have poor prognosis. More screening strategies should be used to get early diagnosis and avoid advanced and metastatic forms. Genetic testing would be essential, for patients and their families, for adaptation of the screening, surveillance and therapeutic management.

#### 073 : Colorectal cancer screening in military population

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**Introduction :** Colorectal cancer screening is mandatory to reduce cancer mortality, morbidity and cost. Cancer screening in military setting is done during all the year especially on Mars. The aim of our study was to show the importance of colorectal cancer screening in military population. **Materials and Methods :** We conducted a prospective study including military population classified as middle risk of colorectal cancer (aged

between 50 et 74 years without digestive symptoms) and classified as middle risk of colorectal cancer during Mars 2023. FOB test was done on stools and colonoscopy was performed when FOB test was positive.

**Result :** 234 persons were included in colorectal screening by FOB test. Median age was 63 years. 34 % had familial cancer history. 40 tests were positive, 87 were negative and 107 tests were unknown. 40 colonoscopy were done. 26 concluded in tubular adenoma in low grade dysplasia and 14 concluded in hyperplasic polyps.

**Conclusion :** We noted a high frequency of precancerous lesions among our population and a high frequency of non adherence to screening program because of fair of positive results .

### 074 : Digestive decontamination before colorectal surgery: A randomised prospective study involving 80 patients

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**Introduction :** This study aims to evaluate the impact of medication-based digestive decontamination before colorectal surgery on patient recovery and the reduction of anastomotic fistulas.

Materials and Methods : Conducted from June 2018 to June 2019, this prospective, randomised, double-blind, comparative study involved two groups: group R, which received 3 doses of 400 mg of oral Rifaximin per day for the two days preceding the intervention, and the control group T. The evaluated criteria were patient rehabilitation, morbidity and mortality, and the rate of anastomotic fistulas during the postoperative period.

**Result :** Eighty patients were included: 40 in group R and 40 in group T. Seven patients from group R were excluded because they did not undergo digestive anastomosis. Both groups were similar in terms of clinical characteristics, surgical procedures, surgical approach, and type of anastomosis. In group R, patient recovery was faster: time to removal of nasogastric tube (p=0.003), restoration of bowel movement (p=0.025), oral intake (p<0.001), drainage removal (p=0.021), and shorter postoperative hospital stay (p=0.036). No significant difference was observed in terms of postoperative morbidity and mortality, particularly for anastomotic fistulas.

**Conclusion :** Preoperative medication-based digestive decontamination before colorectal surgery improves patient rehabilitation but has no effect on the rate of anastomotic fistulas.

# 075 : Laparoscopy influence on morbidity, mortality, and survival for colonic adenocarcinomas

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**Introduction :** The advent of laparoscopy has revolutionized the surgical management of colorectal cancers. Already recognized as a valid approach for colon cancer, it promises optimized postoperative outcomes. However, its impact on oncological prognosis remain a subject of controversy. This study aimed to confirm the superiority of laparoscopy over laparotomy in the treatment of colonic adenocarcinomas in terms of morbidity, mortality, quality of oncological resection, and survival.

**Materials and Methods :** This retrospective study included 88 patients who underwent elective surgery for resectable non-metastatic colon adenocarcinomas at the Department of General Surgery A of La Rabta Hospital in Tunis over a five-year period (January 2015 - December 2019). Patients were divided into two groups: 40 treated by laparotomy and 48 by laparoscopy. A comparative analysis was conducted, focusing on

operative data, morbidity, mortality, quality of oncological resection, survival, and recurrence.

**Result :** Both groups were comparable in terms of epidemiological characteristics and locoregional involvement on staging. Operative time, transfusions, and perioperative morbidity and mortality were similar between the two groups. The laparoscopy group had a significantly lower rate of drainage and stoma requirements. Postoperative outcomes were better with laparoscopy, including a reduction in hospital stay duration, time to drainage removal, and specific medical and surgical complications. Oncologically, laparoscopy provided resections of equivalent quality to laparotomy. Overall survival and recurrence-free survival analysis revealed no statistical difference between the two groups.

**Conclusion :** Laparoscopy is a reliable approach in colic cancer surgery that can improve surgical outcomes without affecting the oncologic prognosis if performed by expert surgeons in selected patients.

# **076 :** Potential Founder Effect of a Mutation in MLH1 Gene in the Central Region of Tunisia

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**Introduction :** Constitutional mismatch repair deficiency (CMMRD) syndrome is a rare autosomal recessive genetic disorder caused by biallelic germline mutations in one of the mismatch repair genes. It is characterized by a broad tumor spectrum including mainly hematological malignancies, brain tumors, and colon cancer in childhood and adolescence. We describe our experience in a CMMRD family demonstrating the role and importance of molecular diagnosis in the management, genetic counseling and cascade screening of CMMRD.

**Materials and Methods :** A colorectal cancer (CRC) gene panel sequencing including MMR genes was performed in a patient referred to our department for suspected cancer predisposition syndrome.

**Result :** A 38 years old patient, from Sousse, had a family history significant for early-onset CRC and Lynch syndrome (LS). He presented at the age of 18 a colonic oligopolyposis and adenosquamous carcinoma of the caecum. He later developed an undifferentiated carcinoma of the parotid, an astrocytoma, and an ampulla of Vater adenocarcinoma. Molecular analysis identified a homozygous likely pathogentic germline missense variant in the MLH1 gene: c.1918C>A; p.(Pro640Thr). Functional impact assessment, immunohistochemistry and the detection of increased cMSI confirmed its pathogenicity. This variant was also identified in a heterozygous state in the eldest brother and his nonconsanguineous wife, from Sousse, who also presented a family history of CRC. This suggests a potential hereditary risk for the couple's offspring to develop the disease. This variant has already been reported in three Tunisian families with an LS phenotype from the same geographical area as our proband. These findings could be consistent with a founder effect. Conclusion : Even though CMMRD syndrome is a rare cause of earlyonset malignancy, its molecular diagnosis is crucial for tailored surveillance programs, timely cancer detection, effective therapy and accurate genetic counseling.

# 077 : Gastrointestinal Stromal Tumors: A Six-Year Retrospective Study

Ammar N, Ammar M, Gdoura H, Mahmoudi S, Moalla M, Boudabous M, Chtourou L, Mnif L, Amouri A, Tahri N

**Introduction :** Although rare, gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the digestive tract. This study aims to investigate the clinical characteristics, diagnostic approaches, and management outcomes of patients with GISTs.

**Materials and Methods :** descriptive retrospective, monocentric study was conducted from 2017 to 2023. Data were collected from the medical records of all patients diagnosed with GISTs and followed at the gastroenterology department.

**Result :** Nine patients with GISTs were included in the study, with a median age of  $62.89 \pm 11.072$  years and a sex ratio of 1:2. The median follow-up duration was 2 years. Gastric GISTs predominated, representing 77.78% (n=7) of cases, followed by tumors in the small bowel (22.22%, n=2). GISTs were incidentally discovered in 44.44% of patients (n=4), while 33.33% (n=3) presented with hemorrhage, and 22.22% (n=2) reported abdominal pain. The median tumor size was 4.00 cm [2.25:7.5]. Biopsy confirmed the diagnosis in 77.8% (n=7) of patients via endoscopy employed in 6 cases and through CT guidance in 1 case. Surgical exploration served as the diagnostic confirmation method in 2 patients. Hepatic metastasis was detected in one patient. Surgical intervention was performed in all patients, with two receiving adjuvant medical treatment with Imatinib. Throughout the study period, all patients remained alive.

**Conclusion :** Surgical intervention remains a cornerstone in the management of GISTs, with promising outcomes observed in patients receiving adjuvant medical therapy with Imatinib. Early detection and comprehensive management are crucial for improving the prognosis of patients with GISTs.

### **078 : Epidemiological, histopathological features and treatment outcomes in metastatic colorectal cancer: Tunisian center experience**

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**Introduction :** Colorectal cancer is the third most common cancer in the world and the second cause of death. twenty percent of patients have metastatic disease at diagnosis. We aim in our study to describe clinical features and treatment outcomes in patients with metastatic colorectal cancer

**Materials and Methods :** This is a retrospective study of patients with metastatic colorectal cancer. Data was collected from 2012 to 2022 at the oncology department in the Maternity center in Monastir. Data analysis was conducted using SPSS, survival rates were assessed using the Kaplan–Meier method, while univariate and multivariate analyses were performed using Cox Regression Model.

**Result :** We included 128 patients with a median follow-up time of 13 months (0-71). Mean age at diagnosis is 59 years old (31-87). Forty-nine percent are women. Mean time to diagnosis is 3 months. Most frequent symptoms are abdominal pain(38%), bowel disorder(30%) and weight loss(33%). Twenty-seven percent of patients presented with obstruction and 29% had urgent surgery. Wright-sided colon involvement is noted in 18% of cases, left-sided colon localization in 50%, and Rectal cancer is observed in 27% of cases. seventy-three percent presented with synchronous metastases. The main metastatic sites are liver(69%), lung (26%) and peritoneal carcinosis (26% of cases). thirty-nine percent have multisite disease. Primary tumor surgery was performed in 59% of patients. Surgery of metastatic site was conducted in 17% of patients In relapsing patients, the mean time to develop metastasis is 17 months. Seventy-five percent have initially stage III disease and 25% had stage I and II. Adjuvant chemotherapy was indicated in 61% of cases. RAS testing was performed in 40% of patients and 58% of them harboured RAS mutation. 89% of patients received first-line chemotherapy. Folfox or Capox regimen was conducted in 50% of patients andFolfiri or Capiri in

31% of them. Only 20% of patients received targeted drug therapy in the first-line management. 32% had objective response and 31% had stable disease. Median progression-free survival is 13 months in the first line and median overall survival is 21 months. univariate analysis showed a positive impact of: PS 1, absence of comorbidities, metachronous metastases, Hemoglobin rate > 10 g/dl, response after 3 cycles of first-line therapy and resection of metastases, while in multivariate analysis, only absence of comorbidities and resection of metastases were associated with better survival.

**Conclusion :** Despite strides in treatment, metastatic colon cancer remains associated with a poor prognosis, particularly in our country where access to targeted therapies remains constrained. Notwithstanding the study's limitations, Metastasectomy is associated with better outcomes and should be strongly considered.

#### 079 : Colorectal cancer in the elderly and predictors of malnutrition

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**Introduction :** malnutrition is an integral part of the progression of cancers and is directly responsible for the increase in mortality, particularly among the elderly. Our study essentially aims to evaluate the nutritional profile of patients aged over 65 years followed for colorectal cancer and to specify the different factors predisposing to malnutrition and indicate appropriate treatment to avoid complications.

**Materials and Methods :** this is a prospective observational study with a descriptive and analytical aim, including 30 patients aged over 65 years with colorectal cancer treated within the medical oncology department at Fattouma Bourguiba hospital in Monastir during the period from January 1 to June 30, 2022.

**Result :** The median age was 69 years [65-77 years] with a sex ratio equal to 0.88. The majority of cases (83%) were of urban geographic origin. The socioeconomic status of the most of our study population (47%) was average. According to the WHO scale, the majority of patients (90%) had stage 2. More than half of participants (56%) underwent surgery for the primary tumor (colectomy segmental: 36%; right hemi colectomy: 6%; left hemi colectomy: 58%). The histological type found in all our patients is an adenocarcinoma. Half of the participants (53.4%) were in stage III of the disease. More than  $\frac{2}{3}$  of cases (70%) had adjuvant chemotherapy. Radiochemotherapy was administered to only in 13% of cases. Palliative chemotherapy was administered in 40% of case. Half of the patients (57%) have a normal BMI. According to the screening score of the MNA-SF scale, half of the participants (50%) were at risk of malnutrition including (40%) cases were those having presented an initial tumor in the rectum. A statistically significant correlation between tumor location and malnutrition was demonstrated (p=0.000). The other factors studied (age, type of treatment, course) were not correlated with malnutrition.

**Conclusion :** carrying out prospective therapeutic trials specifically dedicated to elderly subjects, taking into account geriatric comorbidities, living conditions, maintaining autonomy and quality of life and above all, nutritional status is essential for better management and oncologic outcomes of this patient population.

# 080 : Biliary drainage in locally advanced and metastatic pancratic cancer

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**Introduction :** Pancreatic cancer has a poor prognosis, discovered in more than 80% of cases in locally advanced or metastatic form. Palliative care

is an important part of therapeutic management espacillay biliary drainage and must begin early. Few data have been reported in our country concerning this disease. The objective of our work is to describe different type of biliary drainage in locally advanced and metastatic pancreatic cancer and to determine their impact on survival.

**Materials and Methods :** This is a retrosepctive study collecting 56 cases of locally advanced or metastatic pancreatic adenocarcinomas followed in the medical oncolgy department of Abderrahmen Mami Hospital of Ariana. Data were collected from hsopitalization regiters and medical files of patients treated between January 2012 to december 2019. Through this study, the epidemiological characteristics of the population, the treatments received and the different characteristics of the supportive care provided were noted. The data were analyzed using SPSS version 26.0.Descriptive data expressed as percentage, mean and standard deviation and analytical survival data and prognostic factors using Kaplan Meir

**Result :** In our series, mucocutaneous jaundice was present in 16 patients (29%).Biliary drainage was performed in 11 patients (20%) all with a tumor of the head of the pancreas. A metallic biliary prosthesis was placed in 9 patients (16%): by endoscopic retrograde cholangiopancreatography (ERCP) in 7 patients (78%) and surgically in 2 patients (22%). A biliodigestive anastomosis was performed in 2 patients. Complications were observed in 3 patients: 2 cases of cholangitis and one case of prothesis migration. The average time of biliary drainage from the start of jaundice was 70.12 days (6-284 days). An improvement in liver function tests and in particular in bilirubin levels was noted in all patients treated by biliary drainage. Biliary drainage had no impact on overall survival (p=0.72), but a delay in biliary drainage of less than 63 days from the start of jaundice significantly improved PFS (5, 3 months Vs 1.1 months p=0.025)

**Conclusion :** Biliary drainage is an important therapeutic componant of palliative care in pancreatic cancer and should be underwent early to improve survival.

## **081 : Pain management in locally advanced and metastatic pancreatic cancer**

### Rachdi H, Saadi M, Berrazega Y, Haouari AA, Daoud N, Boussen H, Mejri N

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**Introduction :** Pancreatic cancer has a poor prognosis, discovered in more than 80% of cases in locally advanced or metastatic form. Palliative care is an important part of therapeutic management espacially pain management and must begin early. The objective of our work is to describe different type of biliary drainage in locally advanced and metastatic pancreatic cancer and to determine their impact on survival.

**Materials and Methods :** This is a retrosepctive study collecting 56 cases of locally advanced or metastatic pancreatic adenocarcinomas followed in the medical oncolgy department of Abderrahmen Mami Hospital of Ariana. Data were collected from hsopitalization regiters and medical files of patients treated between January 2012 to december 2019. Through this study, the epidemiological characteristics of the population, the treatments received and the different characteristics of the supportive care provided were noted. The data were analyzed using SPSS version 26.0.Descriptive data expressed as percentage, mean and standard deviation and analytical survival data and prognostic factors using Kaplan Meir

**Result :** The average Visual Analog Scale (VAS) in our series was 7/10, with extremes ranging from 4 to 10. The majority of our patients were on level 3 analgesic treatment, with 35 cases, accounting for 63%, while 20 patients were on level 2 treatment, and only one patient was managed with level 1 analgesics. The average dose of Moscontin was 60mg twice daily, with extremes ranging from 20mg to 300mg. Anti-inflammatory treatment was prescribed for 9 patients, representing 16% of the total. Corticosteroid

therapy for analgesic purposes was prescribed for 22 patients, accounting for 39.3%. Pregabalin was prescribed for pain relief in 7 patients, constituting 12.5% of the total. The Pain Management Center was consulted by only 4 patients, representing 7.1% of our total patients, with an average dose of Moscontin at the time of consultation being 50mg twice daily. Celiac plexus neurolysis was performed in 5 patients, representing 8.9%, for pain unresponsive to usual analgesic treatments. Alcoholization was performed via echo-endoscopic route in 4 patients, representing 80%, and via radiological route under CT guidance in one patient, representing 20%. The average duration between the onset of pain and celiac plexus neurolysis was 8 months, with extremes ranging from 2 to 15 months. Palliative radiotherapy was proposed for pain control in only one patient. Celiac plexus neurolysis doesn't impact survival .Overall survival was significantly better in patients who were referred to the pain management center for pain management (6.8 months vs. 4.3 months, p=0.049).

**Conclusion :** Pain management is an important therapeutic component in pancreatic cancer and can impact survival.

# **082** : Neoadjuvant Chemotherapy: Is it a Predictor of Postoperative Morbidity for Gastric Adenocarcinoma?

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**Introduction :** Gastric cancer is the fourth most common malignancy worldwide with nearly one million new cases per year, and the third leading cause of cancer death. Survival remains poor with only 25% of all gastric cancer patients surviving the first five years. Surgery is the only curative treatment for locally advanced gastric cancer. A gastrectomy is considered high-risk surgery with surgical morbidity rates of 39% and mortality rates of approximately 5%. The aim of our study was to identify risk factors for postoperative complications.

**Materials and Methods :** A retrospective study including 70 patients who underwent surgery for gastric adenocarcinoma between 2005 and 2020

Result : The average age of our patients was 57 years old, ranging from 27 to 85 years old. There were 26 women and 44 men. Perioperative chemotherapy was administered in 22 cases (31.4%). Total gastrectomy was performed in 43 cases (61.4%), subtotal gastrectomy in 18 cases (25.7%), extended total gastrectomy in 7 cases (10%), and total esophagogastrectomy in two cases. The mortality rate was 5.7% (n=4), and the overall morbidity rate was 37.14%. Surgical complications accounted for 25.7%, with anastomotic leakage observed in 11.4% of cases. Diagnostic delay and neoadjuvant chemotherapy were predictive factors for surgical morbidity with respective p-values of 0.016 (RR=0.32) and 0.005 (RR=2.88).

**Conclusion :** Our study findings indicate that neoadjuvant chemotherapy significantly predicts postoperative morbidity in gastric adenocarcinoma, despite it being the current standard protocole associated with surgery.

#### 083 : Testicular metastasis of GIST : a case report

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**Introduction :** Gastrointestinal stromal tumors (GIST) are mesenchymal tumors of the digestive tract originating from interstitial Cajal cells, Mutations in the KIT gene, PDGFRA gene, and occasionally BRAF gene were found to be the main drivers of oncogenesis. the stomach is the most common primary location (60-70%) and the small intestine the secondary

one(20-30%), Metastatic GIST is most common in the liver and peritoneum,

**Materials and Methods :** We present a case of GIST refractory to Imatinib first-line treatment and progressed to an unusual metastasis in the scrotum.

Result : A 63-year-old man who was diagnosed with ileal GIST and peritoneal carcinomatosis in 2012 had to undergo ileal resection and Imatinib 400mg daily until 2018. The disease progressed in 2020, leading to the reintroduction of Imatinibwith complete response. He was 'not followed up until 2022 when he reported swelling in his abdomen and scrotum, Testicular ultrasound showed a large mass occupying the right scrotum .He had an orchidectomy and histology showed morphological aspects of a malignant spindle cell mesenchymal tumor. The sarcomatous process covers the testicular parenchyma without invading it. Imatinib 400mg was given daily for treatment, and then the dose was raised to 800mg per day due to disease progression in July 2023. In January 2024, he experienced another progression of his disease, leading to the introduction of third-line treatment with Sunitinib.

**Conclusion :** GIST can metastasize to rare sites, namely testis and scrotum, diagnosis must be confirmed by the immunohistochemical detection of CD117 and CD34. For primary localized GIST, surgery is the most important treatment, followed by adjuvant imatinib , but for metastatic GIST, TKIs are the principal treatment. In patients with a poor prognosis the use of sunitinib as the first-line treatment may improve prognosis; however, further studies are needed to improve clinicians' understanding of the management of GISTs with rare metastases.

# 084 : Pancreatic neuroendocrine tumors: About three cases presentations

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**Introduction :** pancreatic neuroendocrine tumors (PNETs) are a less common type of pancreatic cancer. The biological behavior is unpredictable: Tumor grade, lymph node, liver metastasis and tumor's size.

**Materials and Methods :** this is a retrospective study including 3 cases of PNETs treated with chemotherapy was conducted between 2020 and 2023 in the department of medical oncology of Jendouba Regional Hospital

**Result :** we present 3 cases of grade 3, nonfunctioning PNETs, histologically proven. They are 3 women. The median age was 52 years (range 39- 64). All patients had abdominal pain, asthenia and weight loss. Computed tomography relived large tumor associated to satellite nodules and hepatic metastases. One patient has extra hepatic metastases (lungs). The first patient received chemotherapy (6 Gemzar+oxaliplatin) with radiological stability. The second patient received one year of Somatuline 120, moreover 3 months of chemotherapy (6folfox) with somatuline and died after 3 months. The third patient received chemotherapy (6 Gemzar+oxaliplatin) and 4 Folfox. Actually she received Sutent with Somatuline 120

**Conclusion :** PNETs have an unfavorable prognosis. The diagnosis is often late. The stage and the grade of disease remain the main prognostic factors. In addition, there is no therapeutic standard. This poor prognosis mandates emphasis on laboratory and clinical research efforts in this rare subset of disease.

#### **085 : Predictive factors of anastomotic leakage in colorectal cancer Surgery**

Ghalloussi MH, Chamakhi A, Ayed K, Aouida A, Zargayoun R, Madhioub F, Ben Taher A, Ganzoui I, Mabrouk M, Triki W, Baraket O, Bouchoucha S

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**Introduction :** Anastomotic fistulas are one of the most dreaded complications of colorectal surgery, and the most leading cause of mortality after surgery. The aim of this study was to identify the predictive factors of leakage for colo-rectal anastomosis.

**Materials and Methods :** This was a descriptive retrospective longitudinal cohort study of patients who underwent colorectal anastomosis after carcinological surgery at the Habib Bougatfa Hospital in Bizerte, Tunisia from 2012 to 2022. Our primary endpoint was the occurrence of anastomotic fistula.

Result : We included 90 patients with SR=1. The mean age was 60.6 years. The anastomosis was mechanical in 56% of patients. It was subdouglassian in 21%, with protective ileostomy in 13% of patients. Surgical complications were observed in 19 patients (21%). Anastomotic fistula was observed in 12 patients, or 13% of cases. The median time to onset of anastomotic fistula was 4 days (IQR= [3-6 days]) with extremes ranging from 1 to 8 days. We had three cases of postoperative death: 2 cases following the first procedure and 1 case following a repeat surgical revision. Mean patient survival was 94.8 months (IC95%=86-103.5 months). The presence of co-morbidities was a risk factor for postoperative anastomotic fistula (OR=5.26). This risk was higher after adjustment for age, gender and personal history (OR=7.07). The risk of postoperative anastomotic fistula was significantly associated with hypo protidemia and hypo albuminemia (OR=11.1) Anastomotic fistulas were significantly more frequent in cases of intraoperative incidents (hemorrhage, hemodynamic instability, digestive perforation). (P=0.003, OR= 11.8)

**Conclusion :** Various types of colorectal anastomosis and technical devices can be performed, but the presence of comorbidities, hypoalbuminemia, hypoprotidemia, the presence of an intraoperative incident, and the occurrence of postoperative medical complications were the independent risk factors for anastomotic fistulas.

#### 086 : Prognostic impact of oncogenesis proteins in rectal cancers

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**Introduction :** The prognosis for rectal cancers depends on clinicopathological factors and still poor for patients with advanced stage of the disease. More recently, identification of molecular prognostic markers to predict the evolution and guide the therapeutic strategy. In this work, we present the impact of oncogenesis proteins on the prognosis of rectal cancers.

**Materials and Methods :** The prognosis for rectal cancers depends on clinicopathological factors and still poor for patients with advanced stage of the disease. More recently, identification of molecular prognostic markers to predict the evolution and guide the therapeutic strategy. In this work, we present the impact of oncogenesis proteins on the prognosis of rectal cancers.

**Result :** Thirty-eight patients were treated with rectal adenocarcinoma. Twenty-six had neoadjuvant radiochemotherapy, 3 adjuvant radiochemotherapy and 5 adjuvant radiotherapy. The average tumor size was 4.9 cm. The tumors were pT3 and ypT3 in 27 cases. The expression of MMP9, p53, MDM2, Cox2, LCor and loss of expression of  $\beta$  catenin, E cadherin, APC, RIP140 were detected respectively in 78, 67, 81, 46, 65, 76, 9, 38 and 13.5% of cases. The study of overall survival showed that the absence of MMP9 expression and the expression of RIP140 are associated with better survival. The other proteins had no impact on overall survival. **Conclusion :** The study of the expression of oncogenesis proteins in rectal cancers is interesting. It makes it possible to clarify the prognosis and adapt the therapeutic care.

### 087 : Gallbladder Cancer : Diagnosis and results of surgery

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**Introduction :** Gallbladder cancer is the most frequent biliary cancer (60%). Surgery remains the only curative treatment . Prognosis is very poor , and Five-year survival is less than 5% . The aim of this study was to describe the diagnosis , surgical management and outcome of patients with gallbladder cancer .

**Materials and Methods :** This was a retrospective study of 32 cases of gallbladder cancer , collected in the department of general surgery of the Bizerte University hospital over an 11-year period (2007-2017).

**Result :** The mean age of our patients was 68 years with a clear female predominance (2/3). The main risk factor was vesicular lithiasis (72%) .In 31% of cases, gallbladder cancer was discovered incidentally after anatomopathological examination of the cholecystectomy specimen . The clinical picture was dominated by pain in the right hypochondrium (88%) and retentional jaundice (38%). Poorly differentiated adenocarcinomas were the most frequent histological type (81%). Tumors were predominantly classified as pT3 and pT4 (59%). Node invasion was present in 31% of cases, and metastasis in 34%. 75% of patients have had a simple cholecystectomy that have been juged suffisant in 9% of the cases. 13% have had a complementary hepatic resection . Surgical treatment was for curative purposes in 34% of cases : simple cholecystectomy (9%); Glenn-type cholecystectomy (9%) and bisegmentectomy IVb and V (16%) combined with extensive lymphadenectomy and excision of trocar orifices (3%). Palliative treatment and adjuvant chemotherapy were given to 13 of patients each . Five-year survival was inversely proportional to the anatomopathological stage of the gallbladder cancer, with zero rate from stage IIIB onwards.

**Conclusion :** Frequently, Gallbladder cancer was discovered incidentally after anatomopathological examination of the cholecystectomy specimen generally at advanced stage. Surgery is the only curative treatment. The choice of procedure depends on the stage of the tumor that remains the mean prognosis factor.

### 088 : Patient's clinical characteristics and risk factors of pancreatic cancer

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**Introduction :** Pancreatic cancer remains a devastating malignancy with a dismal prognosis. In this context, understanding the risk factors associated with pancreatic cancer development is paramount. This knowledge can not only guide preventative measures for susceptible populations but also inform clinical practice by allowing for targeted screening programs for those at highest risk. The Aim of this study was to report the epidemiologic profile of patients with pancreatic cancer and to delve into the established and emerging risk factors for pancreatic cancer. **Materials and Methods :** This study was a retrospective analysis of medical records for patients histologically diagnosed with pancreatic cancer. Data were collected from the oncology department of Sousse hospital, Tunisia. The study population included 186 patients diagnosed with pancreatic cancer between January 2001 and December 2023

**Result :** Median age was 60 years (32-81) and there was a male predominance (119 men and 67 women) with sex ratio 1,8:1. A significant proportion of patients (42.5%) had a history of diabetes. Additionally, hypertension (21.5%) and obesity (7.5%) were present in a notable percentage of cases. Chronic pancreatitis, a known risk factor, was identified in 3.2% of patients. Lifestyle factors also emerged as potential contributors, with a high prevalence of smoking (40.3%) and a significant proportion (18.3%) reporting alcohol consumption. Interestingly, occupational exposure to carcinogens was observed in a smaller percentage (4.3%) of the study population. Furthermore, a family history of cancer was found in 6.3% of the patients, and a personal history of any cancer diagnosis was reported in 1.1% (2 cases).

**Conclusion :** Etiology of pancreatic cancer remains elusive. Our study Suggests that smoking, diabetes, obesity, alcohol consumption and chronic pancreatitis could be associated with an increased risk of pancreatic cancer. Smoking cessation programs, encouraging physical exercise and avoiding obesity by dietary measures could help prevent pancreatic cancer.

### **089 : Impact of stoma on mental health and social life of patients with colorectal cancer**

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**Introduction :** The psychological experience of living with a digestive stoma can lead to significant psycho-emotional disturbance, necessitating a reorganization of various psychic functions. The study aimed to evaluate and screen for mental health problems and assess the impact on social life among colorectal cancer (CRC) patients who underwent stoma surgery.

**Materials and Methods :** To assess the impact of Stoma on mental health and social life of patients with (CRC), a survey was conducted at the department of medical oncology in Nabeul for patients who had stomas. The patients were asked to answer a socio-demographic questionnaire. The Stoma related mental health problems were measured using the Hospital Anxiety and Depression Scale (HADS). Medical conditions and clinical characteristics were extracted from patients' healthcare records.

**Result :** The median age was 61 years (range, 38-81) with sex ratio 0.66. None of the patients had psychiatric history. The tumor site was rectal in 43% of cases . One-fifth of patients initially accepted the stoma. Among the 30 patients surveyed, 20% had depression and 39% anxiety. Sixty-six percent of patients reported a significant impact on their social life.Thirteen percent of patients reported being physically active. Fiftythree percent of patients reported an impact on their married life. The presence of a stoma affected intimate relationships and communication between partners. Five patients (16%) reported using sedatives.

**Conclusion :** These findings emphasize the impact of stoma on patients' social, emotional, and lifestyle domains. Healthcare providers should assess the psychosocial needs of patients with stoma in order to help them coping.

# 090 : A CASE SERIES OF 35 PATIENTS DIAGNOSED WITH NEUROENDOCRINE TUMOR OF THE PANCREAS

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**Introduction :** Pancreatic neuroendocrine neoplasms (PanNEN), comprising well-differentiated neuroendocrine tumors (PanNET) and poorly-differentiated neuroendocrine carcinomas (NEC), although rare, are the second most common neoplasm of the pancreas.

**Materials and Methods :** An 11-year retrospective analysis was conducted during the period between 2010 and 2021 including 34 patients diagnosed in the pathology department of Farhat Hached University Hospital, Sousse, Tunisia.

Result : A slight male predominance was observed with 19 males and 16 females. The mean age was 60.44 years ranging from 34 to 90). Among these cases, 33 were nonfunctioning tumors and 1 was classified as functioning insulinoma. The diagnosis was established on surgical specimens for 16tumors, with pancreatectomy in 3cases, cephalic duodenopancreatecomy in 3cases, distal splenopancreatectomy in 6cases, and enucleation in 4cases. Additionally, it was established through hepatic metastasis biopsy in 10 cases, pancreatic biopsy in 5 cases, tumor cytopunction in 2cases, peritoneal carcinosis resection in 1 case, and periumbilical nodule resection in 1 case. The majority of tumors were located in the head of the pancreas (10cases), the others were located in the tail (6cases), the body (3cases), and uncus (3cases). The precise location was indeterminate in the remaining cases. Tumor size ranged from 1 to 10cm. Histologically, 11cases were classified as NEC including 4 cases of small cell carcinoma while 8 cases were categorized as PanNET G1, 9cases as PanNET G2, and 1 case as PanNET G3. For the surgical specimens, 4cases were classified as pT2N0Mx, 4cases as pT2NxMx, 2 cases as pT3NxMx, 2cases as pT3N0Mx, 1case as pT2N1M1a, and 1case as pT2mN0Mx.

**Conclusion :** Over the past two decades, the diagnostic and therapeutic management of PanNET and NEC has improved. However, their diagnosis may be challenging. All PanNETs should be considered potentially malignant, and the tumor grading based on the mitotic count and Ki-67 index must be established for every case. Surgical treatment remains the only curative option for these neoplasms.

#### 091 : Targeted Therapy and Tumor Sidedness in Metastatic Colon Cancer: A Tunisian experience

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**Introduction :** Colorectal cancer (CRC) ranks as the third most common cancer. In recent years the distinction between left-sided and right-sided colon cancer and the mutational status of key oncogenes, such as KRAS has emerged as crucial factors for disease management and outcomes. Understanding the interplay between tumor location and molecular alterations is crucial for optimizing patient care and treatment strategies.In

this study, we aim to investigate the impact of tumor-sidedness and KRAS mutation status on the treatment of CRC among Tunisian patients

Materials and Methods : We conducted a retrospective analysis of a population of 101 patients diagnosed with metastatic colorectal cancer between 2012 and 2023 at the Medical Oncology Department of Ariana. Result : Median age was 57 years old [18-76] with 32% of patients <50 years old. The most common symptoms reported were abdominal pain (37%), transit disorders (20%), and rectal bleeding (14%). Thirty percent of patients had right-sided colon cancer, and 70% had left-sided colon cancer. Regarding the KRAS mutation: 32% had wild-type KRAS status, 47% had mutated KRAS status, and 21% had unknown status with no difference in KRAS status between the left and right side. MSI/MSS status was assessed in 17% of patients, with 2% having MSI status MSI (right side) .At the time of diagnosis, 76% were node-positive (N+), and 72% of patients presented with metastatic disease. Among this cohort, after multidisciplinary discussion,67% of patients had a disease deemed resectable from the outset, 19% potentially resectable, and 9% never resectable. The initial treatment involved single-agent chemotherapy (FOLFOX) alone in 68% of cases, while 32% received combination therapy including targeted therapy: bevacizumab in 74% of cases (97% with RAS mutation and 3% RAS wild-type) and cetuximab in 26% (100% RAS wild-type). The median number of targeted therapy injections received in the first line was 4 [range: 2 - 8], with initiation typically occurring from the 2nd injection of chemotherapy [range: 1 - 12th injection].Twenty seven percent of patients experienced disease progression under first-line treatment with a median PFS of 13 months [3-35]. There was a statistically significant increase in disease progression observed among patients diagnosed with right-sided colon cancer (p=0.017).

**Conclusion :** Our study highlights the significance of tumor-sidedness in metastatic colorectal cancer management. Right-sided tumors have a higher risk of disease progression and poorer outcomes than left-sided tumors. Personalized treatment approaches, integrating tumor molecular profiling, sidedness assessment, and treatment response monitoring, are essential to optimize patient outcomes. Future studies with larger cohorts are needed to validate these findings.

### 092 : Colorectal cancer liver metastases: Impact and predictive factors of R1-R2 resection

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**Introduction :** Various studies have provided different results concerning the correlation between resection margins and outcomes in colorectal liver metastases (LM). Our study aimed to assess predictive factors and the impact on survival outcomes following R1-R2 colorectal LM resection.

**Materials and Methods :** We conducted a retrospective study that included 53 patients with metastatic colorectal cancer treated with curative intent local treatment of primary tumors and LM. Overall Survival (OS), relapse-free survival (RFS) and prognostic factors were determined using Kaplan Meier and Cox model respectively.

**Result :** Median age was 53.5 years old and 61.5% of patients were male. Synchronous metastases were observed in 75% of cases. Median number of LM was 3 [1-15] with bilobar lesions in 56% of cases. The largest diameter of LM was 4cm or less in 52% of cases. LM were classified as "resectable" in 71% and "potentially resectable" in 29 % of cases. Perioperative, postoperative and total preoperative systemic treatments were administered in 54%, 33% and 6% of cases respectively. All patient underwent liver surgery. Liver resection was complete (R0) in 73%, R1 in 24% and R2 in 4% of cases. R1-R2 resection of LM was identified as an independent factor associated with poorer RFS (14 vs 20 months, p=0.001) and OS (53 vs 30 months, p=0.001). In univariate analysis, predictive factors for R1-R2 resection of LM were the absence of radiological objective response after systemic treatment (p=0.01) and a number of LM more than 4 (p=0.05). The absence of objective response after systemic treatment was independently associated with a higher rate of R1-R2 resection (p=0.032).

**Conclusion :** R1-R2 resection was an independent factor worsening survival of patients with colorectal LM. Response to systemic therapy should be carefully considered before curative intent treatment decision of metastatic colorectal cancers with LM.

### **093** : Gallbladder Cancer: Histopathological Findings through a Retrospective Study

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**Introduction :** Gallbladder Cancer (GBC) constitutes a rare pathological entity worldwide, with an estimated incidence of less than 2 cases per 100,000 individuals. Despite their rarity, GBCs represent the most common malignant tumor of the biliary tract, characterized by an often poor prognosis. Significantly, most of them are incidentally discovered following cholecystectomy performed initially for symptomatic gallbladder stones.

**Materials and Methods :** The histopathological findings of GBC were described with a review of the related literature. These cases were diagnosed in the Department of Pathology of Habib Bourguiba University Hospital in Sfax between January 2013 and March 2024.

**Result :** This study included 72 cases of GBC. The sex ratio M/F was 0.5, and the average age was 66 years (ranging from 28 to 94 years). Adenocarcinoma (ADK) was the most frequent histological type, accounting for 73% of cases, followed by colloid carcinomas, carcinosarcomas, clear cell carcinomas, and mixed carcinomas (ADK+Neuroendocrine carcinoma) with respective percentages of 1.4%. ADKs were of the biliary type in 65.3% of cases, well-differentiated in 44.4%, and poorly differentiated in 8.3%. Tumor size ranged from 0.8 to 7 cm with a mean of 3cm Low-grade dysplasia was diagnosed in 18.1% of cases and high-grade dysplasia in 33.3% of cases. The surgical margin on the collet side was infiltrated in 26.4% of cases. The tumor was classified as pT3 in 26.4% of cases and pT2 in 43.1% of cases. Perineural invasion was observed in 54.2% of cases, while vascular invasion was present in 40.3% of cases.

**Conclusion :** Gallbladder cancer presents a grim prognosis, largely attributable to their late diagnosis. However, a meticulous and thorough approach during the systematic histological examination of cholecystectomy specimens can pave the way for the early detection of cancer.

#### 094 : Anorectal melanoma : a case report

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**Introduction :** Anorectal melanoma (AM) is a rare malignancy accounting for only 1% of all anorectal tumors with aggressive behavior and poor. Although anorectal melanoma carries a poor prognosis; optimal therapeutic strategies are still unclear. While Surgical resection remains the mainstay of treatment. The optimal surgical procedure for primary tumors is still controversial and can vary from wide local excision to

abdominoperineal amputation. We here report our experience in the management of a case AM

**Materials and Methods :** We here report our experience in the management of a case AM.

Result : We report a case of a 78-year-old woman with a medical history of Biermer anemia who presented to our department with complaints of 1 month of rectal bleeding with abdominal and anal pain. Associated symptoms included diarrhea, anorexia, and 5 kg weight loss. Physical examination found an easily friable anorectal 7 cm mass with an irregular contour. There was no palpable adenopathy. The patient had total colposcopy which showed an hémi- circumferential non stenosing 4 cm mass. The biopsy was consistent with anorectal melanoma. CT scan and MRI were performed showing a circumferential parietal anorectal thickening of 20mm and about 80mm long causing a subtotal obstruction. The tumor was infiltrating with the fascia recti and both sphincters. There was no distant metastasis. The tumor was staged T4dN1M0. The patient had abdominoperineal amputation with a definitive colostomy. Histopathologic examination concluded 75 mm anorectal melanoma with 30mm thickness with vaginal and mesorectal infiltration. There was no lymph node involvement Post operative course was uneventful and the patient is regularly followed up at our center and she is free of diseases.

**Conclusion :** In summary, AM is a rare, aggressive disease with no optimal therapeutic approach. Patients with AM should always be treated by a multidisciplinary melanoma team and further research needs to be carried out to get clear treatment strategies.

# **095** : Hereditary colorectal cancer genetic profile in Tunisian patients: a case series

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**Introduction :** Colorectal cancer (CRC) is one of most commonly diagnosed and deadly cancers in the world. It's a complex disease, resulting from a combination of genetic and environmental factors. Approximately 2% to 5% of colon cancers originate from specific inherited syndromes, such as Lynch syndrome and familial adenomatous polyposis, and these syndromes are known for their association with a heightened risk of developing colon cancer. Beyond these well-defined syndromes, up to one-third of colon cancers demonstrate an elevated familial risk, likely attributable to genetic inheritance.

**Materials and Methods :** This study focused on a group of 20 Tunisian patients displaying symptoms indicative of hereditary colorectal cancer syndromes. The aim was to confirm the clinical diagnosis accuracy and pinpoint the genetic alterations responsible for the disease.

**Result :** Through the use of Targeted Exome Sequencing or Sanger sequencing methods, we detected a set of pathogenic variants or variants with unknown significance (VUS).

**Conclusion :** Our research contributes to a deeper comprehension of the genetic spectrum linked to various clinical manifestations of colorectal cancer (CRC). Additionally, it underlines the significance of molecular genetic testing for CRC patients, enhancing patient care and facilitating genetic counseling for affected families.

#### 096 : Colorectal medullary carcinoma: a case report

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**Introduction :** Colorectal medullary carcinoma (CMC) represents a rare entity different from poorly differentiated or undifferentiated adenocarcinomas. It represents 0.03% of all colorectal carcinomas. Although morphologically similar to undifferentiated adenocarcinomas, they have a distinct anatomo-clinical profile, often with little lymph node involvement, a strong association with microsatellite instability (MSI) and a better prognosis.

**Materials and Methods :** We report the case of a patient followed in Salah Azaiez Institute for CMC.

**Result :** A 32-year-old patient with no past medical history presented with an anemic syndrome, abdominal pain and bloating associated with diarrhea evolving for 6 months. Colonoscopy showed an ulcerative and proliferative tumor of the transverse colon. Biopsies concluded to undifferentiated adenocarcinoma. Imaging showed no distant metastasis so the patient got surgery: Intraoperatively there was a mass in the transverse colon with no hepatic nodule nor peritoneal carcinomatosis. Carcinological section of the transverse colon extended to the sigmoid was operated and the pathological examination concluded to a proliferation of large cells associated with abundant lymphoid stroma. The immunohistochemical study showed positivity to CK20 and CDX-2. The 69 nodes examined were non-invasive. The diagnosis of pT4N0M0 medullary carcinoma was made. The study of the MMR status confirmed the unstable profile. In view of the young age and stage pT4, and after discussion of the file in a multidisciplinary consultation meeting, adjuvant chemotherapy based on Oxaliplatin and 5FU was given.

**Conclusion :** Although the incidence of colorectal adenocarcinoma has recently emerged, CMC remains extremely rare with distinctive clinical, histological, immunophenotypical, and prognostic traits.

### 097 : Screening for Colorectal Cancer: Current state in SFAX Region

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**Introduction :** Screening for colorectal cancer (CRC) could reduce the specific mortality rate and improve the quality of life of patients.

**Materials and Methods :** This is a prospective study conducted within Dar el Amal Association for Cancer Control in SFAX, which included individuals aged 45 and older, asymptomatic, and with no personal history of adenoma, CRC, Crohn's disease or a hereditary predisposition. The test used was immunological that detect blood in the stools. A negative test should be repeated after 2 years. A positive one indicated colonoscopy to identify lesions that will be biopsied or removed. A negative colonoscopy implied rejoining the screening program after 5 years.

**Result :** Between 2021 and 2023, 1849 tests were performed out of 2385 distributed kits, resulting in a participation rate of 1.1%. Two hundred thirty-two tests returned positive (12.5%), 1613 negative, and 4 showed traces of blood. The median age of individuals with positive tests was 61 years [45-96]. Ninety-seven colonoscopies 42% were performed, with a median delay of 15 days [2-373 days]. Colonoscopy was normal in 12 cases (12%) and it showed polyps in 38 cases (40%), ulcerated tumors in 2 cases (2%) that histopathological examination revealing adenocarcinoma. Nearly half of the colonoscopies performed had poor or moderate preparation (44 colonoscopies; 49.4%).Polyps were sessile in 21 cases (55.26%), pedunculated in 4 cases (10.52%), flat in 3 cases (7.89%), and hyperplastic in 4 cases (10.52%), They were multiple in 11 cases (28.94%) with a size larger than one centimeter in 10 cases (26.31%). Histopathological examination showed advanced adenoma in 5 cases (13%) and simple adenoma in 18 cases (47%)

**Conclusion :** The preliminary results of the CRC screening experience were satisfactory, with a detection rate of  $0.83 \,\%$  and a polyp detection rate of 16%, of which 2 ‰were advanced adenomas. However,

improvement in these results requires increasing participation rate through better awareness and coordination.

#### 98 : prognostic factors in gastric adenocarcinoma

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**Introduction :** Gastric adenocarcinoma is a serious and frequent digestive cancer. It is the second most common cause of cancer death worldwide, after colorectal cancer. Its poor prognosis is due to a number of factors. Identifying prognostic factors will enable us to better codify therapeutic management in order to improve survival and reduce recurrence rates. The aim of this study is to identify the main prognostic factors affecting overall survival and recurrence.

**Materials and Methods :** Retrospective study including 60 patients operated on for gastric adenocarcinoma at the Habib Bougatfa Hospital in Bizerte between January 2006 and March 2016

**Result :** The median age was 60 years. The mean time to diagnosis was 7 months. One-quarter of patients had a predisposing lesion. The tumor was locally advanced in 5 cases and metastatic in 4. Histologically, the tumor was advanced in 50 cases, and 70% of patients had lymph node involvement. Overall survival was 58% at 3 years. Recurrence-free survival was 20 months. Recurrence-free survival at 1, 3 and 5 years was 88%, 73% and 70% respectively. Eleven patients had a recurrence. The median time to recurrence was 12 months. Of the 11 patients with recurrence, 9 died, giving a recurrence-related mortality of 82%. In univariate analysis, overall survival and recurrence were influenced by several factors. After multivariate analysis, only node invasion, recurrence, number of nodes removed less than 15, presence of ring cells and tumor stage 3 significantly influenced survival. Independent factors influencing recurrence were the presence of intraoperative lymph nodes and ring cells

**Conclusion :** Improved therapeutic results require early diagnosis and rigorous surgery. Adjuvant and neo-adjuvant treatments should have a prominent place in the therapeutic arsenal.

### **99 : Impact of the IDEA Collaboration Study Results on Clinical Practice for Patients with Stage III Colon Cancer**

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**Introduction :** The IDEA collaboration revealed the potential for personalized treatment approaches in stage III colon cancer, allowing for adjustments in chemotherapy type and duration based on risk levels. Our study aims to assess how these insights from IDEA have been applied in real-world clinical practice for stage III colon cancer.

**Materials and Methods :** In a monocentric retrospective study conducted at the Oncology Department of Abdelrahman Mami Hospital in Ariana, Tunisia, between 2018 and 2023, 56 patients who underwent surgery for stage 3 colon cancer were included. Patients were categorized into two groups based on tumor and lymph node staging: low risk (T1-T3, N1) and high risk (T4 and/or N2). Treatment allocation involved either 3 months of adjuvant Xelox or 6 months of Folfox based on risk stratification. Covariates such as age, lymph node dissection, occurrence of obstruction, and chemotherapy-related side effects were collected for analysis.

**Result :** The study cohort comprised 56 patients with a mean age of 57 years [ 30-77], including 60.71% of women and 39.29% men. None had personal or family history of colorectal cancer or Lynch syndrome. Performance status, assessed by WHO criteria, ranged from 0-2, with only

one patient scoring 2. Tumor distribution included 28,57 % of patients with right colon cancer, 66,07% with left colon cancer, and three patients with transverse cancer, 21,43% of the patients were on obstruction. Stratification revealed that 44,64% of the patients at low risk and 55,36% at high risk. Regarding treatment, 17 patients (68% of low risk) received 3 months of CAPOX, one received 6 months of CAPOX, and 7 patients underwent 6 months of adjuvant FOLFOX. All high-risk patients received 6 months of adjuvant treatment, with one receiving 6 months of CAPOX and 30 receiving 6 months of FOLFOX. Among those receiving three months of CAPOX, 52.9% of the patients experienced neuropathy, versus 91.89% on the other group.

**Conclusion :** the influence of the IDEA collaboration is evident in the departments practice, with notable shifts in treatment strategies for stage III colon cancer.

### **Gynecology Cancer**

### 100 : Impact of adjuvant chemotherapy on ovarian function in young women with breast cancer: A study of 80 cases

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**Introduction :** Breast cancer is the most common gynecological cancer, increasingly affecting younger women. Adjuvant chemotherapy is often used to reduce the risk of recurrence and improve survival rates. However, it can have significant side effects, particularly on ovarian function. This study aims to assess the impact of adjuvant chemotherapy on ovarian function in young women treated with chemotherapy for breast cancer.

**Materials and Methods :** This is a retrospective, single-center study conducted at the Department of Obstetrics and Gynecology at Hedi Chaker University Hospital in Sfax, over a period of 5 years from January 1, 2018, to December 31, 2023. We included women under the age of 45 diagnosed with early-stage breast cancer and who underwent adjuvant chemotherapy. Clinical and biological data were collected from medical records. We assessed ovarian function before and after treatment using hormonal assays such as FSH and estradiol levels, as well as menstrual cycle tracking.

**Result**: Our sample size was 80 patients. The average age was  $35.1\pm4.6$ . More than half were married (62.5%) and 85% had infiltrating ductal carcinoma. 95% of our patients had received adjuvant chemotherapy 1 to 2 months after surgery. We observed an impairment of ovarian function in 70% of the patients after chemotherapy, with nearly half experiencing this after the third cycle of chemotherapy. FSH and LH levels were significantly higher, and estradiol levels were significantly lower after treatment (p<0.001). Additionally, 60% of women reported menstrual cycle abnormalities, ranging from amenorrhea to irregular menstrual cycles. The impairment of ovarian function was significantly associated with being over 40 years old (p=0.02) and the use of anthracyclines (p=0.001). 40% of our patients recovered normal ovarian function after the end of chemotherapy.

Conclusion : In conclusion, our study highlights the significant impact of adjuvant chemotherapy on ovarian function in young women with breast cancer. It is essential that healthcare professionals discuss the risks of ovarian function impairment with their patients and guide them towards fertility preservation options.

#### 101 : Neuroendocrine tumors of the breast

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Department of Obstetrics and Gynecology at CHU Hedi Chaker, Sfax, Tunisia **Introduction :** Neuroendocrine tumors primarily affect the bronchopulmonary system and the gastrointestinal tract. Breast localization is rare, accounting for less than 0.1% of all breast cancers and less than 1% of neuroendocrine tumors. The aim of our study is to investigate the epidemiological, clinicopathological, therapeutic, and prognostic characteristics of neuroendocrine tumors of the breast.

**Materials and Methods :** Retrospective study of 3 cases collected between January 2017 and December 2022.

Result : The average age of our patients was 66.3 years (ranging from 47 to 77 years). The reason for consultation for all of our patients was the discovery of a breast nodule on self-examination, with an average size of 2.8 cm. All patients underwent breast ultrasound and mammography. The ultrasound and mammography revealed suspicious lesions ( $\geq$  ACR 4b) requiring further pathological examination. The staging workup was negative in all cases. A breast biopsy was performed in 2 patients and a lumpectomy with frozen section examination was performed in the other patient, revealing infiltrating carcinoma in all cases. One patient underwent breast-conserving therapy, while the other two underwent mastectomy with axillary lymph node dissection. The final pathological examination confirmed the diagnosis of neuroendocrine tumor. Hormone receptors were positive in 2 cases and negative in 1 case. HER2 overexpression was negative in all cases. The Ki67 proliferation index was evaluated in 2 cases and was 1% and 30% respectively. Vascular emboli were present in one case. Only one woman did not have lymph node involvement. Adjuvant treatment consisted of chemotherapy and radiotherapy in 2 women, and radiotherapy in 1 woman. The survival rate was 100%. None of our patients developed metastases or local recurrence. Conclusion : Neuroendocrine tumors of the breast are extremely rare malignant tumors. They can be primary or secondary. The mammographic appearance is nonspecific, making it difficult to differentiate them from fibroadenomas or carcinomas. A definitive diagnosis is based on immunohistochemical studies.

### 102 : Neoadjuvant chemotherapy in the treatment of locally advanced breast cancer

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**Introduction :** Breast cancer is the most common cancer in women in Tunisia and is the leading cause of cancer-related deaths. The prognosis for locally advanced breast tumors remains poor, leading many medical teams to opt for neoadjuvant chemotherapy followed by locoregional treatment. The aim of our study is to determine the value of neoadjuvant chemotherapy in the treatment of locally advanced breast cancers.

**Materials and Methods :** This prospective study included 58 women with locally advanced breast cancer classified as T4a, T4b, T4c, T4d M0 according to the TNM classification, and treated at the gynecology and obstetrics department in Sfax from January 2019 to January 2022.

**Result :** The average age of the patients was 48 years. The average age at menarche was 13.5 years. The average age at first pregnancy was 32.7 years. The average parity was 4.1. 32,7% of women had a family history of breast cancer. 69% of patients received FEC 100-based chemotherapy, 25,8% received FEC60-based chemotherapy, and 3.4% received EVCMF-based chemotherapy. This allowed for a satisfactory objective response, enabling carcinological surgery to be performed. At the end of the study, 67,2% of women were in complete remission, 17,2% had passed away, 8.6% had metastatic progression, and 12,1% were lost to follow-up.

**Conclusion :** Locally advanced breast cancer is common in Tunisia. Neoadjuvant chemotherapy improves the prognosis of these stages, which remains poor compared to early-stage detection, highlighting the importance of screening mammography for diagnosing these advanced stages.

#### 103 : Ovarian granulosa cell tumors

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**Introduction :** Granulosa cell tumors (GCT) are tumors of the mesenchyme and sex cord, representing rare malignant tumors, accounting for 2 to 6% of all malignant ovarian tumors. The rarity of these tumors explains the lack of consensus in management. The objectives of this study are to investigate the epidemiological, clinical, and pathological aspects, as well as the therapeutic management and follow-up after treatment.

**Materials and Methods :** We conducted a retrospective study on 14 cases of adult-type GCT treated and followed up at the Department of Gynecology and Obstetrics of Hedi Chaker University Hospital in Sfax, collected over a period of 12 years. The pathological examination of the surgical specimens was performed at the Department of Pathology and Cytology of Habib Bourguiba University Hospital in Sfax.

Result : GCT accounted for 11.9% of malignant ovarian tumors according to the Southern Tunisian Cancer Registry. The average age of our patients at the time of diagnosis was 44,4 years, with a range from 18 to 63 years. 21,4% of our patients were postmenopausal. 42,8% of our population were nulliparous. Ovulation-inducing treatment was reported in 28,6% of cases. Postmenopausal metrorrhagia in three patients. Discovery circumstances were: menometrorrhagia (28,6%), abdominal pain (57,1%), secondary amenorrhea (42,8%) with an average duration of eight months, digestive disorders such as repeated vomiting (14,3%). Physical examination showed an abdominal-pelvic mass in eight patients (71,42%), with one presenting with acute abdominal symptoms, while two had normal findings. Ultrasound was performed for all patients. The average tumor size was 11.13 cm, ranging from 4.2 cm to 32 cm. Estradiol levels were tested in ten patients during follow-up (71,4%) and were found to be normal. Inhibin and AMH levels were not tested. CA125 levels were tested in all patients pre- and post-operatively, with an abnormal result in only two cases. Three patients underwent hysteroscopy. Endometrial biopsy was performed in 6 patients, 3 of whom had it done under hysteroscopic guidance. Frozen section examination, conducted in 7 cases, identified the tumor type in 85.7% of cases.

**Conclusion :** Given the often-endocrine nature of GCTs, it is recommended to conduct a systematic histological study of the endometrium to look for atypias or associated endometrial cancer, especially if a conservative treatment is being considered.

#### 104 : Gynecological cancers: What impact on sexuality?

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**Introduction :** The diagnosis and treatment of cancer have significant consequences on patients and their loved ones, particularly from a sexual perspective. The aim of our study was to assess the impact of gynecological cancers on women's sexuality as well as on the couple.

**Materials and Methods :** We conducted a prospective study between January and December 2022, including patients with gynecological cancers who were sexually active and provided informed consent to participate in the study. A questionnaire was developed to define the various parameters of the study.

**Result :** The sample consisted of 75 patients, with 46.6% having breast cancer, 26.7% endometrial cancer, 13.4% ovarian cancer, 10.7% cervical cancer, and 2.7% vulvar cancer. The average age of the patients was 49.5 years. The majority of patients (96%) were sexually active before the diagnosis of gynecological cancer. 93.3% stated that cancer had

significantly affected their sexual activity. The main factors influencing sexual activity were fatigue in 78.6% of cases, decreased libido in 57.1% of cases, and dyspareunia in 42.8% of cases. Furthermore, fear of contagion and partner refusal were observed in 35.7% and 21.4% of cases, respectively. In over 86.7% of cases, there was no communication within the couple to discuss the issues encountered in their sexual life. Regarding marital status, 13.4% of married women had experienced a change in their status.

**Conclusion :** The influence of gynecological cancers on sexuality remains a sensitive and underexplored topic, where the taboo around sex combines with the fear of cancer. Implementing a patient information program can significantly improve their care.

#### 105 : Diagnosis and Management of Uterine Sarcomas

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**Introduction :** Uterine sarcomas are rare tumors (less than 10% of uterine tumors) characterized by rapid clinical progression and a poor prognosis, with a significant risk of recurrence. Their diagnosis remains a challenge. We analyzed the epidemiological factors and clinical signs of this pathology in order to plan the management.

**Materials and Methods :** Fifteen patients with uterine sarcoma who underwent surgery at the Department of Gynecology-Obstetrics at CHU Hedi Chaker in Sfax between 2008 and 2016 were included in this retrospective study.

**Result :** The average age of our patients was 51.4 years. The time to consultation was 3 months (4 days - 9 months). Abnormal uterine bleeding was the most common presenting symptom (73.3%). All our patients underwent surgical treatment. Adjuvant radiotherapy was performed in 3 cases, and neoadjuvant brachytherapy in 3 cases. Chemotherapy was indicated in 4 cases of our patients. During the study period, we had 6 deaths, 5 lost to follow-up, and the others were in good health. Prognostic factors influencing survival in 9 patients were tumor stage and histological type.

**Conclusion :** Uterine sarcoma is a rare cancer, but with a poor prognosis. Preoperative diagnosis is rarely made; leiomyosarcoma often presents as a benign fibroid or with necrosis. The main prognostic factor is the mitotic activity. Treatment is dominated by surgery. Radiotherapy only reduces local recurrences without modifying survival, and chemotherapy has not proven to be effective.

#### 106 : Assessment of Pretherapeutic Staging in Endometrial Cancer

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**Introduction :** Endometrial cancer is the second most prevalent gynecological cancer in Tunisia, following breast cancer. Accurate staging is crucial for determining the appropriate treatment approach. Staging involves imaging techniques to evaluate myometrial invasion, cervical involvement, and lymph node metastasis, as well as histological analysis for tumor differentiation and type. However, this staging process is not always accurate and can lead to treatment errors. This study aims to assess the efficacy of MRI and endometrial biopsy in staging endometrial cancer and discuss the potential role of pelvic lymphadenectomy in intermediate-stage cases.

**Materials and Methods :** This retrospective observational study was conducted at CHU Hédi Chaker in Sfax from January 2015 to December 2020, involving one hundred patients with endometrial adenocarcinoma.

**Result :** MRI showed a reliability of 65% in assessing myometrial invasion, with a sensitivity of 84% and specificity of 63%. For cervical involvement, the reliability was 89%, with a sensitivity and specificity of 42% and 80%, respectively. The reliability for lymph node involvement was 82%, with a sensitivity of 15% and specificity of 92%. Histological analysis had a reliability of 90% for low-grade tumors and 78% for high-grade tumors. Systematic pelvic lymphadenectomy in intermediate stages helped correct staging errors.

**Conclusion :** The current pretherapeutic imaging methods for endometrial cancer staging are not sufficient for tailoring surgical strategies to the disease stage. Ongoing evaluations of new tools such as 3D ultrasound, PET scans, and sentinel lymph node biopsy aim to improve preoperative assessments. Given the limitations of current assessments, the consideration of systematic pelvic lymphadenectomy in intermediate-stage cases warrants further discussion.

#### 107 : Ovarian mucinous tumors

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**Introduction :** Ovarian mucinous tumours are types of epithelial tumours of the ovarian surface. They are characterised by their risk factors, diagnostic challenges, therapeutic specificities and prognosis.

**Materials and Methods :** A retrospective descriptive study carried out between 2016 and 2023 in our department analysed cases of mucinous tumours classified as benign (26 cases), borderline (9 cases) and malignant (13 cases).

**Result :** The average age of patients was 36, 38 and 42 for benign, borderline and malignant tumours respectively. The majority of patients were multiparous and had no history of taking oral contraception. The mean time to diagnosis was 15, 10 and 5 months for benign, borderline and malignant tumours. The most frequent clinical symptoms were abdominopelvic pain (72%) followed by abdominal distension (54%). All patients underwent abdomino-pelvic ultrasound in the first instance. Benign tumours were all stage I, as were 77% of borderline tumours and 46% of malignant tumours. Pathologically, 23% of malignant tumours were bilateral. These tumours were generally large (mean 18.4 cm), cystic with a solid component in 22% of borderline tumours and 69% of malignant tumours. A multilocular component was present in 83% of cases, with a predominance of the intestinal type in malignant tumours (90%). These tumours were often heterogeneous, with benign, borderline and invasive elements coexisting.

**Conclusion :** The risk associated with mucinous ovarian tumours does not depend on reproductive factors. Pre-treatment work-up must exclude a secondary origin. The heterogeneity of these tumours highlights the importance of careful analysis by pathologists. However, further studies are needed to increase our knowledge of these tumour types.

#### 108 : Endometrial Carcinosarcoma: About 10 cases

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**Introduction :** Type 2 tumours represent around 15% of endometrial cancers and include serous carcinomas, clear cell carcinomas, carcinosarcomas (or malignant mixed mullerian tumours or ambiguous carcinomas or undifferentiated carcinomas) and carcinofibromas.

**Materials and Methods :** Our study is a retrospective study carried out over a period of 7 years from January 2015 to December 2022 on patients with endometrial carcinosarcoma managed in our department.

Result : In this study of 10 cases of patients with endometrial carcinosarcoma, the results were as follows: the mean age of the patients was 69.1 years. The delay in diagnosis was greater than 01 year in 55.5% of patients. Postmenopausal metrorrhagia was the most frequent reason for consultation, accounting for 88.8%. Pelvic ultrasound was performed in 100% of patients. It was pathological in 100% of cases, with endometrial thickening in 66.6% of cases, an intracavitary image in 22.2% of cases, and myometrial infiltration in 11.11% of cases. Diagnostic hysteroscopy was performed in 88.88% of cases. Biopsy curettage was performed in 11.11% of cases. The extension work-up included a clinical examination in all patients. Pelvic MRI was performed in 27.7% of cases, and CAT scan in 100% of cases, showing pulmonary metastases in 22.2% of cases. Surgical treatment: 88.8% of patients underwent hysterectomy + bilateral adnexectomy + pelvic and lumbo-aortic curage + omentectomy + multiple biopsies + peritoneal cytology.Post-operative follow-up was straightforward in 89.4% of patients. Pathology: The tumours varied in size and morphology, ranging from 1 cm to 12 cm. The histological type was endometrial carcinosarcoma.Node invasion was positive in 27.7% of patients.100% of patients subsequently underwent adjuvant radiochemotherapy. In our series, 50% of patients operated on achieved complete remission.

**Conclusion :** Endometrial carcinosarcoma is a rare anatomopathological entity combining a sarcomatous component with a carcinomatous component. It accounts for approximately 2-5% of endometrial cancers and 1% of ovarian cancers. Management is mainly based on maximum cytoreduction surgery, with a controversial role for platinum-based adjuvant chemotherapy and radiotherapy in certain situations. Despite a poor prognosis, advances in anatomopathological knowledge and the use of targeted therapies offer promising prospects for this subtype of cancer. The management of carcinosarcoma requires a multidisciplinary approach to improve therapeutic outcomes.

### 109 : B-Cell ALL: Clinical Course and Unusual Cervical Relapse

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**Introduction :** Acute lymphoblastic leukemia (ALL) is the most common type of cancer in children. Studies have shown an improvement in general survivability, more than 90% 5-year overall survival.

**Materials and Methods :** The aim of this abstract is to report the clinical case of relapse in a localized form of LAL

Result : A 12-year-old girl was admitted to the hospital with suspected acute leukemia. The laboratory results indicated a white blood cell count of 240,000/µl, platelet count of 49,000/µl, and hemoglobin level of 8.2 g/dl (with 100% peripheral blasts). Bone marrow analysis revealed a highly cellular marrow with a homogeneous population of small blasts with lymphoid morphology (86.5%). Flow cytometric analysis confirmed a B-cell precursor ALL The patient was diagnosed with common B-cell precursor ALL and underwent treatment according to the EORTC protocol. Cytogenetic and molecular examinations consistently revealed the t (4,11) translocation in all analyzed mitoses, with a negative BCR-ABL transcript. The patient responded well to induction therapy, with a positive response to prednisone on the 8th day. The patient was in cytological, molecular, and cytogenetic remission post-induction . The patient was lost to follow-up since May 2020. In June 2023, she presented to gynecological emergency services with profuse uterine bleeding. Pelvic ultrasound revealed an enlarged uterus with a 90\*60 mm isoechogenic formation in the cervico-isthmic region. Subsequent MRI confirmed a well-defined intra-cavitary cervico-isthmic uterine mass without signs of invasion. A cervical biopsy, guided by vaginoscopy, indicated histological and immunophenotypic features consistent with a relapse of acute lymphoblastic leukemia. Immunohistochemistry revealed diffuse and intense membranous positivity with anti-CD79a and nuclear staining with anti-TDT. The proliferation index KI67 was elevated, estimated at 80%. The patient was referred to our institution for further exploration. Myelogram demonstrated no infiltration (blasts at 2%), flow cytometry confirmed the absence of leukemia relapse and the karyotype is without anomalies. The patient is currently hospitalized for salvage chemotherapy based on fludarabine, cytarabine, and daunorubicin

**Conclusion :** The clinical presentation is distinctive, and the recurrence site is atypical. This highlights the need for vigilance in monitoring and managing ALL patients. Rare occurrences like this require further investigation and collaborative efforts to understand the underlying mechanisms and optimize treatment strategies for these unique cases.

### **110 :** Review of the experience of the sentinel lymph node in endometrial cancer

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**Introduction :** Endometrial cancer is the second most common gynecological cancer. It is considered to have a good prognosis because its diagnosis is often made at an early stage, when the cancer is still confined to the uterus, and surgery is often curative. The therapeutic usefulness of lymphadenectomy, especially in the early stages, is controversial. It significantly increases morbidity, with risk of intraoperative bleeding and injury, and postoperative lymphedema. Sentinel lymph node biopsy is a useful procedure to determine lymph node involvement in early cancers, with a lower risk of lymphedema.

**Materials and Methods :** This is a descriptive study of 9 cases of patients followed for endometrial cancer for whom the sentinel lymph node technique in surgical treatment was adopted, collected retrospectively over two years (2022 and 2023)

**Result :** The average age was 63.8 years. None of the nine women had a family history of endometrial neoplasia. The majority of patients were obese with an average BMI (body mass index) of 35.3. Preoperatively, 7 patients (77.7%) were classified as FIGO stage IA, and 2 as FIGO stage IB, one of which could be classified as IIC according to the new FIGO 2023 classification). Likewise, 7 patients were at low risk according to the prognostic classification, one at intermediate risk and one at high risk. None of these patients received neoadjuvant treatment. All patients benefited from the sentinel lymph node technique with double marking: isotopic with technetium 99 and colorimetric (3 using patent blue and 6 using methylene blue). Among the nine cases, we note a single failure of isotope detection, and a failure of left colorimetric detection, requiring ipsilateral subvenous picking, in a patient classified IA FIGO. The average number of lymph nodes removed was 2.6 (ranging from 1 to 5 during the first cases). Among the sentinel lymph nodes collected, only one was metastatic requiring additional pelvic dissection on the same side, the rest were reactive. The final anatomopathological result noted the escalation of 3 patients to intermediate risk, 3 to high intermediate risk, and 2 to high risk.

**Conclusion :** The sentinel lymph node technique replaces lymphadenectomy in the early stages of endometrial cancer, thus reducing the complications that can result from it. Double isotopic and colorimetric labeling is always preferable.

### 111 : Rapidly growing juvenile granulosa cell tumor of the ovary arising in adult: a case report

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**Introduction :** Juvenile granulosa cell tumor (JGCT) of the ovary is a rare subtype of ovarian sex cord-stromal tumors, accounting for approximately 5-10% of all ovarian malignancies. It primarily affects young women, with a peak incidence in the second and third decades of life, although cases have been reported in older age groups as well. JGCTs are characterized by their distinct histopathological features and unique clinical behavior compared to other ovarian neoplasms. Clinically, patients with JGCTs may present with a spectrum of symptoms, including abdominal pain, distension, and menstrual irregularities. Hormonal manifestations such as precocious puberty or virilization may also occur due to the tumor's ability to produce estrogen or androgen hormones. Despite their potential for hormonal activity, JGCTs are generally considered indolent tumors with a favorable prognosis.

Materials and Methods : Case Presentation A 31-year-old female patient with no significant past medical history presented with a one-month history of abdominal-pelvic pain and abdominal distension, accompanied by a general deterioration in her health status. Physical examination revealed significant abdominal distension with diffuse abdominal tenderness, more pronounced on the right side. Laboratory findings showed leukocytosis, elevated C-reactive protein (CRP) levels at 160, hypoalbuminemia, and increased CA125 levels. Ultrasound imaging identified a large heterogeneous solid-cystic mass occupying the entire abdominal cavity extending to the subcostal level. Subsequent abdominalpelvic computed tomography (CT) imaging revealed a large abdominalpelvic, solid-cystic mass of apparent adnexal origin, with heterogeneous enhancement and hemorrhagic remodeling, measuring 15x13x25 cm, associated with abundant intraperitoneal effusion. Magnetic resonance imaging (MRI) of the abdominal-pelvis area confirmed the presence of a large right ovarian mass, occupying the ipsilateral hemiabdomen and extending up to the subhepatic space. The mass was multiloculated, with a thick enhanced wall and multiple tissue components, measuring 26x14x13 cm. It displaced digestive structures to the left and was in contact with the sigmoid and right colon, external and internal iliac vessels, the infrarenal portion of the aorta, and the inferior vena cava. There was also a large amount of partitioned intra-abdominal effusion, with peritoneal implants located laterally on the mesorectum to the left and in the median, and on the right parietocolic gutter, along with thickening of the peritoneal sheets.

**Result :** The initial management involved right adnexectomy with an intraoperative frozen section examination, which was highly suggestive of a juvenile granulosa cell tumor. Biopsies were taken from peritoneal carcinomatosis nodules located on the parietal side, Douglas pouch, digestive tract, and the anterior surface of the broad ligament. The decision was made to await the definitive histopathological examination results, which confirmed the diagnosis of a largely necrosed juvenile granulosa cell tumor with secondary localizations. The patient underwent six cycles of chemotherapy, followed by a control CT scan of the thorax, abdomen, and pelvis (TAP), which showed a left adnexal solid-cystic mass measuring 52x33 mm and the absence of peritoneal carcinosis nodules. The decision was to proceed with complete ovarian-type surgery including hysterectomy, left annexectomy, omentectomy, and lymph node dissection.

**Conclusion :** Juvenile granulosa cell tumors (JGCTs) of the ovary represent a rare but distinct entity among ovarian neoplasms, primarily affecting young women. This case underscores the diagnostic and therapeutic challenges associated with managing this unique tumor type. The presented case highlights the importance of a multidisciplinary approach involving gynecologists, oncologists, radiologists, and pathologists in the comprehensive management of JGCTs. Surgical resection remains the mainstay of treatment, aiming for complete excision while preserving fertility when feasible. Adjuvant therapies, including chemotherapy, may be considered in cases of advanced or recurrent disease, although their role in improving long-term outcomes remains uncertain.

# 112 : Predictive factors of high CA125 levels in patients with epithelial ovarian cancer

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**Introduction :** CA125 remains a reliable biomarker in the therapeutic management of epithelial ovarian cancer. Monitoring chemotherapy effectiveness and early detection of relapses during patient follow-up in remission represent the two most common clinical situations where CA125 has been successfully applied. Thus, it is reasonable to investigate whether CA125 may also serve as a prognostic indicator in ovarian cancer. The aim of this study was to identify clinico-pathological factors predictive of a high CA125 level in epithelial ovarian cancer.

**Materials and Methods :** This was a retrospective, descriptive and analytical study, covering a 10-year period (from 2007 to 2017), and which is based on the analysis of 90 medical records of patients with epithelial ovarian tumors treated at Farhat Hached University Hospital of Sousse. We collected clinical, biological and histological characteristics from the patients' records.

**Result :** The mean age of patients at diagnosis was 53 years. The most frequent tumor stage was stage IIIc (50%). Serous adenocarcinoma presented the most frequent histological type (47.44%). The median CA125 level at the time of diagnosis was 475 UI/mL (5-13221). A statistically significant association was noted between initial serum CA125 level and age, menopause, the presence of ascites, the presence of carcinosis and histological type (p < 0.05). No statistically significant association, metastatic localization, or number of metastases (p > 0.05).

**Conclusion :** Our preliminary results provide more information on the clinico-pathological parameters that should be considered in order to improve the interpretation of CA125 variations and, consequently, better management of patients with epithelial ovarian cancer.

### 113 : Germinal tumors of the ovary

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**Introduction :** germ cell tumours of the ovary are the second histological type, accounting for approximately 20 to 25% of ovarian tumours. the usual symptoms are not typical: a feeling of swelling or abdominal heaviness. ultrasound findings are more specific. in 95% of cases, germ cell tumours of the ovary are benign and represent cystic teratomas.

**Materials and Methods :** This was a descriptive, retrospective study of 40 patients admitted to our department. The study period was 7 years, from January 2017 to December 2023. The parameters studied were: clinical and para-clinical data, treatment and post-treatment evolution.

**Result :** the frequency of germ tumors was 18.26% of all ovarian tumors operated. the average age of discovery was 35 years. pelvic pain and incidental discovery, were the most frequent circumstances of discovery.the ovarian germ tumor was complicated in 20% of cases. The ultrasound performed in 90% of patients allowed to attach the mass to the ovary, to specify its echograpic characters and to refine the diagnosis. the average ultrasound size was 76mm.the ultrasound location of the tumor was unilocular in 69% of patients, finemet echogene in 58%, contours were regular in 86% and the content was heterogeneous in 97%.the solid component was present in 80% of cases and calcifications in 56% of cases.a CT +/- MRI were performed in 12 patients to specify the ovarian seat of the pelvic mass and for suspicion of malignancy in front of clinical

and ultrasound signs.the 2 main tumor markers dosed were CA-125 and ACE.the average rate of CA-125 performed in 15 patients was 14 IU/ml, it was pathological (63 IU/ml) in 2 patients with malignant ovarian germinal tumors. ACE was measured in 16 patients preoperatively, the average rate was 33 ng/ml,it was 201 ng/ml in the 2 patients with malignant germ tumors.all paientes in our study were operated, the main treatment route was laparoscopy, 58% of cases. The extemporaneous examination was performed in 16 patients and the result was in 2 suspected cases of malignancy, the surgical treatment was conservative in 29 patients and radical in 11 patients.the following operations were simple in all patients. the definitive histological examination had coclu that all tumors were teratomas, in 2 cases teratomas were immature(malignant). During the post-operative follow-up, a recurrence of symptomatology was observed in the 2 patients who had immature teratoma, in the 2 cases of pelvic recurrences confirmed by imaging and managed by chemotherapy. Conclusion : germ cell tumors of the ovary are tumors usually occurring in women of childbearing age.Surgery will thus always be concerned to maximum ovarian hormonal function preserve the and fertility.laparoscopy is the first therapeutic way The definitive diagnosis is histological and in most cases it is benign cystic teratomas.

# 114 : Mature ovarian teratoma degenerated into squamous cell carcinoma: A case report

#### Jbir I, Ben Ammar N, Ben Othmen S, Khaldi O, Bel Fekih H

#### Mohamed Taher Maamouri Hospital of Nabeul, Tunisia

**Introduction :** Approximately 1 to 2% of mature teratomas transform into cancer, and this association represents only 0.17 to 1% of all ovarian carcinomas. The malignant transformation of mature teratoma is defined as a dermoid cyst in which a carcinoma develops within one of its mature components.

**Materials and Methods :** We report the observation of a squamous cell carcinoma developed on a mature ovarian teratoma in a postmenopausal patient.

**Result :** A 64-year-old female patient, menopausal for 5 years, underwent surgery in October 2023 for a right ovarian cyst (ORADS 2) discovered incidentally on a lumbar MRI performed for spinal pain. She underwent a right annexectomy. The histopathological examination of the operative specimen revealed a squamous cell carcinoma without capsular rupture developed on a mature ovarian teratoma. The TAP CT scan did not reveal any secondary locations. Tumor markers were negative. Additional ovarian staging was performed. Pelvic and para-aortic lymph node dissections returned negative, and the tumor was classified as stage IA according to FIGO. No adjuvant treatment was indicated, and the patient is regularly followed up in the outpatient clinic.

**Conclusion :** The malignant epithelial transformation of mature ovarian teratomas is rare. Currently, there are no formal diagnostic criteria before histopathological analysis. Treatment is similar to that of malignant epithelial tumors of the ovary.

#### 115 : Exceptional Mode of Revelation of Serous Ovarian Carcinoma: A Case Report

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**Introduction :** Cutaneous metastases constitute a rare secondary localization of deep cancers. They represent 0.6 to 10% of metastases from solid tumors. While cutaneous metastases from deep cancers most often occur during their evolution, they are sometimes revealing of the primary tumor. This rather rare mode of discovery is associated with a poor prognosis.

**Materials and Methods :** We report a case of serous ovarian carcinoma revealed by a cutaneous metastatic mass on the abdominal wall.

**Result :** A 76-year-old female patient with no significant medical history underwent surgery in August 2023 for a painful peri-umbilical cutaneous mass with a budding appearance. Histopathological examination of the operative specimen, along with immunohistochemical studies, revealed a cutaneous localization of a tumor proliferation consistent with high-grade serous carcinoma of ovarian origin. Tumor markers were negative. As part of the search for the primary cancer, a TAP CT scan revealed suspicious bilateral inguinal lymphadenopathy, with the ovaries not visualized and the endometrium appearing thin. Subsequently, the patient underwent surgical exploration, during which the uterus and ovaries appeared macroscopically healthy. She underwent ovarian staging with pelvic, paraaortic, and bilateral inguinal lymph node dissections.

**Conclusion :** Cutaneous metastases most commonly appear during the course of a known neoplasm. In our case, they represent the first sign of malignancy. The initial diagnosis is first clinically suspected, then confirmed by histopathological examination of the operative specimen supplemented by immunohistochemistry. Treatment depends on the nature, histological type, and location of the primary tumor as well as its local, regional, and systemic extent.

### 116 : Parietal metastasis from endometrial cancer: An unusual localization

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**Introduction :** Endometrial cancer is the most common gynecological cancer. In over 75% of cases, it is diagnosed at an early stage (FIGO I-II), thus explaining its favorable prognosis with a 5-year survival rate of around 80%. Metastatic lesions are rare (less than 5%) and mainly localize to the lungs and liver. The abdominal wall is a rare site for metastases from endometrial cancer

**Materials and Methods :** We report the case of a patient diagnosed with endometrial adenocarcinoma with a metastatic mass on the abdominal wall, managed at Mohammed Taher Maamouri Hospital in Nabeul.

**Result :** This is a 56-year-old patient, previously diagnosed with grade I endometrioid adenocarcinoma of the endometrium, initially treated in the outpatient setting with a hysterectomy in 2015. She experienced ovarian recurrence in 2016, which was managed with annexectomy, pelvic and para-aortic lymph node dissection, along with radiotherapy and chemotherapy. Six years later, she developed a 3 cm mass on the anterior abdominal wall. Surgical resection of the parietal mass and histopathological examination revealed an adenocarcinomatous process with the same characteristics as the previously diagnosed endometrial origin, confirming a parietal metastatic recurrence. Subsequently, she underwent superficial radiotherapy at the site of the excised abdominal wall metastasis. After a 2-year follow-up, the patient remains alive with clinical and radiological remission.

**Conclusion :** Although endometrial cancer is one of the most common malignancies in women, parietal metastases from this cancer are very rare. The appearance of subcutaneous nodules is evidence of widespread dissemination, thereby demonstrating the poor prognosis for these patients.

#### 117 : Non-epithelial ovarian cancer : A rare tumor

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Obstetrics and Gynecology Department, Monastir Maternity and Neonatology Center, Monastir, Tunisia **Introduction :** Non-epithelial ovarian cancers, also known as germ cell tumors and sex cord-stromal tumors, represent less than 20% of all ovarian cancers. Unlike epithelial ovarian cancers, which are more common and typically affect older women, non-epithelial ovarian cancers tend to occur in younger women

**Materials and Methods :** we conducted a retrospective study of 16 cases of non-epithelial ovarian cancer treated and followed up in the gynaecology and obstetrics department of the maternity and neonatology center in Monastir.

**Result :** 16 patients were included in our study .9 cases of granulosa tumor: 5 cases of adult type and one case of juvenile type; 4 cases of immature teratoma; 1 case of small cell carcinoma and 2 cases of secondary tumor.The average age of our patients was 42.8 years, ranging from 15 to 75 years, and the peak frequency of non-epithelial ovarian cancer was between 25 and 50 years of age.The diagnosis of malignancy was based on clinical and biological data and ultrasound.The positive diagnosis was based on pathological data.13 cases were discovered in localised form.In our study, surgery was the gold standard in the treatment of non-epithelial ovarian cancer.we noted two cases of death and the prognosis was good.

**Conclusion :** Non-epithelial cancers of the ova are characterised by their occurrence in young people, by non-specific tumour markers, and by a histological presentation that is sometimes misleading, with the diagnosis of malignancy.

#### 118 : Mixed Müllerian tumors of the uterus

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#### Hopital of Ibn Jazzar, Kairouan, Tunisia

**Introduction :** Uterine carcinosarcoma or malignant mixed Müllerian tumor (MMMT) is a rare and aggressive tumor of the uterus. The prognosis is poor, as the five-year survival rate does not exceed 30%. Early diagnosis is crucial because the tumor stage is the major prognostic factor.

**Materials and Methods :** Patient A.M, 38 years old, G8P4, consulted for menometrorrhagia evolving for 3 months. The gynaecological examination showed a normal cervix and a uterine bleeding. The ultrasound revealed an enlarged uterus containing a hyperechogenic image of 3 cm. The patient underwent a hysteroscopy with an endometrial biopsy, which came back normal.

**Result :** Patient A.M, 38 years old, G8P4, consulted for menometrorrhagia evolving for 3 months. The gynaecological examination showed a normal cervix and a uterine bleeding. The ultrasound revealed an enlarged uterus containing a hyperechogenic image of 3 cm. The patient underwent a hysteroscopy with an endometrial biopsy, which came back normal. The patients' symptoms worsened. During the examination, we noted a polyp protruding through the cervix. A polypectomy was performed. The histological examination showed a mixed Müllerian tumor of the endocervix. The patient underwent a total hysterectomy with bilateral adnexectomy associated with an omentectomy and a pelvic lymphadenectomy, a peritoneal washing and peritoneal biopsies. The final histological examination showed a tumor with double epithelial and mesenchymal malignant components corresponding to a mixed Müllerian tumor. Subsequently, the patient underwent an external radiotherapy.

**Conclusion :** Uterine MMMTs are rare and aggressive tumors. Preoperative diagnosis is essential. If the staging is negative, the primary treatment is surgery. Adjuvant treatment is an external pelvic radiotherapy. Chemotherapy is also considered. The prognosis is poor because the tumor is often diagnosed at an advanced stage.

### **119 :** Role of revision surgery in case of pathological excision limits after conservative surgery for breast cancer

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#### Hopital of Ibn Jazzar, Kairouan, Tunisia

**Introduction :** Despite the documented equivalence in terms of overall survival between radical treatment and conservative treatment of breast cancer, the potential recourse to revision surgery for invaded or economical surgical margins remains one of the problems posed by conservative surgery with a high rate of revision surgery between 20 and 60%. Objective: To evaluate the role of revision surgery for pathological surgical margins after conservative surgery for breast cancer.

**Materials and Methods :** We conducted a retrospective and a descriptive study. It includes 45 patients who had conservative surgery with either invaded or thin surgical margins (less than 2 mm) on definitive histological examination. The study is established between January 2012 and December 2023.

**Result :** 45 patients presented either invaded or thin surgical margins on definitive histological examination. The rate of surgical revision of the margins was 25% with resection of the tumour bed in 4 cases. A quadrantectomy was performed in 1 case. The histological examination showed: the presence of residual disease in 11 cases. The resection limits after revision surgery were intact in 21 cases. However, they were tumour-involved.

**Conclusion :** The presence of pathological surgical margins after conservative breast cancer surgery exposes the risk of persistence of residual disease. Therefore, the risk of regional and distant relapses.

### 120 : Radio-histological correlation of ACR4 breast lesions: A study of 81 cases and literature review

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**Introduction :** The ACR Bi-Rads classification is the recommended radiological image classification system for breast cancer screening. ACR4 lesions correspond to indeterminate or suspicious abnormalities with a malignancy probability ranging from 2 to 95%, according to studies. **Objective:** The aim of our study is to evaluate the correlation between radiological and histopathological findings of breast lesions classified as ACR4.

**Materials and Methods :** We conducted a descriptive retrospective study in the Obstetrics and Gynecology ward in Kairouan from September 1, 2021 to September 1, 2022. We collected cases of core needle biopsies performed for breast lesions classified as ACR4.

**Result :** During our study period, we collected 81 cases of core needle biopsies performed for breast lesions classified as ACR4. The mean age of our patients was 53 years, with a range from 18 to 71 years. A family history of breast cancer was found in 12 women. We noted a predominance of benign lesions with a rate of 62%. However, 29% were malignant lesions. 9% of the lesions were intermediate. Fibroadenoma was the most common histological finding, accounting for 30% of cases. Invasive ductal carcinoma was the most frequent malignant lesion (17%).

**Conclusion :** Histological analysis of radiological findings allows for a good diagnostic approach and better management of ACR4-classified breast lesions.

### 121 : Anatomo-clinical study and therapeutic management of lobular granulomatous mastitis

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#### Hopital of Ibn Jazzar, Kairouan, Tunisia

**Introduction :** Lobular granulomatous mastitis is a rare entity. Its pathogenesis remains unknown. Its clinical and radiological aspects often pose differential diagnosis problems. Objectives: To understand the

epidemiological profile and to study the clinical, radiological, histological, therapeutic and evolutionary aspects.

**Materials and Methods :** We conducted a retrospective and descriptive study. The data were gathered from the Gynaecology & Obstetrics Ward of Kairouan over a period of 10 years, from January 1, 2014 until December 31, 2023.

Result : Our study included 45 patients with granulomatous mastitis. The average age of our patients is 37.8 years. Four patients were postmenopausal. Four patients were pregnant. Thirty-nine patients had a history of breastfeeding. Five were breastfeeding. Ten patients had a history of breast surgery. The time for signs to appear was on average 23.6 days. The lower-outer quadrant was the most frequent location (24.4%). A breast mass was the most common lesion, mean size  $5.4 \text{ cm} \pm 1.9$ . A breast discharge was noted in 12 patients. An axillary lymphadenopathy was observed in 22.2%. The most frequent ultrasound appearance was a hypoechognic lesion in 34 patients. Density asymmetry was the most frequent mammographic sign (46.6%). ACR stage 3 was the most common stage (51.1%). An abscess edge biopsy was performed in 51.1%. Histological examination showed a non-necrotizing epithelioid and gigantocellular granulomatous inflammation with a lobular distribution. 41 patients received antibiotic therapy. Corticosteroids were prescribed in 35.6%. The average duration of corticosteroid therapy was 3.9 months. Surgical treatment involved 38 patients. We noted a recurrence of the disease in 12 patients.

**Conclusion :** Lobular granulomatous mastitis is a benign lesion of the mammary gland. However, its clinical and radiological manifestations can mimic a malignant process. Therefore, histological examination is necessary for diagnosis. Its progression is generally towards chronicity with a significant risk of recurrence.

#### 122 : Granulosa cell tumors (GCT) of the ovary

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#### Hopital of Ibn Jazzar, Kairouan, Tunisia

**Introduction :** To understand the epidemiological profile and study the clinical and pathological aspects of granulosa cell tumors (GCT).

**Materials and Methods :** It is a retrospective study of 12 cases of GCT. It was performed at the obstetrics and gynecology department of Kairouan University Hospital over a 10-year period, from January 1, 2013, to December 31, 2023. The histological examination of the surgical specimens was performed at the Pathology and Cytology Department of Kairouan.

Result : GCTs account for 11.9% of ovarian malignant tumors according to the cancer registry. At the time of diagnosis, the mean age of our patients was 43 years, with a range from 20 to 65 years. 16% of our patients were menopausal. 32% of our population were nulliparous. Ovulation-inducing treatment was reported in 33% of cases. While four patients presented with menometrorrhagia, six patients reported abdominal pain. Secondary amenorrhea in four patients with an average duration of seven and a half months. Besides, one patient reported digestive disorders such as repeated vomiting. Physical examination showed an abdominopelvic mass in eight patients. One of these patients presented with acute abdominal symptoms. The examination was normal in four patients. An ultrasound was performed for all patients: the mean tumor size was 11.75 cm with a range from 4.5 cm to over 30 cm. Estradiol levels were measured in eight patients during follow-up and they were normal. CA125 levels were measured in all patients before and after surgery. They were abnormal in two cases. Three patients underwent a hysteroscopy. Endometrial biopsy was performed in five patients. Three of the biopsies were done with hysteroscopic guidance. Six frozen section examination were performed. They identified the tumor type in 83.3% of cases.

**Conclusion :** Due to the rarity of these tumors, there is no therapeutic consensus. Surgical treatment should be comprehensive, including a total

hysterectomy, a bilateral salpingo-oophorectomy, an omentectomy, and peritoneal biopsies. Adjuvant therapy is indicated in advanced forms and recurrences.

#### 123 : Cytogenic chorion sarcoma: a case report and literature review

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**Introduction :** Endometrial stromal sarcomas (ESS) are rare tumors, representing between 0.2 and 0.4% of malignant uterine tumors and between 7 and 15% of uterine sarcomas.

**Case Report:** Mrs A.H, 34 years old, G3P2A1, presented with metrorrhagia and pelvic pain evolving for 2 months. On examination, the cervix appeared normal. The uterus was enlarged with no mobility on the right side. The ultrasound showed a distorted uterus with two fibromas, one on the anterior surface and the other at the level of the right cornua. The decision was to perform a myomectomy. Intraoperatively, an intramural uterine mass of 6 cm was found. The right adnexa and parametrium were infiltrated by tumor tissue. The patient underwent a total hysterectomy. The histological examination showed a low-grade cytogenic chorion sarcoma. Staging investigations were negative (including a chest X-ray, a liver ultrasound and thoraco-abdominopelvic CT scan). An adjuvant radiotherapy was administered with a subsequent favorable evolution.

**Conclusion :** Endometrial stromal sarcomas (ESS) are rare. Therefore, early diagnosis is crucial as the patient's survival is correlated with the tumor stage. Although this diagnosis is guided by clinical and radiological data, it is most often confirmed by the histological examination of hysterectomy specimens.

#### 124 : Management og subclinical breast lesions

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**Introduction :** Mammography is the screening examination for subclinical breast cancer lesions. For ACR4 and ACR5 lesions, histological evidence is necessary. The most commonly used technique is a hookwire localization. Objectives: To specify the positive predictive value (PPV) of each suspicious radiological lesion.

Materials and Methods : We conducted a retrospective study of 108 hospitalized patients, over 4 years, at the Gynecology & Obstetrics Service in Kairouan. They had subclinical lesions with hookwire localization done. Result : The average patient's age was 49 years. Mammography and breast ultrasound were performed for exploration. 93 lesions were classified as BIRADS4. 15 lesions were classified as BIRADS5. BIRADS 4 microcalcifications accounted for 81.2% of the lesions followed by BIRADS5 (18.7%). While 24 lesions were opacities, 3 lesions were architectural distortions. All lesions were localized by hookwire, with 67.3% by ultrasound and 32.7% by mammography. In case of microcalcifications, a radiograph of the surgical specimen was performed to verify the removal of the entire lesion. Frozen section examination was performed for 15 patients in whom a solid lesion was discovered intraoperatively. On final histological examination: 81.9% of the lesions were benign, 4% were borderline lesions (proliferating fibrocystic change with atypia, sclerosing adenosis), 13.9% were malignant with 17 breast cancers including 2 ductal carcinoma in situ (11.7%). 2 microinvasive carcinomas, and 15 invasive ductal carcinomas (88.2%). In our study, the PPV of malignancy for microcalcifications was 18.18%: 50% for BIRADS5 lesions, and 7.69% for BIRADS4 lesions. The PPV of malignancy for all masses was 41.67%, 100% for BIRADS5, and 37.5%

for BIRADS4. The PPV of malignancy for all BIRADS5 lesions was 66.6% and 6.54% for BIRADS4. 4% of borderline lesions were BIRADS4. **Conclusion :** Our results demonstrate that the BI-RADS classification is overestimated, hence the need to adapt several recommendations. Hookwire localization requires collaboration between the gynecologist, the radiologist, and the pathologist to perform the appropriate surgical procedure.

#### 125 : Bridging Adjuvant treatment gaps: Low and Intermediate Risk Endometrial Carcinoma Patients Care in Salah Azaiez Institute in Tunisia

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**Introduction :** The management of Low and intermediate risk (LR, LIR and HIR) endometrial carcinoma at SAI in Tunisia has undergone transformative changes with evolving international recommendations and the advent of the molecular era. The impact of these changes results in a dual challenge of undertreatment, elevating recurrence risk, and overtreatment, burdening patients with increased toxicities. Since we lack access to the molecular tumor profiling in our institution, this study aims to clarify the connection between adherence to international recommendations and clinical outcomes.

**Materials and Methods :** A comprehensive retrospective transversal analytic study conducted in SAI Radiation Oncology Department in Tunisia, from 2015 to 2020, including 180 patients diagnosed with LR, LIR and HIR endometrial carcinoma, with a minimum follow-up of 3 years. Eleven histopathological slides underwent re-examination to precisely assess the number of invaded vessels.

**Result :** The median age within the cohort was 60 years old [35-69]. The duration of hormonal exposure, averaged 37 years. All included patients underwent surgery as a first-line treatment. The definitive histopathology results in our cohort showed a median tumor size of 35 mm [3-80], myometrial invasion < 50% was observed in 54,5% (n=97) of cases, cervical invasion was identified in 45% (n=45) of cases, extensive LVSI was found in 8.3% (n=15) of cases and focal LVSI was noted in 3.9% (n=7) of cases. As for adjuvant treatment, VBT alone was delivered in 50% (n=90) of patients, 44,4% (n=80) of patients received both VBT and pelvic EBRT, 5% (n=9) of patients did not receive any adjuvant treatment, while 0,6% (n=1) received pelvic EBRT alone. It was observed that 47.2% (n=85) of patients underwent treatment that aligned with the recommended guidelines, over-treatment was noted in 47,2% (n=54) of cases with a significant majority among the LR group, accounting for 63.5% (n=54) of overtreated patients. Suboptimal treatment was delivered for 5,6% (n=10) of patients within the HIR group. At a 3-year follow-up, our study showed that 71.1% (n=128) of the population, achieved disease control. In 4.4% of cases (n=8) there was locoregional relapse and in 1.7% of cases (n=3)metastatic disease was observed. Gastro-intestinal late toxicities were observed in 26.7% (n=48) of cases, genito-urinary late toxicities were observed in 28.3% (n=51) of cases and sexual-related late toxicities were observed in 12.8% (n=23) of cases. Regarding treatment conformity towards actual treatment guidelines, over-treatment was linked to 7.9 times higher risk of death (p-value<0.001, HR 7.9, 95% CI: 5-8.7), and it showed 6.6 times higher risk of recurrence (p-value=0.006, HR 6.6, 95% CI: 1.7-25.45). Under-treatment wasn't identified as a prognostic factor. Overall, over and conformally treated patients led to a higher number of GI, GU and sexually-related late toxicities, with p-values<0.05.

**Conclusion :** In Tunisia, the potential for personalized care in the molecular era is hampered by limited access to molecular profiling. Despite these challenges, we aspire to explore the integration of molecular classification in the future.

#### 126 : Management of borderline ovarian tumor

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**Introduction :** Borderline ovarian tumor represent 10 to 20 of malignant epithelial tumors of the ovary. They pose a unique challenge in terms of treatment, especially for young patients who wish to preserve their fertility. Given that these tumors typically occur in younger individuals.

**Materials and Methods :** We carried out a retrospective study about 15 cases in the service Obstetrics and Gynecology center at the maternity and neonatology center during 7 years in order to analyze our behavior in front of borderline ovarian tumor.

**Result :** The average age of patients was 38.6 years old. Abdominopelvic pain was noted in 53.3% of cases, while an increase in abdominal volume was noted in 33.3% of cases. All patients underwent abdominopelvic ultrasound. The average tumor size was relatively large at 120 mm. there is no specific serum marker for borderline ovarian tumors. The initial surgical approach varied, with a majority undergoing medial umbilical laparotomy (12 cases) and the remaining undergoing laparoscopic surgery (3 cases). In one case, a medial laparotomy conversion was performed due to the suspect appearance of the tumor.we performed conservative treatement in 11 cases and radical treatment.Radical tratement was performed in 4 cases.No lymph node dissection was performed..these tumors was classified stage I in all cases.No recurrence was found during our study

**Conclusion :** Managing borderline ovarian tumors in young women requires a comprehensive approach that balances oncological principles with the preservation of fertility and reproductive function. Close collaboration between gynecologic oncologists, pathologists, and reproducetive specialists is essential to optimize treatment outcomes and quality of life for these patients.

#### 127 : Serous carcinoma confined to endometrial polyp: A Case Report

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**Introduction :** Endometrial polyps (EP) are common, occurring in up to 10% of women. The vast majority are benign. Malignancies limited to EP are rare, occurring in less than 5% of cases in most studies. We report a rare case of polyp-confined serous carcinoma

**Materials and Methods :** A 68 year old woman, with no relevant medical history, presented with postmenopausal bleeding. Transvaginal ultrasonography and hysteroscopy revealed the presence of a 4 cm intracavitary polyp. A biopsy was obtained and the diagnosis of high grade serous carcinoma (HSC) was rendered. Comprehensive surgical staging including total hysterectomy with bilateral adnexectomy and pelvic lymph node dissection was performed.

**Result :** On gross examination, the uterine cavity was filled with a pedunculated polyp measuring 4.5 x 1.5 cm. Microscopic examination showed a 1 cm invasive carcinomatous focus at the tip of the polyp, arranged in glandular structures with occasional endoluminal papillary projections. The tumour cells showed high-grade atypia. On immunohistochemical study, they presented a mutation type, strong and diffuse staining of p53 and p16. The endometrium was atrophic. The iliac and lumbo-aortic lymph nodes were free of metastases. The tumour was classified as pT1aNO/FIGO stage IA.

**Conclusion :** Every EP should be carefully examined and thoroughly sampled for histologic evaluation. Older age, menopausal status, presence

of abnormal uterine bleeding, and hypertension were identified as significant factors associated with premalignancy or malignancy in EP.

#### 128 : Genetic predisposition to breast and ovary cancers linked to BRCA genes: A study of 32 Tunisian families

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**Introduction :** It is estimated that 15 to 40% of familial breast cancer cases and 90% of families with both breast cancer (BC) and ovarian cancer (OC) are associated with mutations in the BRCA1 and BRCA2 genes. The aim of our study is to characterize the mutational spectrum of BRCA genes in Tunisian families and to establish a genotype-phenotype correlation.

**Materials and Methods :** This is a retrospective study of 41 subjects from 32 unrelated families in whom the presence of pathogenic variants in the BRCA genes was confirmed. Collection of epidemiological, clinical, and pathological data and genetic investigation were performed. Patients were tested by direct sequencing of germinal DNA targeting the most frequently mutated exons in the Tunisian population, based on geographical origin.

**Result :** There were 28 women and three men : 23 cases with personal history of BC, seven of whom had bilateral forms, four with OC, and four with both BC and OC. Targeted presymptomatic testing confirmed the presence of familial variation in ten individuals. The mean age of onset for BC was 38 years and 46 years for OC. BC was predominantly invasive ductal carcinoma in 24/27 patients and triple-negative in nine cases. OC was high-grade serous adenocarcinoma in 7/8. In total, 16 different variants were identified (10 BRCA1 and 6 BRCA2). Six variants were recurrent with distinct geographical distribution. The most frequent ones: c.3751dup (BRCA1) and c.1310\_1313del (BRCA2) found in the Northwest; and the variant c.211dup (BRCA1) specific to Cap Bon.

**Conclusion :** The mutational spectrum of BRCA genes in Tunisia appears homogeneous with recurrent and founding mutations for certain regions. Targeting the hot spot exons of these genes based on geographical origin could be a more cost-effective approach for initially screening families at high risk.

#### 129 : Oncoplasty: indications and limits

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**Introduction :** The incidence of breast cancer continues to increase among young women, particularly in developed countries. Surgery can be radical or conservative. Surgically, different modalities of conservative treatment are well known and studied: lumpectomies and quadrantectomies. For around ten years, techniques from plastic surgery have been used to reduce aesthetic after-effects.

**Materials and Methods :** A retrospective study of oncological and aesthetic results including 10 patients, operated between June 2023 and December 2023, in the obstetrics and gynecology department of the Ben Arous regional hospital, by conservative treatment of breast cancer.

**Result :** The average age of the patients was 52.1 years with extremes ranging from 46 to 59 years. They have no history of neoplastic disease. 03 of our patients were nulliparous, with a notion of taking estrogen-progestogen contraception was found in 07 of our patients or 70%. 80% of

our patients were postmenopausal, and none were on hormone replacement therapy. In 100% of cases, the tumor was discovered by selfpalpation of a breast nodule. The left breast was affected in 75% of cases, 70% of tumors were located in the upper outer quadrant, 7.5% at the junction of the inner quadrants and 7.5% at the junction of the upper quadrants. The average breast size of the operated patients was 95 C cup for an average tumor size of 2 cm. In our series, there was a predominance of tumors classified as T2. Lymph node involvement is only found in 20% of cases. All patients were M0. Histologically all patients had infiltrating ductal carcinoma. The techniques used involved a peri-areolar technique in 50% of cases, a round block in 30% of cases, an omega incision in 20% of cases, and a J-shaped technique in 10% of cases. The resection volumes ipsilateral to the tumor were 100 g on average. Axillary dissection was carried out in 20% of cases by making a direct incision in the axillary cavity. The average length of hospitalization was 2 days. The margins were healthy in 100% of cases and there were no early or late complications.

**Conclusion :** The conservative treatment of breast cancer has undergone profound changes over the past ten years, with the development of oncoplastic surgery, the aesthetic and oncological results of which are very encouraging, making it possible to reduce postoperative physical and psychological after-effects. But these techniques must be subject to strict evaluation within multidisciplinary teams.

#### 130 : Vulvar cancer: Epidemiological profile and management

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**Introduction :** Vulvar cancer is relatively rare, but its prevalence increases with age. Symptoms of vulvar cancer may include itching, pain, bleeding, and ulcers. Early diagnosis is essential for effective treatment.

**Materials and Methods :** Our study was retrospective. It covered all cases of vulvar cancer. diagnosed over a period of 5 years (January 2019 - December 2023) in our department

**Result :** A total of 19 cases of vulvar cancer were included in the study. The average age at the time of diagnosis was 65 years old and 78.9% of patients were over 60 years old. The most common warning sign was vaginal pruritus in 42,1% cases. The average tumor size was 3 cm. Stage II was the most common (52,6%). There was a predominance of invasive squamous cell carcinoma (84,2%). The patients benefited from a surgery type total vulvectomy in 89,4% of cases and partial vulvectomy in 10,6% of patients. 94,7% of our patients benefited from an inguinal lymph node dissection bilateral. 36,8% of our patients benefited from adjuvant radiotherapy. Postoperative complications were dominated by wall infection (31%), lymphocele, lymphedema. Complete remission was observed in 73% of our patients. Early recurrences occurred in two patients. The overall survival at 5 years in our series was 38,8%.

**Conclusion :** Vulvar cancer is rare in Tunisia, it mainly affects older women. It is often diagnosed at an advanced stage. Only early treatment of precancerous and cancerous lesions could improve the prognosis.

### 131 : Granulosa cell tumors of the ovary : clinical features, treatement, outcome, and prognostic factors

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**Introduction :** Granulosa cell tumors compromise from 2 to 6 % of all malignant ovarien tumors. The relativety low incidence is one likely reason for the differing opinion on histopathology, treatement and

prognosis. The objective of this study xas to determine the clinical presentation, treatement, outcome, and prognostic factors for patients of granulosa cell tumors. Key words : granulosa cell tumors, prognosis, survival, treatement.

**Materials and Methods :** The present retrospective clinical and histopatholigical study of all granulosa cell tumors was carroed out, from 2009 to 2016 includes 10 patients with a follow up from 1 to 8 years. The clinical and histopathological findings are correlated to therapy and prognosis.

**Result :** The mean age at diagnosi was 43 years, 2 women were post menopausal at the time of diagnosis. The most commun presenting symptoms were abnormal uterine bleeding and abdominal distension or pain. The media nage of the patients was 52 years (range 17 - 66 uears). Abdominal pain was the most common presenting symptom. The median follow-up was 51.4 months (range 11.6 - 96.9 months). Yhe estimates 5 years overall survival (OS) was 84.6. event – free survival (EFS) was 76.5 at 5 years. Advanced stage was significant independent poor prognostic indicator for both OS and EFS.

**Conclusion :** Majority of the patients with granulosa cell tumors of the ovary present in early stage. Surgery is the promary treatement modality. Advanced stage and presence of residual disease were associated with inferior survival, but only prospective studies can ascertain their definite role.

#### 132 : Infertility and uterin sarcoma

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**Introduction :** Infertility can be caused by a variety of factors, some more common than others. However, there are also rare etiologies that may contribute to infertility such as cancers.

Materials and Methods : It is a case report of a patient who presented in our department.

**Result**: We report the case of a 36-year-old patient who presented with primary infertility for 13 years. As part of the etiological assessment, ultrasound was performed showing the presence of multiple intramural fibroids. Hysteroscopy showed the presence of a 2cm intracavitary polypoid formation. A polypectomy was performed, and the product was sent for pathological examination, which showed the presence of high-grade uterine stromal sarcoma. A pelvic MRI was ordered showing that the fibromatous uterine formations were atypical and suspicious for malignancy. The patient was operated on by laparotomy, a total hysterectomy with bilateral adnexectomy was performed. The pathological examination confirmed the diagnosis.

**Conclusion :** Uterine stromal sarcoma often presents with perimenopausal menometrorrhagia. although the most common presentation, it may not always be observed. Therefore, a suspicion of this sarcoma must always be raised as a differential diagnosis in the face of any uterine polyp or fibroid.

#### 133 : Psychological suffering of breast cancer caregivers

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**Introduction :** The psychological and emotional suffering encountered by health professionals taking care of patients with breast cancer is an aspect

that is often underestimated or ignored, and which deserves special attention.

**Materials and Methods :** This is a cross-sectional study carried out at the Gynecology department of Monastir over the period from January 1, 2023 to December 31, 2024. This study aims to evaluate the suffering of staff involved in the management of breast cancers conducting a pre-established questionnaire

**Result :** Twenty healthcare workers were interviewed, including 10 nurses and 10 doctors. The age of the participants varied from 27 to 50 years old with a median of 35 years old. Among the population, 13 were women and 7 were men. The number of years of experience varied from one year to 20 years. The existence of psychological suffering was expressed by 15 caregivers, or 75%. The factors of psychological suffering identified were: family pressure, workload, management of pain and suffering of patients and the number of deaths.

**Conclusion :** It is imperative that healthcare establishments recognize the reality of staff suffering and put appropriate support measures, such as stress management programs and psychological support sessions for the well-being of caregivers.

#### 134 : Protuberant vulvar dermatofibrosarcoma: Case report

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**Introduction :** Protuberant dermatofibrosarcoma is a rare low-grade soft tissue sarcoma occurring in the dermis. Typically, it occurs on the trunk, head, and neck, and on the proximal extremities. it is characterized by local growth and has a tendency for local recurrence after apparently adequate surgical excision.

Materials and Methods : it is a case report of a patient who presented in our department

**Result :** A 38-year-old patient, mother of two children, premenopausal. She consulted for a swelling in the vulvar region that had been developing for 4 months. It is a painful and inflammatory vulvar mass rapidly progressively increasing in size. The clinical examination revealed a vulvar mass at the expense of the clitoris, painful, inflammatory, and soft measuring 60\*30 mm, adherent to the skin and mobile to the deep plane. Ultrasound of soft parts: hyper vascularized mass of the vulva measuring 33\*48\*38 Pelvic MRI: vulvar mass depending on the clitoris: T1 isosignal, heterogeneous signal in T2, diffusion hypersignal with heterogeneous enhancement after injection. The patient was operated, with a resection of the tumor removing the entire clitoris. The anatomopathological study revealed a Darrier Ferrand's dermatofibrosarcoma of the vulva. The suites were simple without complications. Aesthetically, we obtained good healing. Functionally, the patient did not have any sphincter problems.

**Conclusion :** the vulvar protuberant dermatofibrosarcoma is extremely rare and mainly affects women in the fourth or fifth decade of life. Distant metastases are rare but can occur.

#### 135 : Sexuality after cervical cancer

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**Introduction :** The sexuality of woman with cervical cancer may be altered for her and for her partner because of the impacts of the disease and its treatments. Sexual problems in cases of cervical cancer often remain taboo for the couple and even among the health workers who are preoccupied with the fight for survival while neglecting a need primordial of life: sexuality.

**Materials and Methods :** This is a cross-sectional study carried out between January and December 2023 studying a population of women with cervical cancer. The data collection was made through a questionnaire of multiple choices questions.

**Result :** 29 patients have been included. 62% have noted a decrease in the frequency of sexual relations after announcement of cancer, and a decrease in libido in 48% cases. 58% of patients noted an alteration of desire and 72% noted a vaginal drought following the treatment received. 27,5% of patients are scared from of femininity and 68,9% have anxiety about body image changing. 55% of patients have anxiety to lose their partner. Concerning the relationship with their doctors, 58,6% of patients noted a lack of communication.

**Conclusion :** The repercussions of treatments for locally advanced cervical cancer are both psychological and relational. It would be appropriate to offer adapted cares to these patients and their partners.

### 136 : The contribution of midwives in early detection of breast and cervical cancer in Cap bon, Tunisia

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**Introduction :** In 2018, cancer was responsible for 9,555,027 deaths globally, almost half (44%) of which were women. It is the second leading cause of death after cardiovascular diseases, according to the World Health Organization (WHO). Breast and gynecological cancers constitute a real public health problem; according to GLOBOCAN 2018 estimates, they represent 39% of incident cases of female cancers and 30% of cancer deaths in women. They were also diagnosed late in developing countries. Late disease presentation was attributed to poor awareness, absence of organized early detection programs, and inadequate facilities for accurate and timely diagnosis and treatment. Our objective was to investigate the role that midwives can play in early detection of breast and cervical cancer in Cap bon Tunisia.

**Materials and Methods :** The midwives working in the primary healthcare center all over the region of Cap Bon Tunisia should perform a clinical breast exam (CBE) for each consulting women and a cervical cytology (CC) for any woman who is sexually active regardless of her age and all socioeconomic classes. Patients with abnormal breast findings or pathologic cytology results were referred to second or third healthcare center for more investigations.

**Result :** Between January 2020 and December 2022, a total of 6000 women age range (14-99) years were provided CBE with a mean and median age of 40.4 and 39, respectively and 4500 women age range (18-65) were provided CC . Among these, 290 (4.8%) had abnormal findings. Among those with abnormal findings, 160 (55.2%) had breast masses and 52 (17.9%) had pathologic cervical cytology. These women with breast masses were referred for breast ultrasound and/or mammography. Among these 85 (53.7%) had as an ACR 4b/c and ACR 5 as a result and they were referred to specific healthcare center for breast biopsy. These women with abnormal cervical cytology were referred also to healthcare center specialized in cervical diseases. The ultimate diagnosis was not available in the register of these primary healthcare centers.

**Conclusion :** Midwives can play a key role in early detection of breast and cervical cancer if they are trained, and this can greatly reduce the number of women seen with late stage disease and reduce mortality rates.

#### 137 : Benign Peritoneal Metastasis: Myth or Reality? Exploring a Rare Case of Fatal Disseminated Leiomyomatosis Mimicking Peritoneal Carcinomatosis

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**Introduction :** Disseminated benign leiomyomatosis (DBL) is a rare condition characterized by the spread of leiomyomatous lesions beyond the uterus, mimicking malignant processes such as peritoneal carcinomatosis. This report discusses a challenging case where DBL was suspected during an exploratory laparotomy performed for a hysterectomy, aimed at removing a mass exerting a compressive effect on the ureters.

**Materials and Methods :** Objective: To highlight the diagnostic challenges and clinical course of a case initially suspected to be DBL, presenting with symptoms and surgical findings suggestive of peritoneal carcinomatosis, and to discuss the differential diagnosis and management strategies in such complex scenarios.

**Result :** Case Summary: A 53-year-old female presenting with pelvic pain and urinary symptoms was diagnosed with a polymyomatous uterus via pelvic ultrasound, leading to an MRI for detailed mapping. The discovery of a significant uterine mass and obstructive uropathy necessitated nephrostomy and prompted a laparotomy with potential hysterectomy. Intraoperative findings of widespread nodules and the mass's impact on the ureters raised suspicions of peritoneal carcinomatosis, complicating complete surgical removal. Postoperative imaging suggested disseminated peritoneal carcinomatosis and potential pulmonary metastasis. Results: Histopathology confirmed all biopsies as benign leiomyomatous growths. Given the invasive and widespread nature of the lesions, the patient was referred to a specialized center for cytoreductive surgery to enhance prognosis. However, after surgery, she was lost to follow-up and later returned in a critical state, which ultimately resulted in her passing.

**Conclusion :** This case underscores the complexity of diagnosing and managing disseminated leiomyomatous conditions, especially when presenting with features suggestive of malignancy. It highlights the critical need for a multidisciplinary approach and thorough histopathological examination in cases with unusual presentations or when the clinical course does not align with the expected benign nature of DBL. The case also prompts a discussion on the potential for aggressive variants of leiomyomatous diseases and the importance of considering a wide range of differential diagnoses, including peritoneal carcinomatosis, in similar cases.

#### 138 : Vaginal Metastasis of an Invasive Mole: A Case Report

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**Introduction :** Gestational trophoblastic tumors encompass the malignant forms of gestational trophoblastic diseases, among which the invasive mole is the most common. Typically confined to the uterus, the invasive mole can exceptionally metastasize, as in this case where a vaginal metastasis is observed.

**Materials and Methods :** We report a case of an invasive mole diagnosed following the appearance of a rare metastatic site, which is vaginal metastasis, collected in February 2023.

**Result :** A 38-year-old patient, para 4, gravida 2, was referred by her general practitioner for moderate vaginal bleeding. The patient underwent suction curettage one month ago for a complete molar pregnancy confirmed histologically with good radiological evolution showing an empty uterus, and biological evolution with a decline in HCG from 225,000 IU/mL initially to 3,325 IU/mL one month after suction, on the eve of her admission. Upon admission, the patient was found to be in good general condition, tachycardic, with cutaneous and mucosal pallor. Examination with a speculum, cautiously introduced, revealed bleeding originating from a single ulcerated mass measuring 1 cm on the anterior vaginal wall, of dark red color. Examination of the uterine cervix was unremarkable, with no bleeding of uterine origin. Ultrasound showed an

involuted uterus, with the presence of a heterogeneous intrauterine image measuring 12 \* 14mm, suggesting trophoblastic retention or intrauterine hematoma. After preparing the patient, we proceeded under general anesthesia to excise the vaginal nodule while maintaining a macroscopic healthy margin of 5mm, with repair of the vaginal wound using separate stitches. The postoperative course was uneventful. Histological examination confirmed the diagnosis of vaginal metastasis of an invasive mole. A cerebral and thoracoabdominal pelvic CT scan did not reveal any other metastases. The decision of the multidisciplinary team was to complete surveillance with weekly HCG measurement. The patient was placed on microprogestative contraception. The HCG level became negative after 3 weeks of vaginal nodule resection. This negativation persisted after 12 months of follow-up.

**Conclusion :** This case underscores the importance of adequate management and rigorous surveillance of patients with an invasive mole. Although complete hydatidiform moles are generally benign, malignant transformations can compromise obstetrical and even vital prognosis, especially in women of childbearing age.

#### 139 : Juvenile Granulosa Cell Tumor Associated with Pregnancy

#### Sansa H, Abdelkefi S, Abbes M, Trigui K, Derbel M, Chaaben K

#### CHU Hedi Chaker, Sfax, Tunisia

**Introduction :** Juvenile granulosa cell tumors (JGCTs) are malignant tumors belonging to the group of sex cord-stromal tumors. They are rare and account for less than 5% of ovarian tumors in children and adolescents, with the highest frequency occurring between 0 and 10 years of age. The incidence of these ovarian tumors diagnosed during pregnancy ranges from 0.0179 to 0.11 per 1000 pregnancies. They pose a challenge in therapeutic decision-making due to the absence of a well-established consensus given their rarity, the fertility prognosis at stake, and the associated fetal prognosis if occurring during pregnancy.

**Materials and Methods :** We report a case of Juvenile Granulosa Cell Tumor Associated with Pregnancy , collected in December 2023

Result : A 25-year-old woman with no significant medical history, primiparous, was admitted at 32 weeks of gestation for exploration of a pelvic mass discovered following left iliac fossa pain. Examination revealed only painful abdominal distension. Ultrasound showed a large heterogeneous solid-cystic tissue mass. MRI revealed a large intraabdominal mass occupying the left hypochondrium and flank, abundant ascites, and bilateral pleural effusion. Elevated levels of aFP and CA125 were observed in laboratory tests. After 4 days, the patient underwent emergency cesarean section due to preterm labor refractory to tocolysis. During exploration: abundant hematic ascites, a gravid uterus, and a large pelvic mass arising from the left ovary measuring 20 cm, ruptured anteriorly, with its upper surface adherent to digestive structures were found. Peritoneal cytology and cesarean section were performed with extraction of a live newborn. Left annexectomy with excision of ovarian tissue adherent to the mesocolon, as well as bilateral parietocolic biopsy, were performed. Histopathological examination supplemented by immunostaining confirmed a juvenile granulosa cell tumor. Postoperative recovery was uneventful. A thoraco-abdominopelvic CT scan performed 1 month after surgery, showed peritoneal carcinomatosis with tumor infiltration of the left parietocolic gutter. A multidisciplinary team decision was made to proceed with chemotherapy followed by radical surgery after patient consent.

**Conclusion :** Juvenile granulosa cell tumors are generally considered lowgrade tumors. However, some affected patients experience rapid tumor recurrence with metastatic progression. Clinical stage and histopathological characteristics are key to the management and prognosis of JGCTs.

### 140 : A rare cause of pulmonary metastasis: benign metastasizing leiomyoma

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**Introduction :** Benign metastasizing leiomyoma is a rare condition characterized by histologically benign "metastatic" smooth muscle tumors, which can affect women with history of uterine surgery

Materials and Methods : We report the case of a patient with lung metastases.

Result : Mrs. A.T aged 48; history of a myomectomy in 2000 The physical examination revealed a bloated abdomen, a palpable left hypochondriac mass, and an enlarged uterus. The abdomen ultrasound revealed multiple large and heterogeneous uterine nodules, the largest measuring 7 cm. The left hypochondriac contained a 10 cm mass of uncertain origin. The abdominal CT scan indicated multiple uterine fibroids, a left hypochondriac tumor, and retroperitoneal lymphadenopathies in the left external iliac and lateral aortic chains The intraoperative findings included: subsural and intramural masses with macroscopic uterine fibroids; a polylobed solid mass friable and adhering only to the visceral peritoneum in the left hypochondriac; and lymphadenopathy in the left external iliac and lateral aortic chain, indicating metastases. As a result, we underwent inter adnexal hysterectomy, total left hypochondriac mass removal, and lymph node dissection. Anatomopathological examination concluded to a Benign metastasizing leiomyoma a chest CT scan showed multiple bilateral intraparenchymal solitary pulmonary nodules with a metastatic appearance A check showed a stable appearance in the number of nodules and parenchymal masses with an increase in volume of the air component within the nodules previously excavated and excavation of two new nodules: to be monitored given the risk of pneumothorax Biology showed a menopausal patient FSH at 37 so the decision was treatment with anti aromatase

**Conclusion :** The lungs are the most prevalent site for incidental metastasis detection. BML has a relatively slow progression and good prognosis, and historically, there has been a lack of established guidelines for its treatment

#### 141 : Acute leukemia and pregnancy

Sansa H, Abdelkefi S, Abbes M, Trigui K, Derbel M, Chaaben K

#### CHU Hedi Chaker, Sfax , Tunisia

**Introduction :** The association between acute leukemia (AL) and pregnancy is rare, with an estimated incidence of 1 in 100,000 pregnancies. In two-thirds of cases, acute myeloblastic leukemias are involved. This association poses both ethical and therapeutic challenges as chemotherapy during pregnancy exposes the fetus to complications. The aim of this study is to describe the particularities of the management of acute leukemia in pregnant women.

**Materials and Methods :** We Reported to cases of acute leukemia descovered while pregnancy, the first in january 2021, the second in june 2022.

**Result**: Case 1: A 29-year-old woman with no significant medical history, primiparous, was admitted at term (38 weeks of gestation) for the scheduling of her delivery. Initial evaluation revealed leukocytosis at 22,000 cells/mm3, anemia at 9 g/dl, and thrombocytopenia at 117,000 cells/mm3. Close clinical and laboratory monitoring showed no underlying preeclampsia with hypertension. Due to worsening anemia (7.8 g/dl) and thrombocytopenia (66,000 cells/mm3), and the presence of a contraindicated scarred uterus for vaginal delivery, an emergency cesarean section for suspected HELLP syndrome was performed. Postpartum, persistent thrombocytopenia and anemia, along with a still normal blood pressure profile, led to suspicion of hematological disorder, subsequently confirmed by bone marrow aspiration with a myelogram favoring acute myeloblastic leukemia type M2. The patient received chemotherapy

following the M2 protocol with cessation of breastfeeding and achieved complete remission after 22 months of follow-up. Case 2: A 24-year-old woman with no significant personal or family medical history, at 18 weeks of gestation, presented with recent onset bruising associated with epistaxis for 5 days. Blood count revealed thrombocytopenia at 18,000 cells/mm3, anemia at 6 g/dl, and leukocytosis at 150,000 cells/mm3. Diagnosis of AL was confirmed by bone marrow aspiration and myelogram, revealing acute myeloblastic leukemia type M3. Therapeutic interruption of pregnancy was indicated, which proceeded without complications. The patient underwent chemotherapy following the M3 protocol and maintained complete remission after 18 months of follow-up.

**Conclusion :** The combination of AL and pregnancy requires a multidisciplinary approach considering the imperatives of the disease and its treatment, the woman, and her desire for pregnancy, as well as ethical and moral dimensions.

### 142 : Clear cell carcinoma of the Endometrium without Tumor Residue: Postoperative Management?

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**Introduction :** Adenocarcinoma with clear cell features of the endometrium is a high-risk tumor associated with a poor prognosis. These tumors tend to present at advanced stages at the time of diagnosis. There is limited data regarding the management of high-risk endometrial cancers without invasive disease on the final pathological specimen.

**Materials and Methods :** We reported a case of Clear cell carcinoma of the Endometrium without Tumor Residue , collected in jenuary 2021

Result : We report the case of a 70-year-old postmenopausal patient with a BMI of 33.9 kg/m2, who underwent surgery for acute intestinal obstruction and appendicitis and was incidentally found to have a polyp protruding through the cervix. Pelvic ultrasound revealed a thickened endometrium measuring 12 mm with heterogeneous appearance. Hysteroscopy revealed a vascularized suspicious intracavitary process measuring 2 cm and irregularly hypertrophied endometrium. Endometrial biopsy and biopsy of the intracavitary mass confirmed adenocarcinoma with clear cell features. Abdominopelvic MRI showed irregular tumoral thickening of the endometrium involving the junctional zone and myometrium, with no suspicious iliac or pelvic lymph nodes or signs of cervical extension. The tumor was classified as Stage IA FIGO. Our patient underwent total hysterectomy with bilateral salpingooophorectomy, pelvic and para-aortic lymphadenectomy, and infracolic omentectomy. Final histological examination showed adenocarcinoma with clear cell features without tumor residue or lymph node involvement. Radiotherapy was completed based on multidisciplinary team recommendations. The patient remains in complete remission after 36 months.

**Conclusion :** Current recommendations for high-risk Stage IA carcinomas include observation or chemotherapy, with or without vaginal brachytherapy or external beam radiotherapy, with or without brachytherapy, demonstrating the wide range of adjuvant therapies. A clinical dilemma arises when aggressive.

#### 143 : A suspected adnexal torsion revealing a rare tumor

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**Introduction :** Ovarian granulosa cell tumors are rare neoplasms. They arise from sex cord stromal cells of the ovaries. They are characterized by their slow natural history, and their tendency to relapse long time after the initial diagnosis. Complete staging surgery of the disease is the cornerstone

of treatment. Chemotherapy is indicated for localized tumors with a high risk of recurrence, and for recurrent or advanced tumors.

**Materials and Methods :** we present the pre-operative diagnostic difficulty through the case of a tumor discovered during anatomopathological examination, the patient was operated on when there was suspicion of adnexal torsion

**Result :** Mrs. Y.I, 62 years old, with no notable pathological history, postmenopausal, consults in an emergency context for acute pelvic pain with sudden stabbing onset without other associated signs. The patient was afebrile with good general condition and tenderness in the left iliac fossa. Ultrasound showed a large pelvic mass of 9 cm partitioned mixed tissue and cyst with fluid compartments vascularized on Doppler slightly ascending in relation to the uterus this mass appears to depend on the left ovary with an effusion of low abundance. Faced with acute pain the decision was an emergency laparoscopy that showed a twisted doublecomponent ovarian mass with contralateral ovarian exploration without abnormalities, absence of peritoneal carcinomatosis, liver and digestive tract without abnormalities. The patient underwent an adnexectomy without rupture of the mass. The pathological examination showed a granulosa cell tumor adult type So the course of action was a total hysterectomy with contralateral adnexectomy with Prolonged follow-up. **Conclusion :** The granulosa tumor is a particular anatomoclinical entity due to its histological, progressive and prognostic aspects. Its preoperative diagnosis is rarely established apart from forms expressing a frank hormonal syndrome for which a dosage of estradiol, androgens or inhibin helps guide management. Post-operative discovery is the rule and can pose the problem of surgical revisions in our context. Long-term monitoring is necessary due to their potential for late recurrence.

#### 144 : Endometrioid carcinoma of the Ovary

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**Introduction :** Endometrioid carcinoma of the ovary (CEO) is a malignant primary epithelial tumor developed from the ovary. It represents 15 to 25% of ovarian carcinomas. The aim of this study is to highlight the main anatomoclinical and paraclinical characteristics of these cancers and to evaluate the therapeutic outcomes of management.

**Materials and Methods :** In this retrospective study, we report 12 cases of endometrioid carcinomas of the ovary diagnosed over a period of 9 years from January 2012 to July 2021.

Result : The average age of our patients was 57.5 years, ranging from 29 to 74 years. The average parity was 4.33 with a maximum of 11. Five of our patients were nulliparous. The diagnostic delay varied from 3 days to 3 months in our series, with an average of 1.58 months. Clinical symptoms were dominated by abdominal-pelvic pain (9 cases), increased abdominal volume (9 cases), and general deterioration (10 cases). Vaginal bleeding was observed in four patients. Two cases presented with an occlusive syndrome. A palpable mass was found in ten patients. Ultrasound revealed an abdominopelvic mass in 10 cases, with the origin of the mass identified as ovarian in six cases. Abdominopelvic CT scan was performed in three patients, showing an abdominopelvic mass in all three cases, associated with ascites in two cases. Plasma CA125 levels were initially measured in seven patients, and all cases showed elevated levels. Four patients had bilateral ovarian tumors. Associated endometriosis was observed in only one case. Peritoneal carcinomatosis was observed in six cases and hepatic metastases in one case. Endometrial adenocarcinoma was found in four cases. According to the FIGO classification, eight tumors were diagnosed at an advanced stage (stage III and IV). Surgery was radical in eight cases (67%) and conservative in four cases. A second-look laparotomy was performed in six patients after initial surgery deemed incomplete, followed by 3 to 9 courses of chemotherapy. First-line chemotherapy was prescribed for eight patients. Six patients received salvage chemotherapy. Radiotherapy was used in only one patient. Early postoperative outcomes

were favorable for eight patients, with only one unfavorable outcome. During the follow-up, 6 relapses were described out of 9 remissions. The treatment of relapses was palliative in all cases. The overall survival is 29.41 months.

**Conclusion :** Endometrioid carcinomas of the ovary are often considered to have a good prognosis due to relatively early diagnosis, the frequency of low histological grades of malignancy, less frequent peritoneal extension, and the rarity of chemotherapy resistance.

### 145 : Dermatofibrosarcoma of Darrier Ferrand: a rare location of a very rare tumor

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**Introduction :** Dermatofibrosarcoma of Darier and Ferrand is a rare but not exceptional malignant cutaneous mesenchymal tumor, representing 0.1% of malignant skin tumors and less than 5% of soft tissue sarcomas in adults. It was described by Jean Darier and Marcel Ferrand in 1924. It is a so-called "intermediate malignancy potential" tumor, with a good prognosis after complete resection, slow growth, very high risk of local recurrence, but low metastatic potential.

**Materials and Methods :** we present through this case report the diagnostic difficulty of a Darrier Ferrand tumor especially when it occurs in the breast confusing it with a breast tumor

**Result :** Mrs. H.Z, 53 years old, with no notable pathological history, consulted us for a breast mass with, on examination, a budding nodular mass covering the right upper quadrants over 7 cm. An echo mammogram showed a hypo-echoic tissue mass containing hyper-vascularized micro calcifications, part of which had extra-mammary development and a 6 cm intra-mammary tumor-like part with multiple poorly defined nodules and some suspicious-looking axillary lymphadenopathy; classified ACR 5. So a micro biopsy was performed which showed signs in favor of a phyllodes tumor. The decision was an upper bi quadrantectomy of the right breast with simple follow-up The definitive histopathological study concluded of an adermatofibrosarcoma of Darier and Ferrand of 12 cm with healthy borders and without infiltration of the breast tissue. So the action to be taken was surveillance.

**Conclusion :** Intermediate between the harmless fibroma and the formidable sarcoma, the dermatofibrosarcoma of Darier and Ferrand is a rare fibrous tumor of the skin which is distinguished by its diagnostic difficulty, especially when it occurs in the breast. Its diagnostic and therapeutic problems require a sure histological diagnosis confirmed by an immunohistochemical study.

#### 146 : Stromal sarcoma of the breast

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**Introduction :** Stromal sarcoma is an extremely rare malignant fibroepithelial tumor of the breast, often confused with phyllodes tumors. The rarity and histological diversity of this tumor make it difficult to determine a specific epidemiological profile. It poses a major diagnostic and therapeutic challenge. The aim of this study is to Identify the epidemiological and anatomopathological characteristics of stromal sarcomas and to highlight the diagnostic, therapeutic, and evolutionary modalities of stromal sarcomas.

**Materials and Methods :** This is a retrospective study of 4 cases collected at the Department of Obstetrics and Gynecology of Hedi Chaker University Hospital in Sfax over a period of 12 years between January 2010 and December 2022 **Result :** The average age of our patients was 67 years; three patients were postmenopausal, and one patient was in the reproductive age. Three patients were multiparous with no history of breastfeeding cessation noted. A breast nodule was the presenting complaint after an average delay of 3 months. The average tumor size was 12 cm with local inflammatory signs but no nipple discharge or axillary lymphadenopathy in 50% of cases. Breast ultrasound and mammography were classified as BIRADS 5 in all patients. One patient underwent simple mastectomy, and three patients underwent mastectomy with axillary lymph node dissection. Histological examination revealed 4 low-grade stromal sarcomas. Adjuvant radiotherapy was indicated for all patients, and chemotherapy was administered to only one patient. No locoregional recurrence was detected, but one patient developed lung metastasis. The follow-up was marked by the death of 2 patients within 12 months after the initial consultation.

**Conclusion :** Stromal sarcomas are rare tumors. Prospective therapeutic trials should be encouraged to determine prognostic factors and standardize the optimal management of these tumors.

#### 147 : Small cell carcinoma of the cervix: report of a case

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**Introduction :** Gynecological small cell neuroendocrine carcinomas represent only 2% of cervical tumors. Given their rarity and the absence of randomized trials, the diagnostic and therapeutic management of these tumors is difficult and is essentially modeled on that of pulmonary neuroendocrine tumors. Despite multimodal treatment, their prognosis remains unfavorable.

**Materials and Methods :** We report a new case of small cell cervical neuroendocrine carcinoma diagnosed and treated in our medical oncology department at Monastir hospital.

**Result :** this is Ms. AB, aged 37, G1P1, without notable history, who presented for metrorrhagia. On examination, the cervix was suspicious in appearance, bleeding on contact. The biopsy showed the presence of small cell carcinoma of the cervix. On immunohistochemistry, the tumor expresses synaptophysin, chromogranin A, CD56, P16 and ACE. The imaging performed concluded at FIGO stage IIA2. The treatment was modeled on that of neuroendocrine tumors, she initially had chemotherapy based on VP16 and platinum salt. Then she will have cancer surgery.

**Conclusion :** Small cell carcinoma of the cervix tends to be aggressive and is associated with a less encouraging prognosis, even if diagnosed at an early stage. Hence multicenter clinical trials are necessary to try to determine an effective treatment to improve patient survival.

#### 148 : Objective Response in a Case of Recurrent Ovarian Granulosa Tumor Treated with Pembrolizumab Immunotherapy

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**Introduction :** Treating recurrent, unresectable granulosa cell tumors (GCT) of the ovary presents significant challenges. Due to the tumor's rarity, evaluating alternative therapies through large prospective clinical trials has been difficult. Currently, there are no reports on the use of immune checkpoint inhibitors in patients with GCT.

**Materials and Methods :** Case Presentation: We present the case of a 57year-old woman who underwent multiple lines of chemotherapy and surgeries for recurrent GCT

Result : Initially diagnosed in April 2008, she underwent right ovariectomy for an adult granulosa cell tumor measuring 19 cm. The tumor was completely resected without adjuvant medical therapy. The first relapse occurred in October 2018, leading to first-line salvage chemotherapy with carboplatin-paclitaxel for nine weekly cycles. Subsequently, she underwent a second surgery, including left ovariectomy and omentectomy, due to a lesion invading Douglas, peritoneum, and pelvis, with positive peritoneal cytology and residual macroscopic disease. After surgery, she received nine weekly injections of carboplatinpaclitaxel, but disease persistence was observed on imaging. A third surgery in October 2019 revealed peritoneal deposits on the epiploic corn and sigmoid wall, with negative peritoneal cytology and no macroscopic residual disease. She then received adjuvant letrozole for two years until February 2023 when multifocal peritoneal carcinomatosis progression was observed. Molecular testing showed a high MSI status on tumor biopsies. She received the first cycle of single-agent pembrolizumab at a dose of 200 mg IV every 3 weeks in September 2023. Abdomino-pelvic CT scan after two injections showed an objective response with a decrease in the size of peritoneal nodules from 20x10mm to 11x5mm and stability of other nodules.

**Conclusion :** While some studies do not support the routine use of pembrolizumab monotherapy in GCT patients, individuals with adult-type GCT may experience clinical benefits with low risk of toxicity. Future studies should explore the role of immunotherapy and predictors of clinical benefit in this patient population.

# 149 : Ovarian granulosa cell tumor: A clinicopathological study in the Tunisian center

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**Introduction :** Granulosa cell tumors (GCT) are rare malign ovarian tumors accounting for less than 2% of all ovarian cancers. However, they stand up as the most common type of sex cord stromal tumor. This study aims to analyze the clinical and pathological features of this entity.

**Materials and Methods :** A retrospective study was conducted, encompassing 40 cases of GCT diagnosed in our department of pathology during the period between 2014 and 2023.

**Result :** The average age was 48 years ranging from 21 to 80. Clinical presentation included abdominal pain (21 cases), menstrual disturbances (10 cases), uterine bleeding (5 cases) and abdominal mass (4 cases). Tumors were predominantly unilateral (36 cases), but they were bilateral in 4 cases. At gross examination, the mean tumor size was 9 cm (extremes 7-28 cm). All tumors manifested as solid-cystic lesions with hemorrhagic and necrotic areas. Histologically, two variants were identified: adult granulosa cell tumor (AGCT) (36 cases) and juvenile granulosa cell tumor (JGCT) (4 cases). Three cases showed concurrent endometroid carcinoma. Thirty-two patients presented with stage I disease and 7 cases showed extra ovarian location of the tumor. An immunohistochemical study demonstrated positive staining for inhibin, calretinin, FOXL2, and WT1 in the majority of cases. Overall, 84% of patients survived with recurrence observed in 5 cases during follow-up.

**Conclusion :** GCTs are low-grade malignant neoplasms, accounting for approximately 10% of all sex cord-stromal tumors of the ovary. Predominantly GCTs manifest as the adult type (95%) while the juvenile type constitutes the remaining 5%. AGCTs typically occur in perimenopausal women, whereas JGCTs tend to affect patients younger than 30 years. In over 95% of cases, tumors are unilateral and remain confined to the ovary. Clinical manifestations arise from excessive estrogen production. Macroscopically, tumors present as solid and cystic

lesions with hemorrhagic areas and an average diameter of 10 cm. Histological examination plays a pivotal role in establishing the diagnosis of GCTs and is crucial for identifying histological predictors of recurrence. The majority of GCTs are diagnosed at stage I and have a good prognosis, but factors like tumor rupture and extra ovarian location are frequently associated with an increased risk of recurrence.

#### 150 : Surgical management for radiation-induced carcinoma

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**Introduction :** Radiation-induced sarcomas are rare clinical entities. They constitute less than 2% of all sarcomas. Their incidence is increasing as the survival of patients treated with radiotherapy increases.

**Materials and Methods :** we present here the case of a patient presented with radiation-induced bladder carcinosarcoma treated in Salah Azaiez Institute

**Result :** An eighty three years old woman , with history of nephrectomy ten years ago for unspecified pathology and squamous cell carcinoma for the cervix thirty yeas ago treated exclusively by radiotherapy, presented with hematuria. The patient underwent cystoscopy with partial resection of the tumor. The final pathological examination identified a sarcomatoid carcinoma with glandular inflection, infiltrating the chorion and muscularis, classified as G3pT2. The surgery was challeging due to different reasons

**Conclusion :** Radiation –induced sarcomas represent a real therapeutic challenge. Surgery remains the gold standard of its management, but its feasability requires well trained teams to deal with peroperative difficulties due to irradiation effects.

### 151 : Uterine sarcomas of the uterine corpus: clinicopathological series

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**Introduction :** Uterine sarcomas are heterogeneous entities that account for 8% of all tumors of the uterine corpus .This category of neoplasms includes a range of histological diagnoses with differing prognoses, among which leiomyosarcoma (LMS) and endometrial stromal sarcomas (ESS) are the most prevalent. Their rarity complicates diagnosis, pathological classification, and management. Decisions regarding treatment should be made by a multidisciplinary tumor board.

**Materials and Methods :** We retrospectively reviewed the clinical record of 21 patients treated for uterine sarcoma in Salah Azaiez Institute between 1996 and 2023.

**Result :** Data was collected from 21 patients. The median age at diagnosis was 54 years. Fifty percent of patients were menopausal. Bleeding was the most common symptom followed by pelvic discomfort. Four patients initially underwent surgery for symptomatic myomas diagnosed via pelvic ultrasound, three underwent hysterectomy and a myomectomy with tissue retrieval by morcellation in the other one. For the remaining patients, diagnosis was confirmed via uterine curettage. Pathologic examination revealed 16 cases of LMS (6 grade II, 6 grade III and 4 grade I) and 5 cases of ESS (2 low grade, 2 high grade) and 1 undifferentiated ESS. As initial treatment, surgical intervention was performed on 19 patients, whereas two patients, who were metastatic at the time of diagnosis, received chemotherapy. The mean tumor size at the final pathological

assessment was 9.8 cm, with a range from 1 to 40 cm. Adjuvant chemotherapy was administered to seven patients, while ten patients received adjuvant radiotherapy; among these, only three patients underwent concurrent chemoradiotherapy. The median follow-up period was 64 months, ranging from 6 to 245 months. Complete remission was achieved in 13 cases, while one patient experienced a progressive disease course, and seven patients developed locoregional recurrences. Recurrence rates were 31.25% in patients with LMS and 60% in patients with ESS. The five-year overall survival and disease-free survival rates were 63% and 37%, respectively

**Conclusion :** The relative rarity of uterine sarcoma as well as its clinical variety makes establishing the optimal management strategies challenging. Surgical resection remains the cornerstone of treatment. However, the efficacy of systemic therapies and radiotherapy in the adjuvant context has not been definitively demonstrated.

### 152 : Anatomo-clinical and evolutionary study of phyllodes tumors of the breast

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**Introduction :** Phyllodes tumors of the breast are uncommon fibroepithelial tumors that can manifest at any age. The aim of this study is to comprehend the anatomoclinical and evolutionary characteristics of phyllodes tumors and to discuss the prognostic factors associated with these tumors.

**Materials and Methods :** This retrospective study analyzed 25 cases of phyllodes tumors of the breast treated in the obstetrics and gynaecology department from January 2015 to December 2020.

**Result :** Our cohort included 16 cases of benign phyllodes tumors (64%), 5 cases of borderline tumors (20%), and 4 cases of malignant tumors (16%). The average age of patients was 41 years, with 4 patients having a history of operated adenofibromas. Nulliparous women accounted for 40% of the cases. The most common purpose of consultation was incidental discovery of a breast nodule, with an average delay of 10 months. The mean tumor size was 6.54 cm. Mammography lacked specificity for positive diagnosis, while ultrasound, particularly in young women, proved highly beneficial. Histological confirmation was essential for diagnosis. The primary treatment involved lumpectomy with a safety margin of at least 1 cm, especially for low-grade and intermediate-grade tumors. Axillary clearance was not performed in any case in our series. Four cases of recurrence were identified, with metastases observed in 12% of cases, primarily affecting the lungs and bones.

**Conclusion :** Phyllodes tumors of the breast remain ambiguous in terms of terminology, histological classification, and treatment modalities. Surgery remains the cornerstone of treatment, highlighting the need to incorporate certain plastic and aesthetic surgical techniques into breast surgery practices.

### 153 : Clinical study and prognostic factors in borderline ovarian tumours

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**Introduction :** Borderline tumours are characterised by atypical epithelial proliferation without stromal infiltration. They represent 10 to 20% of epithelial tumours. Despite the use of high-performance imaging techniques and tumour marker assays, diagnosis is still based on histological examination of the surgical specimen. The aim of our work is to specify the clinical, paraclinical and evolutionary aspects of these tumours, to establish the factors determining the prognosis and to define a

therapeutic attitude in the case of any ovarian tumour bordering on malignancy.

**Materials and Methods :** We conducted a retrospective study of 30 cases of ovarian tumours at the limit of malignancy, collected in the Obstetric Gynaecology Department over the period from 01 january 2018 to december 2021.

**Result :** The average age of patients with borderline mucinous tumors was higher than those with serous tumors, at 43.2 years compared to 38.4 years, respectively. Tumors were discovered under various circumstances: 19 cases were associated with pelvic pain, 13 cases with increased abdominal volume, 5 cases with menstrual cycle disorders, and 4 cases with a general decline in health. Six cases (20%) exhibited bilateral tumors, with an average size of 11.3 cm. Endocystic vegetations were found in 20 patients (68%), while ascites was present in 8 patients. Initial treatment involved a conservative approach, with extemporaneous examination conducted in 20 patients. The diagnosis of borderline tumors was accurately made in all cases, and histological confirmation was obtained for each case.

**Conclusion :** The diagnosis and management of borderline ovarian tumors present challenges due to their similarity to ovarian carcinomas and their occurrence in women of reproductive age who desire fertility preservation.

#### 154 : Epidemiological study and prognostic factors of cervical cancer

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**Introduction :** In Tunisia, similar to many other developing nations, cervical cancer ranks as the second most prevalent cancer among women, following breast cancer. In 2020, it led to 342 new diagnoses and 185 fatalities. This study aimed to pinpoint the prognostic factors that impact patient survival.

**Materials and Methods :** We conducted a retrospective, descriptive, single-center study involving 55 cases of cervical cancer obtained from the obstetrics and gynecology departments as well as the radiotherapy and oncology departments. These patients had a confirmed diagnosis of cervical cancer through histological examination. The study spanned over a period of 15 years, from January 2006 to December 2020.

**Result :** The average overall survival was 11.2 months, with a 5-year survival rate of 63.4%. There was no significant variance in survival based on age, with those aged 50 years or older (p=0.364) showing similar survival rates. Patients with no prior medical history exhibited notably better survival outcomes (p=0.02), as did those not using contraceptives and with a blood hemoglobin level above 10g/dl. Anemia emerged as a prognostic factor (p=0.038). Furthermore, the presence of vaginal involvement during examination under general anesthesia had a significant impact on overall survival (p=0.026). Tumors larger than 4 cm were associated with poorer prognosis (p=0.036). Notably, there was a substantial difference in survival rates based on histological type (p<0.001) and tumor stage (p<0.001), with squamous cell carcinoma demonstrating a survival rate of 76.1%.

**Conclusion**: The severity of cervical cancer prognosis has spurred extensive efforts worldwide, primarily focusing on prevention through the identification and management of risk factors and implementing systematic screening programs.

#### 155 : Sexuality following breast cancer

### Abdelkefi S, Sansa H, Hakim H, Abbes M, Trigui K, Derbel M, Chaaben K

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**Introduction :** Women with breast cancer have a high prevalence of mental disorders and depression. The aim of this study was to identify the

various biological, clinical and lifestyle factors associated with anxiety and depression symptoms in women with breast cancer.

# **Materials and Methods :** A cross-sectional study was undertaken from July to September 2020, employing a questionnaire. The variables under scrutiny included age, educational background, medical history, chronic conditions, living arrangements, employment status (remote or on-site), retirement status, alcohol consumption habits, physical activity levels, anxiolytic medication usage, adherence to social distancing measures, requirement for isolation or quarantine, presence of flu-like symptoms, time since cancer diagnosis, access to treatment, and presence of metastases.

**Result :** Forty-three women diagnosed with breast cancer were enrolled in our study. In the study population, the prevalence of anxiety symptoms was 34.8%, while that of depressive symptoms was 30.2%. Factors significantly associated with anxiety included being aged 60 years or older and using anxiolytics (p=0.0007). Depressive symptoms were predominantly linked to an age of 60 years or older (p=0.04) in most instances. Furthermore, the use of anxiolytics (p=0.02), non-face-to-face work settings (p=0.04), absence of flu-like symptoms (p=0.03), and limited access to or unavailability of cancer treatments (p=0.02) emerged as noteworthy factors to consider.

**Conclusion :** In conclusion, addressing anxiety and depression symptoms in women diagnosed with breast cancer requires consideration of multiple risk factors, including biological and clinical aspects, as well as patients' lifestyle choices.

#### 156 : Ultrasonographic aspects of fibrothecal tumours of the ovary

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**Introduction :** Fibrothecal tumors of the ovary represent 1 to 4.7% of all ovarian organic tumors. They originate from the stroma and consist of spindle-shaped connective cells and thecal cells in different ratios. Typically benign, these tumors can induce hormone secretion, primarily estrogen. This study aimed to illustrate the various ultrasonographic features of fibrothecal ovarian tumors.

**Materials and Methods :** This was a retrospective study of 18 observations of fibrothecal tumours of the ovary collected in our obstetric gynecology department over a period of 5 years.

**Result :** These non-malignant tumors originate from the ovarian stroma and are predominantly found in pre- and peri-menopausal individuals. Fibroids make up 4% of all ovarian tumors, while thecomas are slightly less prevalent at around 2%. Often, these tumors are of a mixed fibrothecoma type. Macroscopically, they appear as solid, soft, oval, and dense in their early stages, sometimes developing hardness and calcification. Ultrasound serves as the primary diagnostic tool for ovarian masses. Fibrothecoma typically presents as a large, solid mass, occasionally causing confusion with other solid ovarian tumors or subserous uterine fibroids. Over time, it becomes highly absorptive and may become barely detectable on ultrasound. In our study, fibrothecoma appeared as echogenic images in 54.54% of cases, hypoechoic in 36.36% of cases, and anechoic in 9% of cases. Regarding intraoperative assessments, our series found an 84.6% concordance rate between extemporaneous examinations and definitive histology, which showed a 90.1% correlation. Notably, all fibrothecomas were confirmed as benign, and all patients recovered following tumor removal.

**Conclusion :** Fibrothecoma, a rare benign tumor, primarily affects elderly women. Ultrasound stands out as the gold standard for accurate diagnosis, and radical treatment becomes essential in older women to obtain histological confirmation.

#### 157 : CASE REPORT : Adenoid cystic carcinoma of the vulva

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**Introduction :** Adenoid cystic carcinoma (ACC) generally arises from the salivary glands and is rarely found in the female genital tract. It represents less than 1% of all vulvar malignancies, characterized by a slow growth, a high local aggressiveness, a remarkable recurrence and metastasis rates. The symptomatology bigins by itching and a burning sensation (neuronal invasion) then the tumor becomes palpable and resembles that of a vulvar abscess. At an advanced stage, urinary and rectal symptoms will appear There is no consensus concerning the treatment In this report, we present a clinical case admitted to our institution to arise oncologist awareness about this rare malignancy

Case report: A 45 years old non menopaused woman, G5P2, who used hormonal contraception, with a history of right lobo-isthmectomy for multi-nodular thyroid goiter, operated previously for Bartholinitis (no histlogical proof), consulted for 3cm vulver painful swelling on left labial minora. She had an exicion and the final histopathological exam of the specimen reveled an ACC with perineural infiltration and positive margins then the patient was referred to us. On physical examination, a mobile induration under the scar of 1,5cm next to the nympho hymenal groove was found, with no palpable lymph node The cas was discussed in a multi disciplinary meeting and the patient underwent a total vulvectomy and bilateral inguinal lymph node dissection The definitive anatomopathological study revealed an infiltrating tumor proliferation, poorly defined, measuring 2.5\*1cm, consisting with an adenoid cystic carcinoma whose excision was complete and 12 reactive nodes Given the healthy margins and the absence of lymph node involvement, the patient did not have adjuvant radiotherapy. The patient is regularly followed up at our department by physical examination and imaging with no local recurrence disease or distant metastasis since 9 years

**Conclusion :** Adenoid cystic carcinoma of the vulva is an extremely rare, slowly progressing neoplasm. Due to its rarity, treatment remains challenging for oncologists and surgeons. Although longterm overall survival is excellent, risk of local and distant recurrence is high

### **158 :** Tailoring adjuvant treatment of uterine cancer in low and middle-income countries: Reversed PORTEC

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**Introduction :** Background: Although women with endometrial cancer generally have a favorable prognosis, those with high-risk disease features are at increased risk of recurrence. Based on the PORTEC 3 trial results, adjuvant chemoradiotherapy and chemotherapy have become a standard of care for these patients. Nevertheless, access to radiotherapy machines remains challenging in low and middle-income countries with significant delays. Aim: We report our Tunisian experience with reversed PORTEC as a solution for radiotherapy delays.

**Materials and Methods :** We retrospectively reviewed data of 20 patients with high-risk endometrial cancer treated at the oncologic Institute Salah Azaiez of Tunis between 2020 and 2022. Patients received the reversed PORTEC sequence: adjuvant chemotherapy (4 cycles of carboplatin/paclitaxel) followed by concurrent chemo-radiotherapy (Cisplatin S1-S4).

**Result:** The mean age was 63 years old with 50% of patients having overweight and 40% of them obesity .12 patients had a medical history of high blood pressure and eight were diabetic. All patients had hysterectomy with bilateral oophorectomy. Lymph node dissection was performed in 65% of cases. Histological subtypes were endometrioid (35%), serous

(25%), and clear cell (5%). Lymph node involvement was found in 35% of cases, and 50% of them had lympho-vascular invasion. Tumors were staged according to FIGO 2009 classification as follows: 55% had stage III tumors, and 20% had stage IVA tumors. The median time between surgery and chemotherapy was three months and the median time between surgery and radiotherapy was 11 months. All patients received four cycles of carboplatin and paclitaxel at 21-day intervals. Pelvic radiotherapy was given to all patients with a total dose of 45 Gy. 4 patients had brachytherapy at the dose of 6 Gy because of cervical involvement. Cisplatin was administrated in the first and fourth week of radiotherapy. During chemotherapy, six patients developed neuropathy (4 grade 1 and 2 grade 2), and eight patients developed gastro-intestinal toxicity. No grade 3–4 toxicities were reported during concurrent chemo-radiotherapy. After a median follow-up of 20 months, two patients had a local relapse, and one patient had distant metastasis. Overall survival was estimated at 90%.

**Conclusion :** The reversed PORTEC sequence seems to be a safe alternative for high-risk endometrial cancer to overcome the challenges of radiotherapy delays. It should be considered as a solution in low and middle income countries where standard PORTEC can't be carried out.

### **159 : Management of recurrence of cervical cancer after extended colpohysterectomy concomitant radiochemotherapy**

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#### Salah Azaiez Institute, Tunis, Tunisia

**Introduction :** Cervical cancer ranks as the 5th most frequent cancer among women in Tunisia. However, the diagnosis of cervical cancer is still made at relatively late stages in 70% of cases, the diagnosis is made at a locally advanced stage. After complete treatment, the recurrence rates of locally advanced cervical cancer are 28 to 64%. In our study, Our aim is to identify the results of surgical management of cervical cancer after chemoradiation.

**Materials and Methods :** This retrospective study was conducted in the Salah Azaiez cancer institute of Tunisia. We collected the cases of cervical cancer recurrences that occurred between 2018 and 2022.

Result : We collected 6 cases of cervical cancer recurrence after chemoradiotherapy and extended hysterectomy. The mean age at the diagnosis is 54 years old. All cases were diagnosed with squamous cell carcinoma of the cervix at FIGO stage : Ib1 (one case), IIb (3 cases) and IIIc1 (2 cases). Four cases had chemoradiation with brachytherapy and extended colpohysterectomy. The 2 others patients had brachytherapy and extended colpohysterectomy. The time between the end of treatment and recurrence was on average 5 years (6 months-16 years). All patients were symptomatic at the diagnosis of the recurrence. One case was operable but the patient refused the anterior exenteration. All the other cases were treated with chemotherapy because of the extension of the disease. Two cases had a complete response on MRI and vaginal biopsies. Two other patients had a partial response to chemotherapy with extension to the pelvic wall. Only one patient had surgery after chemotherapy that consisted of a colpectomy with cystectomy and Bricker's urinary diversion. Median survival after the diagnosis of recurrence is 15 months. **Conclusion :** The management of the recurrent cervical cancer depends on the site and the extent of the disease. For cases treated initially with radiotherapy, surgery is the only treatment modality that offers the best survival at recurrence. Because of the high rate of complication of this type of surgery, patients should be well selected.

### **160** : Towards a Better Understanding of Cervical Conization: Key Indications and Complications

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**Introduction :** Cervical conization is a surgical procedure involving the removal of a cone-shaped section of the cervix. This procedure is primarily performed to diagnose and, in some cases, treat precancerous lesions or early stages of cervical cancer. It targets the removal of part of the cervix, including the transformation zone where the exocervix meets the endocervix. This junction zone is often the site of cellular abnormalities development.

**Objectives:** To examine the role of conization in the management and screening of cervical cancer and to document its complications.

**Methods:** We initiated a retrospective and descriptive study focused on a sample of 28 patients treated at our facility.

**Result :** The average age of the patients was 33 years, with a parity of 2.13 and a gravidity of 2.8. Nineteen patients presented with menometrorrhagia. Following abnormal results from cervical smears, 17 patients underwent colposcopy with cervical biopsy, revealing low-grade lesions in 9 of them and high-grade lesions in the remaining 19. The conization procedure was performed using a scalpel for 17 patients and an electrocautery loop for 11 patients. For 26 patients, surgical margins were clear of lesions, while the remaining two patients, aged 34 and 41 and having completed their desire for maternity, underwent a more extensive surgical intervention. No cases of hemorrhagic complications or recurrences were noted in this cohort. Furthermore, two patients successfully conceived post-procedure and carried their pregnancies to term without complications.

**Conclusion :** This procedure is minimally invasive and well-suited for treating intraepithelial neoplasias, causing minimal physical harm. Although complications are rare, rigorous post-therapeutic monitoring is crucial to detect any treatment failures or recurrences early.

#### 161 : Evaluation of sexuality after mastectomy: a non-taboo subject

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**Introduction :** Local and systemic treatments for breast cancer have led to a considerable improvement in the prognosis of patients. The diagnosis of the disease and its treatments, sometimes long-term, can however disrupt the sexual life of patients. This contributes to a deterioration in their quality of life and can also lead to an alteration of their therapeutic adherence and therefore their prognosis. For a long time the subject remained taboo and little discussed between professionals and patients.

**Materials and Methods :** The objective of our study is to evaluate the sexuality of women with breast cancer after mastectomy. A study was carried out on 30 patients followed for non-metastatic breast cancer with sexual activity, met at the oncology consultation at the Manzel Tmim maternity ward. Data collection was carried out using an information sheet and using two validated scales: RSS (Relation Ship and Sexuality) and BESAA (Body EsteemScale For Adolescents and Adults) in order to assess the sexuality and image of the body.

**Result :** The average age was 49 years old. More than half of the patients (64%) had a sex life altered by the disease. The frequency of intercourse, sexual desire and the ability to reach orgasm were reduced in 22, 19 and 26 patients respectively. Dissatisfaction with the way of the emotional relationship in the couple was found in 26 patients and 15 women stated that they had not had sexual intercourse during the last two weeks. For the sexual fear dimension, 20 patients reported a fear of sexual intercourse. Concerning patients' knowledge of the subject, almost all participants (90%) stated that they had not received information about the impact of breast cancer on sexual relations. 40% of patients and their partners had been emotionally separated during the illness, while 25% of women were emotionally close to their partners. More than half of patients (68%) felt less sexually attractive The overall score for the 3 dimensions of body

image was 49.4. Women aged between 35 and 42 years developed significantly more fear of sexual intercourse and less sexual frequency **Conclusion :** It is currently becoming obvious that, as with other aspects of medical care, the question of sexuality must be addressed by professionals in order to inform patients of the impact of treatments, to identify their needs, to prevent/ treat possible complications and refer them to specialists, psychologists/psychiatrists or sexologists, if necessary

#### 162 : Evaluation of the Contribution of High Dose Rate Uterovaginal Brachytherapy to the Doses Received by Pelvic Lymph Node Areas

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**Introduction :** High-dose-rate brachytherapy (HDR-BT) is increasingly used after external beam radiotherapy (EBRT) to deliver a cumulative equivalent dose (EQD2) of 80 to 90 Gy to the tumour. However, there is less certainty regarding the dose contribution of HDR-BT to the pelvic lymph node areas. This poses a challenge in terms of the dose to be prescribed by EBRT to a macroscopic nodal disease to achieve adequate cumulative tumour control. This study aims to evaluate the contribution of uterovaginal HDR-BT dose to the pelvic lymph node areas.

**Materials and Methods :** This is a retrospective dosimetric study including 20 patients treated with uterovaginal HDR-BT preceded by concurrent chemoradiotherapy for locally advanced cervical cancer treated between 2021 and 2022 at Salah Azaiez Institute. The HDR-BT dose was 24 Gy in 3 weekly fractions. Patients were randomly selected. The common iliac (CI), external iliac (EI), internal iliac (II), obturator (OB), and presacral (PS) lymph node areas were contoured according to the guidelines of the Radiation Therapy Oncology Group on dosimetric CT scans performed for HDR-BT planning, with an applicator in place and contrast agent injection. Using the initial brachytherapy plan, mean doses to each lymph node group were calculated for each patient.

**Result :** The mean age of our population was 58 years [47-68]. Fortyseven per cent of patients were classified as stage IIB, 38.46% as stage IIIC1, and 15.38% as stage IIIA according to the International Federation of Gynecology and Obstetrics. EBRT was administered by intensitymodulated radiation therapy in 9 patients and by 3D technique in the others. The mean EBRT dose was 45 Gy. No boost on lymph nodes was delivered. With a brachytherapy dose of 8 Gy at the Manchester point A, the mean absolute doses received by the CI, EI, II, PS, and OB groups were 0.36 [0.19, 0.55], 0.8 [0.47, 1.15], 1.26 [0.76, 1.94], 0.94 [0.54, 1.97], and 1.76 Gy [1.23, 2.26] respectively, corresponding to EQD2 ( $\alpha/\beta = 10$ ) of 0.24 [0.1, 0.4], 0.62 [0.3, 1], 1.09 [0.6, 1.9], 0.78 [0.4, 2], and 1.75 Gy [1.2, 4] respectively.

**Conclusion :** Our study shows that pelvic lymph node areas receive considerable doses during uterovaginal HDR-BT. This should be taken into consideration when planning EBRT in the treatment of cervical cancer. However, what is the impact of this dose contribution in terms of regional disease control?

#### 163 : Placental site trophoblastic tumor: A Case Report

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**Introduction :** Placental-site trophoblastic tumor is a rare form of gestational trophoblastic neoplasia originating from the location where the placenta implants. The majority of cases occur after a full-term pregnancy, with the latency between pregnancy and onset ranging from a few months up to 20 years.

**Case Report :** We present the case of a 53-year-old premenopausal woman who had a 10-year interval between her last pregnancy and her presentation. The patient presented at our Center reporting persistent menorrhagia lasting for a minimum of one month. Transvaginal ultrasound examination showed an enlarged uterus with a heterogeneous mass. A slightly elevated beta-HCG level was detected. The MRI revealed a tumor infiltrating the myometrium. The histological diagnosis was obtained via hysteroscopic biopsy. The histological and immunohistochemical analyses confirmed the presence of Placental-site trophoblastic tumor. The patient underwent a successful hysterectomy, leading to good outcom.

**Conclusion :** Placental site trophoblastic tumor is an exceptionally rare type of gestational trophoblastic disease known for its slow growth and low secretion levels of beta-subunit of human chorionic gonadotropin. Given the rarity of this tumor, it is essential to document new cases to enhance the diagnosis and management of these patients.

### **Geriatric Oncology**

#### 164 : Management of Chemotherapy toxicity in elderly population ?70 Years with solid tumors: A cohort of 81 patients treated in the medical oncology department of Sousse

Maatallah S, Gammoudi A, Ben Rhouma S, Khlifa H, Ghzel S, Khelifi K, Ben Fatma L, Hochlef M, Chabchoub I, Ezzaairi F, Gahbiche S, Belaid I, Ben Ahmed S

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**Introduction :** Trials in the elderly have established that older individuals may benefit from chemotherapy to the same extent as younger individuals. Although the elderly patient is a prototype for cancer, data are limited on the occurrence and outcomes of chemotherapy toxicity. This Trial was undertaken to study the chemotherapy induced severe toxicity among elderly and how to Avoid it.

**Materials and Methods :** This Trial was a retrospective cohort study between November 2022 to Juin 2023. All patients were aged  $\geq$ 70 years. Patients had solid tumor, localised or metastatic, and were planned to receive chemotherapy.

**Result :** A total of 81 patients were included in the study, 67.1% were treated with chemotherapy. Median age was 74 years [70-89], 63% of the patient's cohort had one or more comorbidity. 54.4 %, had a good performance status (PS=1), general condition was alterated (PS 3 to 4)in 7.6 % of patients And So chemotherapy was recused. We used the same regimen of chemotherapy as in young patients in 54.3%. Adjuvant chemotherapy was planned in 28% of patients and neoadjuvant chemotherapy in 26% patients, 40% of them received palliative chemotherapy, and 6% received chemoradiotherapy. Sequental[ Epirubicin Endoxan docetaxel], Folfox and paclitaxel Carboplatin were the most favored regimens used respectively in 8.6%, 12.3% and 7.2%. The most common Hematological toxicity was neutropenia 26%, Grade 4 in 14%, only 4% of Neutropenia with fever. The most common non heamatological toxicities were fatigue 32%, Neuropathy 26% (grade 1 and 2), Anorexia 26%, vomiting 18%, Diarrhea 12%, Renal failure 8%, mucositis 6%, Hand Foot Syndrome 4%, 1 Allergic reaction, 1 Toxic Death was observed with Docetaxel regimen after the first cycle Overall, 62% of patients were able to complete their prescribed treatment, with dose reduction in 24%. Treatment was stopped in 14% patients because of several toxicity, which mainly occured during the first 5 cycles. 48 % started Chemotherapy with reduced doses from 25 to 50% of full dose and chemotherapy was well tolerated. 8% of patients received prophylactic granulocyte colony stimulating factor (GCSF) support, and among them, only 1 patient developed severe hematoxicity( grade 4 neutropenia). On the other side, 19.5% of patients suffered from Neutropenia with no primary GCSF support.

**Conclusion :** Conclusions: The physiological changes associated with aging increase the risk of developing a serious toxicity induced by chemotherapy treatment. Based on theses observations, we suggest Appropriate supportive care to manage toxicity of chemotherapy, such as the use of growth factors and starting by reduced dose, which is particularly important in older patients, who are at greater risk for the toxicity associated with chemotherapy.

### 165 : Epidemiology of Cancer and treatment modalities among older adults : A review of 81 patients

Maatallah S, Lasmar I, Gammoudi A, Ghzel S, Khlifa H, Ben Rhouma S, Khelifi K, Ben Fatma L, Hochlef M, Chabchoub I, Ezzaairi F, Gahbiche S, Belaid Imtinene, Ben Ahmed S

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**Introduction :** Despite the high prevalence of cancer in elderly people, administering the optimal treatment to older patients remains a challenge. Until recently, most therapeutic trials in oncology did not admit elderly patients. This study describes the epidemiology, clinical extent of disease at diagnosis and treatment modalities of cancer among older adults.

**Materials and Methods :** This Trial was a retrospective descriptive study Between November 2022 to Juin 2023. A total of 81 patients were included. All patients were of age  $\geq$ 70 years, had Solid Tumor , localised or metastatic, and were planned to receive systemic therapy.

Result : We included 81 elderly patients [43 females and 38 males]. The median age of the population was 74 years[70-89]. 63% of patients had one comorbidity or more, only 4.9% were uncontrolled. The most commun comorbidities were Hypertension (42%), diabetes (23.3%), dyslipidemia(18.5), coronary artery disease (11.1%). We enrolled oncology patients with varied primary diagnosis into our study. The majority of patients Had of colorectal cancer (22.2%) -followed by Breast cancer(19.8%), gastrointestinal tumors (16.2%), genitourinary tract tumors (14.7%), gyneacological tumors (9.8%) Head and Neck cancer (7.4%), Lung (6.1%), Glioblastoma (2.4%), Melanoma (1.2%), 37% of patients were metastatic [12 Bone, 10 Lung, 10 liver, 6 Peritoneal carcinomatosis]. 61.7% Patients were treated with chemotherapy, 1 patient with immunothrapy(nivolumab) and 2 patient with Targeted therapy (1 sunitib, 1 bevacizumab combinated to Chemotherapy), 12 with Endocrine therapy. Adjuvant chemotherapy was planned in 28% of patients and neoadjuvant chemotherapy in 26%, 40% of them received palliative chemotherapy, and 6% received chemoradiotherapy. 18 different chemotherapy regimens and schedule were used. Sequental [Epirubicin Endoxan docetaxel], Folfox and paclitaxel Carboplatin were the most favored regimen. 51.9% of patients treated with chemotherapy completed treatment as planned, the protocol was changed in 3 cases because of several toxicity and stopped in 17.4%, Chemotherapy was omitted in 27 cases (33.3%). The main cause is that Patients or their families refused any treatment in 8 cases, 6 patients had a Performance status >=3, 2 patients Died before starting chemotherapy, 4 patients were considered unfit to chemotherapy, deadlin.

**Conclusion :** The increasing cancer incidence among older adults poses a huge burden on the health system. the occurrence of chemotherapy related toxicity is a matter of concern, that's why the choice of treatment in the older patient remains a challenge.

### **166 :** Assessment and management of toxic effects of cancer therapy in the elderly

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Medical Oncology Department, University Hospital Mohamed Taher Maamouri Nabeul, Tunisia **Introduction :** The management of cancer in elderly patients presents challenges due to several factors. It requires a multidisciplinary approach. Tailoring cancer treatment to the individual needs and characteristics of elderly patients is essential to optimize outcomes while minimizing treatments toxic effects.

**Materials and Methods :** This is a retrospective study including 120 Geriatric patients(>=70 years old ) treated in the department of medical oncology of Mohamed Tahar Maamouri University Hospital in Nabeul between June 2022 and January 2024. The aim of the study was to evaluate the patient's features, treatment modalities and to assess the toxic effect of cancer therapy in the elderly.

**Result :** The median age was 75 years, (range 70-85) with sex ratio 0.34. Seventy three percent of patients were in good general condition (ECOG PS of 1). 78% of patients had G8 score>14. 60% were of urban origin, 58% of tumors were classified asstage IV. The most common cancer was colorectal cancer (33%) followed by lung cancer (18%), and breast cancer (10%). Chemotherapy was indicated in 75% of cases, with adapted doses in 57%, targeted therapy in 8% and hormone therapy alone in 9%. The most common adverse events were mild to moderate gastrointestinal toxicity observed in 69% of cases followed by hematological toxicity in 44% of cases. Altered quality of life was observed in 20% of patients. Symptomatic treatment was required in 57% of cases. Dose reduction was necessary in 15% of cases. The decision to stop the treatment was made in 3% of cases due to toxicity.

**Conclusion :** Our data show the vulnerability of older patients with cancer to the toxic effects of chemotherapy. Elderly patients are underrepresented in clinical trials. This poor data can lead to inappropriate management. Clinical trials specifically focusing on elderly populations are needed.

### **Pediatric Oncology**

# 167 : Correlates of the impact of childhood cancer of family functioning

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**Introduction :** A highly distressing event like childhood cancer (CC) can have a significant influence on the psychological aspect of parents and other relatives involved. For a parent, it is one of the most disconcerting experiences. This study aimed at examining the factors which determine how CC affects Tunisian families.

**Materials and Methods :** This is a cross-sectional study among parents of children diagnosed with cancer that took place for at least two months and up to two years on completion of the treatment. The study was done at the oncology sector of a university hospital in Tunisia from April to September 2022. For data collection purposes, a questionnaire was self-administered. While the perceived stress scale (PSS) and brief cope assessed parent's perceived stress levels and coping strategies, a valid Arabic version of scales were used in this study. The survey assessed self-reported functioning by parents themselves as well as family functioning using valid Arabic version of PedsQLTM Family Impact Scale. In order to identify associated factors for total score of PedsQL scale multiple linear regression analysis was used.

**Result :** The study included 65 patients who met the inclusion criteria. The average age of the parents was  $37.9 \pm 7.42$  years, with a predominance of women (73.8%). Most were married (93.8%) and had between 1 and 2

children (58.5%). Participants tended to have moderate levels of perceived stress and family functioning with mean scores of  $20.8\pm6.7$  and  $53.6\pm20.7$  respectively. Of the fourteen coping strategies, religion and planning had the highest mean scores (7.2±1.2 and  $6.8\pm1.1$  respectively), positive reinterpretation and acceptance were negatively and significantly correlated with overall PSS score (r= -0.33, p=0.006; r= -0.46, p<0.001 respectively) while denial was positively correlated (r=0.3, p=0.009). With regard to the family impact of CCs, overall PSS score ( $\beta$ = -0.57, p<0.001), average socioeconomic level ( $\beta$ = 0.39, p<0.001) and death of a parent ( $\beta$ = -0.19, p<0.026) were the predictive factors in linear regression analysis (adjusted R2=0.59).

**Conclusion :** CC can be traumatizing for family members. It is therefore crucial to put in place interventions that promote resilience and coping skills to meet their psychological well-being requirements.

### **168** : Nasopharyngeal carcinoma in children and young adults: therapeutic results and prognostic factors

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**Introduction :** Nasopharyngeal carcinoma (NPC) in children and young adults has a specific clinical, therapeutic, and behavioural feature. Few studies have investigated this subject, and treatment recommendations are based on those for adults. Induction chemotherapy (IC) combined with intensity-modulated radiotherapy (IMRT) and concurrent chemotherapy (CC) is the standard treatment for locally advanced forms of the disease. Our objective was to evaluate the results of our treatment protocol, as well as its toxicities and prognostic factors in children and young adults.

**Materials and Methods :** We conducted a retrospective study including non-metastatic NPC patients aged 10 to 35 years, treated between October 2016 and June 2022 in our department. All patients had IC followed by IMRT with simultaneous integrated boost in 33 fractions at a total dose of 66.5-69.96 Gy (2-2.12 Gy/fraction) depending on age. All patients received cisplatin CC. Statistical analysis was performed using SPSS version 23 software.

Result : Twenty-six patients were enrolled. The median age was 25 years [11-35]. Most tumours were classified into stages III-IV in 24 cases (92.4%). Twenty patients (76.9%) received IC with TPF (docetaxel, cisplatin, 5-fluorouracil). After a median follow-up of 69 months [24-95], there were no local relapses. One patient (3.8%) presented a late "in-field" regional relapse in cervical sector II, 43 months after IMRT. This patient initially had a lymph node biopsy for diagnosis. Three patients (11.5%) presented a relatively early metastatic relapse at 3, 6 and 24 months. They died of their disease shortly after despite second line chemotherapy. Overall survival (OS), event-free survival (EFS), metastatic disease-free survival (MFS) and locoregional relapse-free survival (LRFS) at 5 years were respectively 92%, 83.6%, 88.3% and 95%. In sub-group analysis, a number of CC courses  $\geq 4$  and a cumulative cisplatin dose  $\geq 380 \text{ mg/m}^2$ were associated with better OS, EFS and MFS. We found no factors affecting LRFS due to the low number of loco-regional relapses. There were no grade 3-4 acute or late toxicities. The most common late toxicity was grade 1-2 xerostomia in 16 patients (61.5%). Four patients (18%) developed subclinical hypothyroidism.

**Conclusion :** Our therapeutic protocol provided excellent therapeutic results and good quality of life in children and young adults with NPC. The number of CC courses and the total cumulative dose of cisplatin influence the therapeutic results.

169 : Epidemiology and clinical features of retinoblastoma in the oncology pediatric center of Sousse Tunisia

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**Introduction :** Retinoblastoma (RB) is the most common primary intraocular tumor of infants .The incidence of retinoblastoma is approximately 1 in 17,000 live births with approximately 8,000 new cases diagnosed each year worldwide. The purpose of this study is to highlight the epidemiological, clinical features of this disease as well as its management in the oncology pediatric center of Sousse Tunisia

**Materials and Methods :** We conducted a retrospective study between April 2004 and December 2023 at the pediatric unit of oncology department of Farhat Hached University Hospital Sousse.

**Result :** Twenty patients were recorded with a median age of 34 months [4-220months] and female predominance with sex ratio 0.81. The most common presenting signs of retinoblastoma were leukocoria (50%). Regarding the laterality of retinoblastoma, we observed 65% of unilateral cases and 35% of bilateral cases. In terms of disease staging, only 15% of children presented with extraocular retinoblastoma (cT4). The average time from the onset of the first symptom to clinical presentation was 3,5 months. Chemotherapy associated with surgery was the treatment of choice (85% of patients), radiotherapy was reserved for 20% of patients, with 50% of children achieving complete regression. The overall survival outcomes were mixed, 10% alive with relapse, 35% succumbing to the disease and 5% lost the follow-up.

**Conclusion :** RB is curable in 90% cases in the developed countries, while the cure rate continues to be far lesser in developing countries. Advances in the knowledge of its tumor, biology and drug response and the development of new routes of drug delivery promise to lead to additional new, more effective, and less toxic therapies in RB.

### 170 : Mobilisation and collection of haematopoietic stem cells for autograft: The Tunisian paediatric experience

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**Introduction :** Haematopoietic stem cell (HSC) autotransplantation is an essential step in the treatment of high-risk neuroblastoma (NBHR) in children. The mobilisation and collection of HSC is a complex procedure du to the large variability between individuals. Our aim was to report the experience of a Tunisian paediatric oncology unit in the mobilisation and collection of HSC in a series of children followed for NBHR.

**Materials and Methods :** A retrospective study over a six-year period (2017-2023) including all children followed up for NBHR at the paediatric oncology unit of of the Tunis Children's Hospital and treated with high-dose chemotherapy followed by HSC autograft.

**Result :** During the study period, 34 children followed for NBHR received an autograft. The sex ratio was 1.83. Median age was 42 months [14-108months]. 55 cytaphereses were performed. The median number chemotherapy courses prior to mobilisation was 6 courses [5-16 courses]. The mobilisation regimens were VP16- carboplatin in 88% of cases. Stem cells were mobilised with G-CSF in all cases, in one case in combination with plerixafor. The median number of days of mobilisation was 6 days [3-21days] and the median number of peripheral C34+ cells on the day of cytapheresis was 31 VA/µl [20-103VA/µl]. The mean graft size was 3.8\*106VA/kg weight [0-17.106VA/kg]. The number of cytaphereses per person resulting in a good graft was one in 20 cases (59%), two in 9 cases (27%), three in four cases and four in one case. The median number of peripheral stem cells on the day of cytapheresis and the size of the graft were higher in the first mobilisation. **Conclusion :** Although HSC collection is now a routine procedure, it remains a challenge in the paediatric population. Graft size is influenced by a number of factors including stage of disease, number of chemotherapy regimens received and as yet unexplained inter-individual variability.

#### 171 : Visual prognosis of optic gliomas in children

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**Introduction :** Optic tract gliomas (OTG) are rare low-grade benign brain tumours. The prognosis is rarely life-threatening. However, functional prognosis, especially visual prognosis, is an important issue and a priority in the management of these patients. Our aim was to investigate the clinical and evolutionary features of ophthalmological involvement in OTG.

**Materials and Methods :** Retrospective descriptive study conducted at the paediatric oncology unit of the Tunis Children's Hospital over a 14-year period [2009-2023] including all children with OTG.

**Result :** We collected nine cases : three gliomas of the optic nerve, three gliomas of the optic chiasm, and three gliomas extending to the hypothalamus. The sex ratio was 1.25. The mean age at onset of visual symptoms was 4.8 years [6months -12years] and the mean age at diagnosis of GVO was 5.4 years [6months-14years], giving a mean time to diagnosis of 7 months. Ophthalmological signs revealed the disease in all cases. The most common symptoms were decreased visual acuity and nystagmus in three cases each, followed by exophthalmos in two cases and strabismus in one case. Visual acuity was not quantifiable in four cases due to the young age of the patients In the other patients the visual impairment was mild in one, moderate in one and severe in three. Funduscopic examination (FE) showed papillary pallor in 7 cases, unilateral papilledema in 1 case and return to normal in 1 case. Papillary optical coherence tomography was performed in 2 cases and showed a decrease in RNFL thickness. Goldmann perimetry was performed in only one child and showed bitemporal hemianopia. Visual acuity was assessed during postchemotherapy follow-up in 6 cases, with a mean of 2.4/10 for the most affected eye. FE showed papillary pallor in all patients.

**Conclusion :** Visual prognosis may be compromised in GVO. Early diagnosis and treatment, together with rigorous and prolonged multidisciplinary monitoring, are essential.

### 172 : Rhadomyosarcome in children: Clinical aspects, Evolution and Prognostic factors

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**Introduction :** Rhabdomyosarcoma (RMS) is the most common malignant mesenchymal tumour in children. It accounts for 60-70% of mesenchymal tumours in children. The aim of our study were to describe the clinical, therapeutic and evolutionary aspects of paediatric RMS, to study survival and to identify factors associated with a poor prognosis.

**Materials and Methods :** Retrospective descriptive study conducted from January 2008 to December 2022, collecting all cases of RMS treated at the paediatric oncology unit of the Tunis Children's Hospital.

**Result :** Fifty cases of RMS were included. The mean age was  $69\pm42.6$  months. The sex ratio was 2.8. The mean time to diagnosis was 71.88±65.73 days. The genitourinary system was the predominant primary site (32%). 80% of the tumours were located in an unfavourable site. Embryonal RMS was the most common histological subtype (66%). The tumour was metastatic in 28% of cases, mainly to the lungs (26%). The

majority of patients were classified as high and very high risk. Patients were treated according to the RMS 2005 protocol. 56% of patients underwent surgery. Resection was macroscopically complete in 82% of cases and microscopically complete in 42% of patients. Radiotherapy to the tumour bed was performed in 58% of patients. Tumour recurrence was observed in 15 patients (30%). Median time to relapse was 24.14 months [1-132 months]. Overall survival at 5 years was 58.3% and event-free survival was 17%. The main factors significantly influencing survival were disease stage (p=0.009), lymph node involvement (p=0.04), tumour operability (p=0.03), quality of gross resection (p=0.03) and treatment goups (p=0.013). Stage of disease was the only independent prognostic factor influencing survival (p=0.010; HR=11.40; 95% CI [1.77-73.43]). **Conclusion :** Difficulties remain in the management of refractory and relapsed disease due to the lack of clear recommendations and the unavailability of targeted therapies in Tunisia.

### 173 : High-risk neuroblastoma in paediatrics: experience of the paediatric oncology unit at the Tunis children's hospital

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**Introduction :** Neuroblastoma is the most common extracranial malignant solid tumour in children. Half of the children belong to the high-risk group (HRNB), which is the most challenging subgroup from both a diagnostic and therapeutic point of view. The aim of our study was to determine the epidemiological, clinical and evolutionary characteristics of HRNB.

**Materials and Methods :** This is a retrospective descriptive and analytical longitudinal observational study, from January 2009 to December 2019, collecting all HRNB at the paediatric oncology unit of the children's hospital in Tunis.

**Result :** We included 59 cases of HRNB. The mean age at diagnosis was 40 months. The sex ratio was 1.36. The median time of diagnosis was 40 days. The main presenting features were altered general condition (48%) and prolonged fever (46%). The primary tumours were abdominal (n=55) or thoracic (n=4). MYCN was amplified in 74% of cases and 52 of our patients had metastatic disease. Surgery was performed in 56% of our patients and 66% had complete resection of the primary tumour. Myoablative chemotherapy followed by haematopoietic stem cell transplantation was performed in 23 patients, 28 patients received radiotherapy and 22 patients received retinoic acid. Complete remission was achieved in 15 cases, 10 of which relapsed. There were 41 deaths, 32 of which were due to progressive disease. Median follow-up was 23 months. At 5 years, overall survival was 19% and event-free survival was 18%. Risk factors were tumour location, LDH, MYCN status, number of bone metastases, surgery, myoablative chemotherapy, radiotherapy and consolidation. On multivariate analysis, only LDH and number of bone metastases were significant factors for overall survival. Intensification of treatment helped to reduce relapse and mortality.

**Conclusion :** The prognosis of HRNB has improved since the introduction of intensified multimodal treatment. The current management of our patients is in line with international recommendations.

#### 174 : Bilateral adrenal neuroblastoma in children: a two-case report

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**Introduction :** Neuroblastoma (NB) is the most frequently-occurring extracranial childhood tumor. However, bilateral adrenal neuroblastoma is rare and can be due to multifocal primary or contralateral metastasis. Staging is confusing in these patients and treatment guidelines are difficult to set.

**Materials and Methods :** We present two cases of children diagnosed with bilateral adrenal neuroblastoma in order to describe the clinical presentation and to discuss the treatment of this rare condition.

Result : Two cases of bilateral adrenal neuroblastoma in children are reported. The first patient is a girl who was presented at the age of 18 months with an abdominal mass and a subcutaneous nodule on the forehead. The CT scan and biopsy concluded to a bilateral metastatic adrenal neuroblastoma involving the liver, bone, lungs, and skin, classified as stage IVs with intermediate risk. Nmyc gene was not amplified. She had neoadjuvant chemotherapy with a partial response. She had an adrenalectomy on the right side and a tumorectomy on the left side. No postoperative complications were noted. The patient is currently undergoing post-operative immunotherapy. The second patient is a boy who presented at the age of a month and a half with an abdominal mass and a hepatomegaly. The investigations concluded to a bilateral adrenal neuroblastoma with liver metastasis. The tumor was classified as stage IVs (pepper's syndrome). The Nmyc gene was not amplified. The patient had neoadjuvant chemotherapy and was later operated at the age of 5 months. He had an adrenalectomy on the left side and a tumorectomy on the right side. The postoperative evolution was favorable with complete remission. Conclusion : Such simultaneous occurrence of primary adrenal neuroblastoma is unusual, and appears to reflect the multicentric origin of this tumor.

# 175 : Cervical neuroblastoma in children: clinical features and surgical management

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**Introduction :** The neuroblastoma is an embryonal malignant tumor that's frequent in early childhood. However, cervical neuroblastomas are rare, accounting for approximately 5%. The purpose of this work is to assess the clinical features in cervical neuroblastoma and report our experience in its surgical treatment.

**Materials and Methods :** We conducted a retrospective study including patients with cervical neuroblastoma managed at the Pediatric Surgery Unit in Fattouma Bourguiba University Hospital of Monastir, between 2011 and 2023. Clinical features, surgery management and outcomes were analyzed.

**Result :** Seven patients, 4 girls and 3 boys, were enrolled. Ages at diagnosis ranged from 24 days to 4 years. Predominant symptoms included cervical swelling (50%), periorbital edema (16%), and respiratory manifestations (33%). All patients underwent chest X-rays, cervical ultrasounds, and CT scans, with diagnosis confirmed via biopsy. Four patients exhibited mediastinal extension, two had hepatic metastases, and one presented with bone marrow and orbital involvement. Two patients underwent immediate surgery followed by chemotherapy, while 3 others were operated on post neoadjuvant chemo-radiotherapy, and 2 received

palliative chemo-radiotherapy. Post-operative complications included dysphonia, dysphagia, ptosis, respiratory distress, and infectious pneumonia. Outcomes varied, with complete remission observed in 3 patients, disease stabilization in 2 others, tumor progression and fatality in two.

**Conclusion :** Cervical neuroblastoma presents mainly with cervical swelling but other presentations can also reveal the disease. The surgical treatment presents many challenges concerning the choice of the surgical approach and the postoperative complications.

### 176 : Epidemiology and outcome of pediatric cancers in a tertiary care center in Tunis

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**Introduction :** In Tunisia, data regarding childhood cancer's rates and survival are unknown. The aim of our study was to describe the clinical and evolutive characteristics of pediatric cancers in a tertiary care center in Tunisia.

**Materials and Methods :** This was a retrospective cohort study of outcomes for children with cancer carried out at the Pediatric Oncology Unit in the department of Pediatric Medicine A at Children's Hospital Center of Tunis covering the decade 2012-2021.

Result : Our study included 563 patients. Male/female ratio was 1.18. The median age at diagnosis was 3 years and relative incidence was higher in children aged 1-4 years (54%). The median diagnostic delay was 4 weeks (IQR : 2-9), and 29% of our patients were diagnosed with metastatic disease. The most frequent tumours in our study were neuroblastoma (23,6%), renal tumours (17,2%), retinoblastoma (10,7%), lymphomas (9,9%) and soft tissue tumours (9,6%). Less frequently, we reported malignant bone tumours (7,3%), leukaemia (5,2%), central nervous system tumours (5%), malignant germ cell tumours (4,1%), Langerhans histiocytosis (3,9%) and hepatoblastoma (2,8%). A remission has been achieved in almost 80% of cases after induction therapy. At a mean followup of 44 months ±34, mortality rate was 29,8% and 5-year Overall survival was 69%. Multivariate analysis demonstrated that independent factors predictive of survival were leukemia (p<0.001), metastatic spread (p<0.001), cancer relapse (p<0.001) and travel distance to hospital longer than 100 kilometers (p=0.018).

**Conclusion :** Despite the difficulties encountered in the management of childhood cancers in Tunisia, the results in terms of survival are satisfactory but can be better by raising public awareness, training primary care doctors and by improving the quality of care.

### 177 : Congenital Neuroblastoma: diagnosis and treatment about seven cases and literature revue

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**Introduction :** Congenital neuroblastoma accounts for 5% of all cases of neuroblastoma, with the majority being diagnosed within the first 2 months of life. Its prognosis is favorable, hence the importance of prompt

management. The aim of this work is to describe the clinical features of congenital neuroblastoma and to discuss its therapeutic management.

**Materials and Methods :** Retrospective study including all patients diagnosed with neuroblastoma before the age of 2 months, between 2016 and 2023, collected in the pediatric surgery department of Monastir.

Result : Seven patients under 2 months of age were hospitalized for management of neuroblastoma between 2016 and 2023: 3 girls and 4 boys. The mean age was 1.6 months with extremes ranging from 1 day to 2 months. All patients initially presented with abdominal distension, with hepatomegaly in 3 cases; 1 patient had a prenatal diagnosis of abdominal mass. All patients underwent abdominal ultrasound and thoracoabdomino-pelvic CT scan. Neuroblastoma was mediastinal in 1 case, unilateral adrenal in 4 cases, bilateral adrenal in 1 case, and median in 1 case. Neuroblastoma was associated with heterogeneous micronodular hepatomegaly in the context of Pepper syndrome in 3 cases. CT scanguided biopsy of the tumor mass confirmed the diagnosis of neuroblastoma in all cases, and liver biopsy showed hepatic localization of neuroblastoma in 3 cases. N-Myc gene was amplified in 5 cases. Bone marrow infiltration was present in 3 cases. All patients received neoadjuvant chemotherapy. All patients underwent complete resection of the mass. Only one patient received adjuvant chemotherapy. Postoperative clinical and radiological follow up was marked by the absence of recurrence in all patients.

**Conclusion :** Although congenital neuroblastoma is rare, it should be considered in any patient under 2 months with an abdominal mass to ensure early diagnosis and appropriate management.

#### 178 : Vaginal Clear cell carcinoma in a 12-year-old Girl

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**Introduction :** Vaginal clear cell carcinoma is an extremely rare pathology. Their occurrence in children raises unique clinical, diagnostic and therapeutic challenges. Recurrence patterns, especially in regional lymph nodes or distant metastases, impact the prognosis and the overall survival.

**Materials and Methods :** We report the clinical and imaging features as well as the therapeutic modalities of a 12-year-old patient diagnosed in 2019 with vaginal clear cell carcinoma.

Result : A 12-year-old girl presented at our institution for continuous vaginal bleeding. Pelvic MRI revealed a voluminous endoluminal mass occupying the vagina and the uterine cervix, measuring 6 x 5 cm. The ovaries and the uterine body were normal, but involvement of the right internal iliac lymph nodes was detected. Workup revealed two pulmonary metastases. Vaginoscopy showed a fragile and necrotic mass filling the upper vagina. Clear cell carcinoma was confirmed by immunohistochemistry. After three courses of chemotherapy (carboplatinpaclitaxel), disease was stable. The patient underwent external radiotherapy using 3D technique with concurrent Cisplatin. Total dose of 45 Gy/25 Fr/32 days to the vagina, the cervix, uterine body, parametria, and lymph node chains including common, internal and external iliac, obturator and superior presacral. The patient was referred to surgery for the residual mass. An anterior exenteration with pelvic and lumbo-aortic lymphadenectomy was performed. Definitive pathology analysis concluded to a clear-cell carcinoma invading the vagina, cervix and uterine body. Lateral aortic lymph node was involved. Pulmonary metastasectomy was also performed. Metastatic recurrence in the lung was detected one vear post-operatively. Second-line chemotherapy was based on 6 courses of Doxorubicin and Cisplatin. After an 8-month follow-up, the pulmonary lesions were stable.

**Conclusion :** Vaginal clear cell carcinoma is rare in pediatric population, with a high incidence of stage III and IV disease is often observed.

Recurrence patterns and fertility-sparing treatment poses significant challenges for clinicians.

#### 179 : Insights into Youth Cancer Patterns in Monastir: Understanding Incidence and Epidemiological Characteristics

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**Introduction :** Cancer among young individuals is a critical public health concern due to its long-term health implications. In Monastir, a city exposed to various risk factors, understanding the incidence and types of cancers among the youth is essential for developing tailored prevention strategies. Our objective was to analyze the incidence and epidemiological characteristics of cancers among young individuals in Monastir.

**Materials and Methods :** This descriptive monocentric study was conducted in the governorate of Monastir from January 2002 to December 2013. We included the examination of all cases of infiltrating cancers diagnosed in residents of Monastir under the age of 20 during this period, whether diagnosed and treated locally or outside the region. Data were collected from clinical sources in both the public and private sectors, primarily from the central registry of the center and the regional registry of hospital morbidity.

**Result** : During early childhood before the age of 5, the most common tumors were those of the central nervous system (CNS)(n=57) with a standardized incidence rate (SIR) of 10.6 per 100,000 person-years (PY) in males and 8.1 per 100,000 PY in females. In second place, kidney cancer (n=14) with an SIR of 2.32 per 100,000 PY in males and 2.48 per 100,000 PY in females. In third place, malignant hematopathies (n=13) with an SIR of 2.88 per 100,000 PY in males and 1.77 per 100,000 PY in females. During childhood and adolescence (ages 5 to 19), there were 61 patients with tumors of the oral cavity, 59 patients with malignant hematopathies with an SIR of 3.75 per 100,000 PY in males and 3.27 per 100,000 PY in females. We noted 54 patients with CNS tumors with an SIR of 3.05 per 100,000 PY in males and 3.7 per 100,000 PY in females.

**Conclusion :** This study has highlighted the diversity of cancers affecting young individuals in Monastir, underscoring the need for targeted prevention strategies aimed at raising awareness, promoting healthy lifestyles, and reducing risk factors to enhance their long-term well-being.

### 180 : Pediatric gastrointestinal tumors: Epidemiologic, clinical and therapeutic characteristics

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**Introduction :** Gastrointestinal tumors in children enclose a spectrum of diverse conditions, ranging from benign to malignant, and they can impact various segments of the digestive system. Although relatively rare in the pediatric population, these tumors pose significant challenges in terms of diagnosis and treatment. Therefore, multidisciplinary care is essential for achieving optimal management and outcomes.

**Materials and Methods :** This is a descriptive retrospective study of 79 children with gastrointestinal tumors, treated during 24 years at Pediatric Surgery Department of Fattouma Bourguiba hospital.

**Result :** There were 49 cases of polyp, 26 cases of lymphoma, 2 cases of appendiceal neuroendocrine neoplasms, 1 case appendicular mucocele and 1 case of gastric teratoma. The mean age of children with polyp was 5,4 years [2 days-12 years] and female predominance. The discovery

circumstances were an exteriorized mass during defecation in 27 cases, rectal bleeding in 10 cases, following a diagnosis of acute intestinal intussusception in 10 cases and incidental intraoperative discovery in 2 cases. The polyp was rectal in 20 cases, anal in 18 cases, caecal in 1 case, ileal in 9 cases and duodenal in 1 case. Forty patients underwent polyp resection, and nine patients underwent digestive resection with anastomosis. The histological study concluded to a juvenile polyp in 48 cases and a Peutz-Jeghers polyp in 1 case. The average age of patients diagnosed with lymphoma was 7 years [2 months-15 years]. The most common symptoms were abdominal pain and abdominal distension. The histological study showed Burkitt lymphoma in all cases. Twenty-five patients achieved complete clinical remission. Death occurred in 1 case after relapse. The cases of appendiceal neuroendocrine neoplasms and appendicular mucocele were diagnosed incidentally in appendectomy specimens for acute appendicitis. The patient diagnosed with gastric teratoma initially presented with abdominal distension. The abdominal CT scan suggested either a neuroblastoma or a teratoma. The biopsy confirmed the diagnosis of a gastric teratoma. The patient underwent resection of the gastric mass followed by adjuvant chemotherapy, resulting in complete remission.

**Conclusion :** While gastrointestinal tumors are relatively rare in children, they can still have significant implications for the affected child's health and well-being. Early diagnosis and appropriate treatment are essential for improving outcomes and quality of life for pediatric patients with gastrointestinal tumors.

### 181 : Rhabdomyosarcomas in Children: Clinical and Therapeutic features

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**Introduction :** Rhabdomyosarcoma (RMS) is the most common malignant mesenchymal tumour in children. It accounts for 60-70% of mesenchymal tumours in children. In Tunisia, this subject has been little studied, except for some clinical facts. Our pupose is to describe the clinical, therapeutic of pediatric RMS.

**Materials and Methods :** We conducted a retrospective descriptive study from January 2002 to December 2020 collecting all cases of RMS treated at the pediatric oncology unit of Farhat Hached Hospital.

Result : Forty seven cases of RMS were collected. The mean age at the diagnosis was 5 years and 3 months. The sex ratio was 1,4. The average time between the onset of symptoms and the first consultation was 3.7 months. The symptoms were highly heterogeneous. Tumor syndrome was present in 53% of patients. The most common site was the head and neck orbit (35%). Tumors in unfavorable locations accounted for 38% of cases. Embryonal RMS was the most common histological subtype (75%). The tumour was metastatic in 19% of cases, mainly to the lungs. The majority of patients were classified as intermediate risk group followed by high risk group. Patients were treated according to the SIOP protocols. 89% of patients underwent surgery. Resection was microscopically complete in 45% of patients. Radiotherapy to the tumour bed was performed in 36% of patients. Tumour recurrence was observed in 18 patients. The median time to recurrence was 7.15 months. Relapses were localized at the initial tumor site in eleven cases and metastatic in seven cases. The primary site most prone to relapse was the head and neck. Three patients underwent surgery. Only five patients received radiotherapy. Death occurred in 18 patients.

**Conclusion :** The optimal treatment of RMS requires a multidisciplinary approach. Difficulties remain in the management of refractory and

relapsed disease due to the lack of clear recommendations and, in particular, the unavailability of targeted therapies in Tunisia.

#### 182 : Surgical resection of pulmonary metastases in infants

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**Introduction :** The role of surgery in the treatment of pulmonary metastatic solid tumors, given its disseminated nature, is not intuitive, yet there are circumstances in which surgical resection of metastatic disease can potentially be curative.

**Materials and Methods :** This is a retrospective study spanning from 2002 to 2023 concerning 9 cases of pulmonary metastases operated on our department.

**Result :** Our study included four boys and five girls. The average age was 8 years. These pulmonary metastases are secondary to nephroblastoma in five cases, to rabdomysarcoma in two cases, to Ewing's sarcoma in one case and to embryonic carcinoma in one case. Eight patients out of nine were operated on for their primary cancer. Pulmonary metastases were present in all of our patients at the time of diagnosis. The diagnosis was established by a thoracic scan in all cases. Metastatic lesions were localized in the right lung in 75% of cases. The first approach was a posterolateral thoracotomy for eight patients, while the thoracoscopic approach was performed in a single patient. Excision was performed by wedge resection in eight of our patients (87.5%), and lobectomy with wedge resection in one patient. The histology was similar to that of the primary tumor in all cases. The outcome was favorable in all our patients. **Conclusion :** Although management of metastatic disease relies heavily on systemic therapies, surgery plays an important role in the treatment of several pediatric metastatic solid tumors. In some cases, the surgery is therapeutic, and in some, it plays a diagnostic role and guides further systemic treatment.

### **183 : Epidemiology and outcome of pediatric Brain tumors in a single center in Tunis**

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**Introduction :** There are few publications regarding pediatric Central Nervous System tumours in developing countries and particularily in Tunisia. We aimed to provide epidemiologic features of primary malignant CNS tumors in Tunisian children in a tertiary care center.

**Materials and Methods :** We performed a retrospective study of clinical, pathological profile, and outcomes of children <18 years diagnosed with CNS tumors in Bechir Hamza Children's Hospital from January 2013 to December 2023. Histopathological categorization was done as per the WHO classification 2007.

**Result :** A total of 34 children were diagnosed with female preponderance of 59%. The mean age was 50 months (Q1=23, Q2=124). Highest incidence was noted in the age group of 1 to 4years (41 %). Low grade glioma was the most common tumor in our study (64%). Medulloblastoma was the most second common tumor (15%). Glioblastoma constituted to only about 15% of all tumors, followed by ependymoma and craniopharyngioma (about 3% of all tumors each). Fifty three percent of patients underwent either resection or biopsy. Chemotherapy was administrated to 32 children. Nine patients performed radiotherapy. Seven patients died due to the progression of disease. Twenty five of patients are

alive. We have reported complete remission in nine children and partial response in 23 cases.

**Conclusion :** The results of our study present an important epidemiological understanding of patients with CNS tumors and emphasizing the great need of multicentric studies. It is important that our country prioritize the development of infrastructure and resources to provide specialized medical and surgical care for effective CNS pediatric tumors management.

# **184** : Genetic cancer predisposition and pediatric central nervous system tumors : a report from a single center in Tunis

### Saidi M, Fedhila F, Jbebli E, Jbeli Y, Ben Ahmed S, Amdouni R, Rhayem S, Khemiri M

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**Introduction :** Studies have demonstrated that 8%-19% of pediatric central nervous system (CNS) tumor patients harbor a germline alteration in a classical tumor predisposition gene. To our knowledge, there is no tunisian publication regarding genetic cancer predisposition associated to CNS pediatric tumors.

**Materials and Methods :** This was a retrospective study of children with genetic predisposition cancer having central nervous system tumors and carried out at the Pediatric Oncology Unit in the department of Pediatric Medicine A at Children's Hospital Center of Tunis covering the decade 2012-2023.

**Result :** We have collected eleven cases: four boys and seven girls. The mean age was 11 years (ranges :27months-14 years). We have reported six cases of type 1 Neurofibromatosis, four cases of Constitutional mismatch repair deficiency (CMMRD) and one familial ependymoma. There was a family history of predisposition to cancers in only one case. The tumors reported were low grade glioma (6), glioblastoma (4) and ependymoma (1). The diagnosis of cancer reveals genetic predisposition syndrome in the majority of cases. Molecular testing genetic for analysis of genetic predisposition confirmed the diagnosis in only one case. Five patients underwent either resection or biopsy. 10/11 patients received chemotherapy and radiotherapy was performed in five cases (glioblastoma and ependymoma). Three patients having glioblastoma died, the other patients are alive : one in progression (ependymoma) and the others have partial response to chemotherapy (glioma).

**Conclusion :** The understanding of genetic syndrome predisposition can help the pediatrician in their prompt recognition, leading to an informed genetic counseling for families.

#### 185 : Malignant ovarian tumors in children and adolescents

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**Introduction :** Ovarian tumors are uncommon lesions in children and adolescents. The actual incidence of ovarian lesions in young girls is unknown. An approximate incidence has been estimated as 2.6 cases annually/100,000 girls, and malignant ovarian tumors comprise about 1% of all childhood cancers. This study aims to study the clinicopathological characteristics of malignant ovarian masses in children and adolescents.

**Materials and Methods :** A retrospective study involving patients under the age of 15 who underwent surgery at the pediatric surgery department of Fattouma Bourguiba Hospital for malignant ovarian tumors between the years 2012 and 2023.

**Result :** In the 11-year study period, 9 patients were operated upon for malignant ovarian tumors at our hospital. The mean age of the patients at

presentation was 10 years (range 2–14 years). The most common presenting complaint was abdominal swelling in 5 (55.5%) patients, abdominal pain 3 (33.3%) and menstrual disorders 1 (11.1%) patients. The size of the ovarian mass ranged from 10 to 25 cm. It was located on the right side in 4 cases and on the left side in 5 cases. One case involved a Sertoli tumor, one case showed immature teratomas, one case presented a yolk sac tumor, one case had an ovarian dysgerminoma, one case was diagnosed with gonadoblastoma, and two cases (14.28%) were identified as juvenile granulosa cell tumor.

**Conclusion :** Early diagnosis of ovarian masses in young girls is important. Since most of these masses are benign, operation should be designed to optimize future fertility, while the treatment of malignant tumors would involve complete staging, resection of the tumor, postoperative chemotherapy when indicated, to give the patient a chance for future childbearing.

#### **186 : Investigating Prognostic Factors in Neuroblastoma: Observations from the Oncology pediatric Center in Sousse**

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**Introduction :** Neuroblastoma, originating from primitive sympathetic nervous system cells, commonly arises in the adrenal medulla or paraspinal ganglia. It is the primary extracranial solid tumor in childhood, occurring in various anatomical locations. This study seeks to analyze prognostic determinants in neuroblastoma.

**Materials and Methods :** A 27-year retrospective study was conducted at Farhat Hached University Hospital's medical oncology department in Sousse. 66 neuroblastoma patients were included, spanning January 1, 1997, to December 31, 2023.

**Result :** The mean age was 32.4 months (1 to 120 months), predominantly male, with 38 patients aged over 18 months at the time of diagnosis. The predominant site of the primary tumor was abdominal extra-adrenal in 45.2% and adrenal in 29%. Metastasis was noted in 61.7% of cases. Regarding biological data, elevated levels of LDH were observed in 36 patients, while elevated ferritin levels were found in 3 patients. Pathologically, the degree of differentiation was specified in 14 patients, revealing poorly differentiated in 7 patients and undifferentiated in one. In terms of genetic characteristics, the search for chromosome 1p deletion was conducted in 19 patients, with 8 yielding positive results. Additionally, the investigation for BIRC5 gene amplification was conducted in 15 children, with 7 showing positive results. The analysis for N-myc gene amplification was carried out in 34 patients, revealing amplification in 52.9% of cases. The analysis demonstrated that age exceeding 18 months, metastatic disease, high-risk categorization, and Nmyc oncogene amplification were linked to worse prognoses, with corresponding p-values of 0.031, 0.001, 0.000, and 0.041, respectively. The study indicated a 5-year survival rate of 48%.

**Conclusion :** This study underscores the prognostic significance in neuroblastoma, highlighting factors such as age, metastasis, risk classification, and N-myc oncogene amplification, all crucial in determining patient outcomes.

### 187 : Perivascular epithelioid cell tumor (PEComa): a rare tumour that should be known

Ben Salah R, Baccouche A, Laaribi S, Toumi A, Sahnoun L, Sfar S, Ben Fredj M, Ben Youssef S, Mosbahi S, Kechiche N, Laamiri R, Ksia A, Mekki M, Belghith M

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**Introduction :** Perivascular epithelioid cell neoplasms (PEComas) are formed as a rare group of related mesenchymal tumors composed of histologically and immunohistochimically distinctive perivascular cells, which expresses both myogenic and melanocytic markers. Many anatomic sites can be affected. Because of its rarity, little is known about these tumors

**Materials and Methods :** We report the case of a child with abdominal PEComa that was operated on in our department.

**Result :** The patient was 10 years old and presented with abdominal pain developing since 4 days. The physical examination was unremarkable. Abdominal CT scan showed a well-defined oval interhepato gastric tissue mass that was spontaneously hypodense and homogeneous with moderate heterogeneous enhancement after iodine injection. This lesion was in contact with the gastric minor curvature without parietal invasion of the stomach. It also comes into contact with the abdominal muscular wall without any sign of invasion. No coeliomesenteric or hepatic adenomegaly were found. A fine-needle biopsy was performed, concluding to an inflammatory myofibroblastic tumour. The child underwent surgery, with macroscopically complete resection of the tumour. Pathological examination of the specimen concluded to a perivascular epithelioid cell tumour (PEComa) with uninvaded excisional margins. The tumor cells immunestained was positive for HMB-45. The patient was controlled by abdominal CT scan three months later which haven't shown any recurrence.

**Conclusion :** This kind of tumor is extremely rare and the natural history of PEComa is uncertain. Only after long term follow-up can we know whether the tumor is benign or malignant. It appears that longer clinical follow-up is necessary in all patients with PEComas.

#### **188 : Surgical management of Ewing sarcoma of the rib in children: Our experience**

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#### Pediatric Surgery Department, Fattouma Bourguiba University Hospital, Monastir, Tunisia

**Introduction :** Ewing's sarcoma, comprising 1% of cases in children under 15 and 2% in teens aged 15 to 19, is a prevalent bone cancer. It typically originates in long bones and pelvic bones, with ribs accounting for 10% of cases. Complete resection with adequate margins is the main goal, potentially avoiding radiation therapy. However, the optimal extent of surgical intervention remains uncertain. Our aim was to Evaluate surgical management and associated outcomes in pediatric costal Ewing sarcoma.

Materials and Methods : Our study involved a retrospective analysis of patients diagnosed with primary Ewing sarcoma of the ribs who underwent surgical treatment at our institution from January 2010 to December 2020 Result : we included 9 patients aged 2 to 14 years, with histological confirmation achieved through CT-guided biopsy in all cases. Bone scintigraphy, bone marrow biopsy, and abdominopelvic CT scan assessed tumor extension, followed by neoadjuvant chemotherapy. Rib resection, performed in most cases, involved more than one rib in 7 patients. Rib resection was not feasible in one patient due to tumor expansiveness, and only one pathologic rib was resected in another case. Additional procedures included partial diaphragm resection (1 patient), lung wedge resection (2 patients), and pleural nodule removal (1 patient). Primary closure was achieved in 8 patients, while reconstruction with a prosthesis covered by a muscle flap was done in one patient. Microscopically positive or close margins were observed in 4 patients. Seven patients required admission to the ICU. The primary complications observed included one

case of surgical site infection, one case of hematic pleural effusion necessitating chest tube drainage, and one case of nosocomial infection. Postoperative radiotherapy was administered to eight patients. During follow-up, one patient succumbed to tumor progression, two experienced tumor recurrence, one underwent reoperation for pulmonary metastasis, and five patients have remained in complete remission for nearly three years.

**Conclusion :** Collaborative medical and surgical treatment are crucial for improving the ouctomes of children diagnosed with Ewing sarcoma of the rib.

### 189 : Surgical management of difficult oncologic pediatric cases with multidisciplinary team work

Toumi A, Ben Fredj M, Messaoud M, Ben Salah R, Ben Youssef S, Mosbahi S, Sfar S, kechiche N, Lamiri R, Ksia A, Mekki M, Belghith M, Sahnoun L

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**Introduction :** Pediatric oncology surgeons are key in treating childhood solid tumors, but challenges like vascular extension and proximity to critical structures require multidisciplinary teams for optimal outcomes

**Materials and Methods :** We reviewed 6 oncological pathologies that necessitate the collaboration of pediatric surgeons with the cardiovascular, reconstructive, and plastic surgery teams over the last 3 years.

Result : The first case of a 2-month-old infant presented with a large retroperitoneal neuroblastoma encasing major blood vessels. Despite preoperative chemotherapy, the tumor continued to grow, prompting surgical intervention. The 6 cm mass was successfully removed with collaboration from cardiovascular surgeons, resulting in complete tumor resection. Similarly, a 2-year-old girl with mediastinal ganglioneuroblastoma extending into the cervical region underwent surgery following neoadjuvant chemotherapy. Using the Cormier Dartevelle-Grunenwald approach, complete tumor removal was achieved, leading to favorable outcomes. Additionally, two patients, aged 4 and 2 years, had metastatic nephroblastoma with intravascular thrombus extending into the cavo-atrial region. After neoadjuvant chemotherapy and collaboration with cardiovascular surgeons, nephrectomy was performed. In one case, successful removal of the thrombus was achieved, while in the other, extraction was impossible. They both died because of tumor progression. Another case involved a10-year-old girl with a massive Ewing sarcoma of the chest wall underwent resection of the 5th, 6th, and 7th ribs, along with wedge resections in the upper and lower left lobes. Reconstruction involved a dorsal muscle flap and synthetic prostheses under plastic surgeon supervision. Finally Collaboration with cardiovascular surgeons enabled successful complete resection while preserving vascular axes in a 4-year-old girl with pelvic rhabdomyosarcoma involving the left internal and external iliac arteries. Conclusion : This collaboration underscores our commitment to enhancing patient care through the establishment of additional

enhancing patient care through the establishment of additional multidisciplinary meetings aimed at addressing complex cases and challenging surgical procedures. Through collaboration, we aim to improve patient management and achieve more favorable outcomes.

### **Psycho Oncology**

# **190 : Evaluation of religious cooping In women with breast cancer Speeker : Lajnef**

Fendri S, Lajnef I, Fkih F, Ayari J, Balti M, Ben Nasr S, Haddaoui A

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**Introduction :** The diagnosis and treatment of a serious illness such as breast cancer is a major stressful life event. Faced with such stressors, many subjects turn to religion to find comfort and support. The present study aimed to assess the religious coping and its association with clinical and psychosocial factors in early breast cancer patients.

**Materials and Methods :** Sixty-one women with newly diagnosed breast cancer completed three questionnaires : the Depression, Anxiety, and Stress Scale (DASS-21), the Religious Coping Scale (RCOPE), and the Arabic Scale of religiosity (ARS). Women were interviewed 4 weeks after the diagnosis was announced. The patients were 18 to 65 years old, with histological confirmed breast cancer and no history of psychiatric disease or other cancers.

**Result :** The average age of the patients included in this study was 46.5 years. The majority of them lived in urban areas (82%) and had an average socio-economic level (83.6%). Thirty-two percent (32.8%) of breast cancer patients were diagnosed at an advanced stage (III and IV) and received surgical treatment in 73.8% of cases. Our results indicated that patients with newly diagnosed breast cancer used more positive coping to cope with the disease. A high level of affective religiosity was the best predictor of positive coping.

**Conclusion :** Tunisian women with breast cancer use more positive coping to cope with the disease. Our results show that there is no correlation between patients' psycho- emotional needs and their coping strategies for cancer.

### **191 :** Evaluation of Sleep disturbance in Cancer patients. A cross-sectional study

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**Introduction :** Sleep disturbance (SD) is one of the most common and troubling symptoms that harm the quality of life throughout all phases of treatment and stages of the illness among Cancer patients. The aim of this study is to conduct a cross –sectional study to examine the present status of SD prevalence in patients with cancer and to identify possible increminated fators.

Materials and Methods : Patients (n=56) who where undergoing chemotherapy (Oral or intraveinous), and had been diagnosed with cancer since at least 6 months were interviewed. Study questionnaire included items concerning demographic characteristics, stage of cancer. Sleep disturbance was evaluated through Insomnia Severity index (ISI). The ISI has seven questions. The seven answers are added up to get a total score. Result : Median age was 52.45 years old, 46% were male cancer patients. Patient reported to have a "good" socio-economical level in 63.5% of cases, 64% high school or university educational level. Cancer stage was III or IV for 45 % of patients. Most of the patients were married (88.5%), without comorbidity (77.9%), BMI  $\geq 20$  kg/m2 (74.5%), and nonmetastasis tumor (66.4%). Approximately half of the patients (49.4%) received surgery. The median score was seventy (range: 0-17). Sever insomnia (SI) (score between 22-28) was observed in 35% of patients. Fourty five per cent (45%) of patients reported a moderate clinical insomnia (MI) (score between 15-22). SI was reported in 66% of female patients. Seventy Six (76 %) of patients aged more than 50 Years old reported SI or MI. Patients with BMI <20 kg/m2 (P = 0.024) and nonsurgery (P = 0.015) were more likely to suffer from sleep disturbance. However, there were no differences in marital status, education level, comorbidity and cancer type. Multivariate logistic regression models showed that BMI < 20 kg/m2 [(OR) 0.489, 95% (CI) 0.329–0.948, P =0.029] and non-surgery surgery (OR 0.608, 95% CI 0.358-0.896, P = 0.048) were significant favorable predictors for sleep disturbance . However, age (P = 0.39), gender (P = 0.095), education level (P = 0,405), comorbidity (P = 0.342), metastasis status (P = 0.658), and cancer type (P = 0.77) were not associated with SD.

**Conclusion :** Sleep disturbances in cancer patients are common and are often multifactorial, and likely are comorbid with cancer. BMI< 20, non-surgery exacerbate sleep problems. However, the factors associated with SD in cancer patients remain unclear. Assessment of sleep disorders is mandatory in this population for the obvious interference with quality of life.

# **192** : impact of breast cancer treatment on quality of life in women with non-metastatic breast cancer

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**Introduction :** The many side effects associated with breast cancer treatment can cause physical, functional, psychological and social difficulties. The consequences of all these difficulties can lead to a poorer quality of life at the time of diagnosis, treatment and follow-up for women with breast cancer.

**Materials and Methods :** We conducted a prospective cohort study with longitudinal follow-up of patients treated for non-metastatic breast cancer at the Tunis Maternity and Neonatology Center, over a period of one year. The EORTC QLQ-C30 quality of life questionnaire and its BR23 module specific to breast cancer were completed by 50 patients over 3 evaluation periods, (T1: a basal level), (T2: after surgery and the end of chemotherapy) and (T3: after the end of radiotherapy). To describe changes in quality of life over time and the influencing factors, we used a repeated measures ANOVA model for each of the most important dimensions of the EORTC QLQC30/Br23.

**Result :** The ANOVA analysis shows that the health-related quality of life of women with breast cancer changes over time. The T1 phase of the cancer diagnosis had a negative impact mainly on the emotional, sexual and future perspective functions of quality of life. At T2, the analysis showed that the scores for the various dimensions of quality of life, both generic and specific, fell in a clinically and statistically significant way compared with T1 and T3, implying a negative impact of the treatment, particularly chemotherapy, on patients' quality of life. Q3 was marked by a progressive improvement in the majority of quality of life dimension scores. This implies that the patients were able to overcome the disease.

**Conclusion :** It is important to assess the quality of life of women with breast cancer longitudinally at different points in their treatment trajectory, in order to improve their psychosocial care.

### 193 : Oncologist's concerns and challenges during cancer diagnosis disclosure

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**Introduction :** Announcing a cancer diagnosis is critical yet lacks standardization in Tunisia. Our study aims to describe cancer diagnosis disclosure (CDD) practices among Tunisian oncologists and identify challenges.

**Materials and Methods :** We distributed a 34-item questionnaire via Google forms to medical, radiation and surgical oncologists in Tunisia.

Result : Seventy-nine oncologists responded to our questionnaire. Most respondents were female medical oncologists aged 35-45, with an average of 10.35 years of practice. Almost all participants (97.5%) believed that

patients have the right to be informed about their cancer diagnosis (CD). The majority were unaware of any laws regulating CDD in Tunisia (53%) and stated they had not received specific training in CDD (74.7%) or communication skills (77.2%). Fifty-four per cent of participants perceived the doctor-patient relationship model as an autonomist model. Sixty per cent reported that more than half of patients referred to oncology consultations were unaware of their CD. Thirty per cent of participants always disclosed CD and 20% always explained the term "cancer". The majority of participants did not follow a uniform approach to disclosure and offered a personalized care pathway during CDD consultation (CDDC). All participants admitted to experiencing varying degrees of apprehension concerning the patient's or their family's reaction. The most common obstacle reported was the family requesting the CD not to be disclosed to the patient (95%). Factors associated with not disclosing CD included poor performance status, advanced age, and psychological distress. Twenty-three oncologists (29%) expressed dissatisfaction with their current CDDC. Suggestions for improvement included continuing education, training, and simulation in CDD in 78%, 65% and 52% of respondents, respectively. The predictive factor of satisfaction in CDDC was continuing education (p = 0.046).

**Conclusion :** Training young oncologists in CDD and communication skills is imperative. Continuing education emerges as essential for enhancing CDD, benefiting both patients and oncologists.

### **194** : Workplace-related stress in Oncology department: Insights from two centers in Tunisia

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**Introduction :** Oncology medical personnel are consistently dealing with chronic stress, which can result in a decline in the quality of care provided to patients. This study aims to assess the psychological impact and mental workload of working in a radiation oncology and a medical oncology center.

**Materials and Methods :** This is a cross-sectional survey of working conditions that included 52 medical and paramedical staff: 16 from the medical oncology department at Fattouma Bourguiba Hospital in Monastir and 36 from the radiation oncology department at Farhat Hached Hospital in Sousse. The survey employed a personalized psycho-somatic questionnaire and an MBI (Maslach Burnout Inventory) score.

Result : The study comprised 21 doctors (9 radiation oncologists,3 medical oncologists, and 9 residents),2 supervisors,10 nurses,10 technicians, 3 physicians, 1 dietitian, 4 secretaries, and 2 cleaning personnel. They worked 6 days a week, 6 hours each day, except on-call duty. Approximately 40 patients receive treatment daily, totaling 600 patients per department annually. Just 37% of individuals expressed satisfaction with their employment, while 55% reported feeling productive, and 43% had a sense of professional fulfilment. 82% of the individuals indicated dissatisfaction with job conditions, while nearly 25% expressed career regret. The main challenges at work are anxiousness, low motivation, and limited skill development opportunities, with 61% reporting receiving insufficient instruction. Autonomy and soft skills were satisfactory for 41% and 88% of individuals, respectively. However, half of the participants expressed unhappiness with treatment management, while 80% were unhappy with the timeline. 70% of individuals reported being involved with patients. 90% of the participants acknowledged experiencing feelings of guilt, exhaustion, fatigue, or sadness at least once. 33% of individuals reported anxiety or sadness, while 76% experienced bodily symptoms due to work. Over 50% of the individuals experienced

sleeping difficulties, and 49% had to take a leave of absence because of mental tiredness. In addition, 33% of individuals sought psychological aid and 18% received psychiatric therapy. Around 50% reported discontentment with working conditions, with more than 80% feeling not being adequately compensated. Positively, the majority (88%) expressed optimism for improved work circumstances, while 94% endorsed the establishment of a psychology section for caregivers. MBI score was used to evaluate burnout level. Emotional weariness, depersonalization, and personal accomplishment were assessed as moderate, with scores of 20, 9.5, and 30.28, respectively.

**Conclusion :** healthcare personnel working in cancer departments face considerable stress, especially in our nation where resources are limited. It is crucial to prioritize improving working conditions and allocating resources to enhance professional development. These endeavors are vital for improving patient results and the overall performance of the healthcare system.

#### **195 : Fear of cancer recurrence among adult cancer survivors**

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**Introduction :** Fear of cancer recurrence (FCR) represents a significant psychological burden for cancer survivors, often persisting long after treatment has ended. his study aimed to evaluate the incidence of fear recurrence in adult cancer survivors.

**Materials and Methods :** Forty cancer survivors in remission treated between 2018 and 2024 were assessed for FCR using the Fear of Cancer Recurrence Inventory (FCRI)in the radiotherapy department in the Salah Azaiz institute.

**Result :** In total, 40 cancer survivor patients responded to the questionnaire, 62.5% women and 37.5% men. The median age was 53 years (25-77 years). Twelve patients were treated for breast cancer, seven for prostate cancer, eight for head and neck cancer, seven for gynecological cancer, one for lung cancer and five for digestive cancer. All patients received radiotherapy, 77.5% underwent surgery and 70% received chemotherapy. The average FCRI score was 14.45 (0-32). Fifty percent of patients had mild to moderate FCR, 25% had severe/pathologica FCR, and 25% had clinical FCR. Younger age, higher education level and chemotherapy were significantly associated with severe/pathological levels of FCR (p < 0.001). There was no correlation between martial status and FCR rate. A delay of less than 6 months since the end of treatment was significantly associated with a high FCR rate (p<0.001). Sleep disturbances as well as fatigue and difficulty anticipating were significantly associated with clinical FCR (p < 0.01).

**Conclusion :** Our results highlight the variable severity of FCR experienced by survivors, with younger age, higher education level, and chemotherapy significantly correlating with increased levels of fear. Additionally, sleep disturbances, fatigue, and difficulty anticipating emerged as significant indicators of clinical FCR. These findings emphasize the importance of addressing FCR in survivorship care, with the goal of reducing psychological distress and improving overall wellbeing in this vulnerable group of patients.

### **196** : Natural caregivers of cancer patients: Quality of life and caregiving burden

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**Introduction :** The incidence of cancer has increased in Tunisia. Furthermore, survival rates are improving, and cancer is often becoming a chronic condition. Concurrently, the caregiving burden experienced by natural caregivers is increasing. The physical and psychological distress experienced by natural caregivers of cancer patients has been underexplored in Tunisia. The aim of this study was to investigate the relationship between quality of life and caregiving burden experienced by natural caregivers of cancer patients and to identify the various factors influencing these parameters.

**Materials and Methods :** A descriptive, cross-sectional, and prospective study was conducted on a sample of 56 natural caregivers of cancer patients. Data collection was performed using a pre-established questionnaire containing sociodemographic characteristics of the natural caregivers as well as those of the patients. Caregiving burden was assessed using the abbreviated version of the Zarit Burden Interview. Quality of life was evaluated using the SF-36 questionnaire.

**Result :** Our sample consisted of 56 natural caregivers and 56 patients treated in the medical oncology department. The mean age was 47.7 years. Fifty-seven percent of the natural caregivers reported moderate to severe caregiving burden. The mean quality of life score was estimated at 47.2, indicating impaired quality of life according to the Leam score. We concluded a statistically significant relationship between quality of life and caregiving burden (p: 0.03). Poor quality of life among natural caregivers was associated with female gender (p: 0.23). Lung cancer localization and stage 4 were factors contributing to impaired quality of life.

**Conclusion :** Our results highlight the impact of cancer on natural caregivers. Interventions targeting natural caregivers should be considered.

# **197** : Correlation Between Quality of Life and Emotional State of Patients in Oncology Settings

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**Introduction :** The announcement of a cancer diagnosis on one hand and the initiation of chemotherapy on the other represent a destabilizing experience and generally evoke strong concerns from patients. This study aims to determine the impact of chemotherapy on the quality of life and emotional state of patients undergoing treatment for cancer without psychiatric history.

**Materials and Methods :** A descriptive, cross-sectional, and prospective study was conducted on a sample of patients undergoing cancer treatment with chemotherapy. Data collection was performed using a pre-established questionnaire containing sociodemographic and clinical characteristics. We utilized the SF-12 test in its validated Arabic version to measure the quality of life of patients, as well as the HADS scale to assess anxiety and depressive disorders in patients undergoing chemotherapy. The collected data were entered and processed using Microsoft Excel 2019 and SPSS 25 software.

**Result :** Our study included 80 patients undergoing cancer treatment with chemotherapy. Most patients were over 55 years old (65%), female (71%), married (78%), and had a university education level (48%). Among these patients, 62% had localized cancer and received curative chemotherapy. The mean score for the physical component of quality of life was 39.52 (<50), and for the mental component, it was 46.86 (>43). The majority of the population (86%) had a deterioration in physical score, and 42% had a deterioration in mental score. One in four patients, accounting for 21% of the population, exhibited certain anxiety symptoms, while certain depressive symptoms were found in 16% of patients. The level of emotional distress and quality of life were independent of

sociodemographic and clinical variables. A significant correlation between SF12 and HADS scores was found (P=0.004).

**Conclusion :** These results indicate that the quality of life in its physical dimension was more impaired than in its mental dimension. An associated anxiety-depressive symptomatology further worsened this quality of life.

### **198** : Religion and spirituality as a coping mechanism in Tunisian cancer patients

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**Introduction :** Recent research has found that religious and spiritual beliefs are associated with active coping strategies in cancer patients. We aimed to examine the factors influencing religious beliefs and the role of religious coping with cancer to decrease stress.

**Materials and Methods :** We conducted a questionnaire-based crosssectional study between January-April 2023, on 156 cancer patients receiving chemotherapy regardless of disease site or stage. We assessed religious beliefs, hope of cure and evaluated correlated factors. Psychological distress was evaluated using the STAI\_Y1 scale: high stress when scores>55 and low if  $\leq$ 55. Both the Pearson and Spearman tests were used to measure the correlations.

Result : Median age was 53 years(26-78), 79% were females and 80% were treated with curative intent (73% were undergoing their first chemotherapy session). Eighty-two percent were married and 31% had a university-level education. Eighty-nine per cent were living in an urban area, 71% were employed with 22% percent of patients considered with high salary (exceeding 2000 dt=597 euros, 4 times minimum wage in Tunisia). All patients were Muslims, and 89% reported being active practising believers. After cancer diagnosis, 82% of patients believed that they would be cured and 96% of patients reported that their religious beliefs became stronger. Ninety-six percent of patients believed that cancer was a divine test. Thirty-five per cent reported feeling stressed(STAY-Y1 score>55). Eighty-five per cent said that praying helped alleviate psychological pain and reduce stress. Patients with more financial difficulties tended to be more commonly religious(p=0.02) with lower STAY-Y1 scores. Scores were significantly higher in non-practising patients(p=0.01), high-salary patients (p=0.005), higher education(p=0.001), and patients undergoing their first chemotherapy session(p=0.0013).

**Conclusion :** We observed a significant contribution of religiosity and spiritual practices to psychosocial coping and stress relief. Patients with higher educational levels and better economic situations probably need more attention to help them relieve psychological distress.

### **199** : Anxiety among cancer patients in Tunisia: Prevalence, risk factors and impact

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**Introduction :** Anxiety persists as a prevalent issue among cancer patients, impacting their overall wellness and influencing various aspects of their cancer experience. This study aimed to explore anxiety prevalence and risk factors among Tunisian cancer patients and describe its impact on their cancer experience.

**Materials and Methods :** We conducted a cross-sectional survey using an anonymous self-administered questionnaire delivered to 100 patients treated for cancer regardless of gender, type or stage. Anxiety was assessed by using the '' Hospital Anxiety and Depression Scale''.

Result : Median age was 50 years old and 75% of patients were women. Twenty-three percent of patients were urban and 30% reported low socioeconomic status. Breast cancer was the most common primary cancer (52%), followed by colorectal (21%), gynecological (11%) and pulmonary (10%) cancers. More than half of the patients (57%) reported experiencing some form of cancer-related stigma. Anxiety was reported by 54% of patients: 43% confirmed that they frequently have a feeling of imminent danger which was the item with the highest mean (2.57) among all questions. Anxiety was significantly more common in young (under 55 years) (OR=2.68, p=0.031) and rural patients (OR=2.71, p=0.029) with advanced stage disease (OR=4.1, p=0.001). The most significant risk factor identified for anxiety was cancer stigma, with those experiencing stigma being 4.9 times more likely to report anxious symptoms (p < 0.001). Patients experiencing anxiety were 4.4 times more likely to encounter physical symptoms exacerbation such as pain and fatigue and 3.2 more likely to feel helplessness, and uncertain about the future, affecting the patient's ability to cope with their diagnosis and treatment.

**Conclusion :** Cancer patients are at an increased risk of developing anxiety. Thus, healthcare providers need to prioritize offering appropriate support and resources to help patients cope effectively with the challenges of their cancer journey.

#### 200 : Assessment of Resilience Among Total Laryngectomy Cancer Patients: 30 Patients

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**Introduction :** Patients undergoing total laryngectomy for advanced cancer encounter multifaceted challenges, necessitating reliance on their innate resilience. Exploring this capacity to effectively rebound from adversity assumes particular significance within the context of such altered circumstances. Our aim is to evaluate the resilience levels in patients who underwent laryngectomy for advanced laryngeal cancer.

**Materials and Methods :** We conducted a descriptive cross-sectional study including 30 patients operated on laryngeal cancer with a total laryngectomy in the Head and Neck Carcinologic Surgery Department, Salah Azaiez Institute (2019-2022). All patients completed the Arabic version of the Brief Resilience Scale (BRS) to assess the ability to recover from stress related to laryngectomy.

Result : Our research included 30 male patients, averaging 62 years old. The majority of the population lived in urban areas (53%) with a medium socioeconomic status (47%) and low education levels (43%), all married and residing with their families. Tobacco and alcohol use were prevalent among 100% and 67% of patients, respectively. Only one patient had a psychiatric history (3%). Squamous cell carcinoma was mostly staged as T3 (63%). Total laryngectomy followed unsuccessful conservative treatments in 26% of cases, with all patients receiving postoperative radiotherapy. The average score in our study was  $17.6 \pm 3.6$ , ranging from 10 to 23. Urban origin was linked to a lower BRS score (P=0.005). A higher level of education, specifically secondary or higher, was associated with a lower score (P=0.001). Similarly, a higher socioeconomic status was correlated with a lower BRS score (P=0.02). These findings suggest that individuals from urban areas, with higher levels of education, or with greater socioeconomic status may exhibit lower levels of resilience as measured by the BRS.

**Conclusion :** Assessing resilience in total laryngectomy patients is crucial for understanding their ability to cope with the challenges of treatment and adjustment to life post-surgery.

### 201 : Understanding Psychological Distress in Total Laryngectomy Cancer Patients

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**Introduction :** Exploring the prevalence of depression, anxiety, and stress among total laryngectomy patients is imperative, given its substantial repercussions on their overall quality of life. Here, we explore signs of depression, anxiety and stress in patients who underwent total laryngectomy.

**Materials and Methods :** We conducted a descriptive cross-sectional study including 30 patients operated on laryngeal cancer with a total laryngectomy in the Head and Neck Carcinologic Surgery Department at Salah Azaiez Institute (2019-2022). All patients completed the Arabic version of Depression, Anxiety and Stress scale (DASS-21).

Result : A cohort of 30 participants, with an average age of 62 years. All individuals were male, predominantly from urban areas (53%) and with a moderate socioeconomic status (47%), alongside a lower level of educational attainment (43%). All subjects were married and cohabitating with their families. Tobacco and alcohol usage were prevalent, observed in 100% and 67% of cases, respectively. Only one patient had a prior psychiatric history (3%). Subsequent to the surgical intervention, all patients underwent postoperative radiotherapy. The depression-related items yielded a mean score of 6.1, indicating minimal depression, with a median score of 3. The anxiety-related items produced a mean score of 6.3, suggesting moderate anxiety, with a median score of 4. The stress related items exhibited a mean score of 6.1, indicating absence of stress, with a median score of 4.5. In urban settings, lower levels of anxiety were observed (p=0.05). Higher levels of education were associated with lower levels of depression, stress, and anxiety (p=0.001, 0.001, 0.012, respectively). Prior conservative treatment pejoratively influenced depression scores in subjects (p=0.001).

**Conclusion :** Investigating depression, anxiety, and stress in patients posttotal laryngectomy is crucial due to its profound impact on quality of life. Despite its significance, such comprehensive studies are scarce in current literature, necessitating further exploration.

### 202 : Exploring Social Support Dynamics After Total Laryngectomy for Cancer

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**Introduction :** Facing laryngeal cancer and total laryngectomy comes with drastic changes. Networks encompassing friends, family, and significant others facilitate adaptation and coping mechanisms. Our aim is to explore the dynamics of perceived support in total laryngectomy.

**Materials and Methods :** We conducted a descriptive cross-sectional study including 30 patients operated on laryngeal cancer with a total laryngectomy in the Head and Neck Carcinologic Surgery Department at Salah Azaiez Institute (2019-2022). All patients completed the Arabic Multidimensional Scale of Perceived Social Support (MSPSS).

**Result :** Our study involved 30 patients, with an average age of 62 years. All patients were male. Population was mainly urban (53%) with a medium socioeconomic status (47%) and a low level of education (43%). All individuals were married and living with their families. Tobacco and

alcohol consumption was found in respectively 100% and 67%. Only one patient had a psychiatric history (3%). The tumor was a squamous cell carcinoma staged T3 in most cases (63%). Total laryngectomy was preceded by a failed conservative treatment in 26% of cases. All patients underwent postoperative radiotherapy. The average MSPSS score was 5, indicating moderate support. The Friends Subscale had the lowest values with an average score of 2. Two individuals didn't have a person of support. For the others, that person was either the spouse (61%) or their child (39%). Total score correlated with age; the younger the subject the better the score (p=0.018). Rural origin was associated with a lower score than urban origin (p=0.03).

**Conclusion :** Advanced laryngeal cancer represents a major milestone in a patient's life, not only as a malignancy itself, but also given the sequelae of total laryngectomy. In the aftermath of such radical procedure, patients undergo profound changes in various dimensions of their life. Very few studies have shed light on this population's perceived level of support.

### 203 : Quality of Life Assessment in Total Laryngectomy Patients: A Cancer Survivorship Study

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**Introduction :** Studying total laryngectomy's impact on quality of life is a crucial step in approaching survivors' wellbeing, as it illuminates their physical, psychological, and social adjustments. Our aim is to investigate the quality of life in patients who underwent total laryngectomy.

**Materials and Methods :** A descriptive cross-sectional study was conducted, involving 30 patients who underwent total laryngectomy for laryngeal cancer treatment at the Head and Neck Carcinologic Surgery Department at Salah Azaiez Institute (2019-2022). All participants completed the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Head and Neck Module (EORTC QLQ-H&N35).

**Result :** The study cohort comprised 30 male participants, with an average age of 62 years. The majority were urban dwellers (53%), with a moderate socioeconomic status (47%) and a low level of education (43%). All patients were married and lived with their families. Prevalent tobacco and alcohol consumption were reported at rates of 100% and 67%, respectively. Only one patient had a history of psychiatric illness (3%). Squamous cell carcinoma was predominantly staged as T3. Total laryngectomy followed unsuccessful conservative treatments in 26% of cases, with all patients undergoing postoperative radiotherapy. The average quality of life score was  $60.1 \pm 9.8$ . After communication and social interactions, the most pejoratively impacted domains were sensory changes and xerostomia. Younger age correlated with better quality of life (P=0.002). Lymph node involvement was associated with poorer quality of life (P=0.004). Patients residing in urban areas tended to report higher quality of life scores (P=0.04), suggesting poorer quality of life compared to rural counterparts. Similarly, patients with higher socioeconomic status displayed better quality of life(P=0.006). Moreover, patients who underwent total laryngectomy followed by postoperative radiochemotherapy exhibited worse quality of life.

**Conclusion :** These findings emphasize the multifaceted influences on quality of life outcomes in total laryngectomy, offering valuable insights for personalized support.

# 204 : Exploring Voice Handicap in Total Laryngectomy Cancer Patients

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**Introduction :** Following total laryngectomy, patients face a definitive loss of natural speech, resulting in significant challenges in communication and daily interactions. Our aim is to assess patients' perception of total laryngectomy's impact on voice impairment.

**Materials and Methods :** We conducted a descriptive cross-sectional study including 30 patients operated on laryngeal cancer with a total laryngectomy in the Head and Neck Carcinologic Surgery Department at Salah Azaiez Institute (2019-2022). All patients completed the Arabic Voice Handicap Index questionnaire (VHI-10).

**Result :** Our study enrolled 30 male participants, with an average age of 62 years. Most participants resided in urban settings (53%), had a moderate socioeconomic status (47%), and limited educational backgrounds (43%). All were married and lived with their families. Tobacco and alcohol consumption were common, reported by 100% and 67% of participants, respectively. Only one patient had a history of psychiatric illness (3%). Squamous cell carcinoma was predominantly staged as T3 (63%). In 26% of cases, total laryngectomy followed unsuccessful conservative treatments, with all patients undergoing postoperative radiotherapy. Speech rehabilitation was conducted using the esophageal voice for all individuals. The average VHI score was  $18.27 \pm 6.2$ , suggesting mild voice handicap. The most negatively impacted aspect was the inability to be well heard in noisy social environments. Fifty percent of the population experienced negative effects on their financial and professional aspects. Up to 57% of individuals reported being frequently to always asked about their voice, which pejoratively effected their handicap perception. A perception of handicap was declared by 60% of the population. A higher socioeconomic status correlated with lower scores, indicating less perceived voice handicap.

**Conclusion :** Detecting VHI in total laryngectomy patients is crucial for assessing voice-related challenges and guiding rehabilitation efforts. Insights gained may illuminate alternative interventions with potentially lower perceived handicaps than esophageal voice, enhancing the quality of life.

# 205 : Sleep Quality Among Cancer Patients Undergoing Chemotherapy

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**Introduction :** Patients undergoing chemotherapy for cancer often experience sleep disorders. Numerous studies have highlighted the prevalence of sleep disturbances in this population, ranging from 30% to 74%, surpassing rates observed in the general population. This study aims to characterize the sleep quality of patients undergoing chemotherapy and identify factors influencing it.

**Materials and Methods :** Patients receiving active cancer treatment at the Oncology Department of Hospital Abdelrahman Mami Ariana completed the Pittsburgh Sleep Quality Index (PSQI) in its Arabic version. Covariates included age at survey and diagnosis, gender, and primary cancer type. A PSQI score above 5 indicates the presence of a sleep disorder.

**Result :** The study comprised 51 patients, including 42 women (95%) and 9 men (5%), with a mean age of 53 years (range: 30 to 77). Only one patient had history of anxiety, and none had family history of anxiety or depression. Among them, 39 (80%) were receiving treatment for breast cancer, 4 for lung cancer, and 7 for colon cancer. Twenty-five patients (56%) were undergoing adjuvant chemotherapy, 22 neoadjuvant, and 4 palliatives. PSQI scores ranged from 0 to 19, with 23 patients (45.1%)

scoring above 5, indicative of a sleep disorder. Of these, 17 were undergoing curative treatment for breast cancer. Thirteen patients, 56,52%, reported good subjective sleep quality despite having a final score higher than 5. Fifteen patients, accounting for 56.21% of them, had a sleep onset latency exceeding 30 minutes. Seven patients (30,43%) Had less than 6 hours of sleep. Only six patients (26.08%) were taking drugs for sleep disorder. No significant correlation was found between any factors and sleep quality.

**Conclusion :** Consistent with existing literature, this study highlights the prevalence of sleep disturbances among cancer patients, particularly those undergoing breast cancer treatment. Enhancing healthcare professionals' knowledge and skills to provide guidance on sleep management for cancer patients is essential.

#### **206** : Understanding Long-term effects in Retinoblastoma Survivors at the oncology pediatric center of Sousse Tunisia

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**Introduction :** Retinoblastoma is the most common intraocular tumor in children with lifelong consequences. Challenging care is not only about survival rate with around 90% in developed countries, contrasting with 40% in developing nations but also about the therapeutic sequelae. The purpose of this study is to evaluate the Long-term effects in Retinoblastoma Survivors at the oncology pediatric center of Sousse.

Materials and Methods : A retrospective study was carried out at the pediatric oncology unit of Farhat Hached University Hospital in Sousse Between April 2004 and December 2023.

**Result :** Twenty patients, with a median age of 34 months, with a female predominance. The survival rate among the pediatric cohort was 60%. Among survivors, 75% experienced monocular blindness, 17% suffered from binocular blindness, and the remaining 8% retained their visual acuity. Aesthetically, 60% accepted their appearance with a prosthetic eye, while 40% felt compromised, which could impact their psychological state. About 67% of patients experienced long-term complications (recurrent conjunctivitis or chronic pain) which are related to the treatment. Notably, ocular impairment correlated with depression and irritability in 50% of the cases. The findings additionally indicated that 80% of patients exhibited autonomy, demonstrating independence without requiring assistance or technical aids. Furthermore, 70% reported limited access to social or cultural activities, and 60% engaged in minimal or no physical activity. Regarding education, 70% of school-aged survivors seamlessly integrated into regular education without needing adjustments. Conclusion : Survivors of retinoblastoma navigate a complex post-cancer landscape marked by enduring challenges. Their experiences underscore the importance of holistic care, addressing not only physical but also psychological and social needs to ensure comprehensive recovery and quality of life.

#### 207 : Tracheostomy acceptance over time

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**Introduction :** Body image and its alteration are a crucial issue in oncology. Despite therapeutic advances, total laryngectomy remains the standard treatment for locally advanced laryngeal cancer. The morphological sequelae of this surgery, involving the placement of a

permanent tracheostomy, contribute to negatively affecting patients' quality of life.

**Materials and Methods :** Survey involved 30 men followed for laryngeal cancer treated by total laryngectomy at Salah Azaiz Institute. They were offered an Arabic version of the EORTC QLQ-C-30 questionnaire to assess various aspects of quality of life.

**Result :** In our study, the median age was 67 (46-81). The majority of men were married (80%). Over half the patients were illiterate (63.3%) and only 6 of them had a secondary education. Medium socio-economic level was noted in 46,7% of cases. Seventeen patients have reported an increase of their faith since diagnosis unlike the other participants. All had radical surgery with tracheostomy. The average of time since surgery was 3 months. The total score ranges between 62 and 94. Main persistent symptoms were fatigue, dyspnea and pain. After assessing emotional aspects, the majority of patients expressed anxiety and mental distress (85%). Increasing depression symptoms were associated with a lower score. Forty-three percent of patients have reported a difficulty in accepting tracheostomy. A strong correlation was found between educational level and acceptance of tracheostomy (P=0.05). Additionally, there was a significant trend showing that the earlier the date of operation, the better the acceptance of tracheostomy (p=0.06).

**Conclusion :** Our study reveals a concerning trend of increasing psychological distress among patients following total laryngectomy. These findings underscore need for psychological support to help optimize patient outcomes and enhance quality of life post-laryngectomy.

# 208 : Assessment of anxiety in parents of children with nephroblastoma: a retrospective study

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**Introduction :** Childhood cancer presents a reel physical and psychosocial challenge for the entire family. Parents often exhibit social behaviors and emotions as they seek security within existing relationships. This study aims to assess the level of anxiety among parents of children undergoing treatment for nephroblastoma.

**Materials and Methods :** A descriptive analysis involving 19 parents of 19 patients followed for nephroblastoma in Pediatric Surgery Department at Fattouma Bourguiba Hospital from January 2020 to December 2023. The anxiety levels of the parents were evaluated using the Hamilton Anxiety Scale. Biographical and clinical information was collected through a predefined questionnaire.

**Result :** The mean age of the patients was 3.9 years with a sex ratio 1.1. A 84.2% of the parents were in a relationship, 15.8% were separated. 21% of the parents had an Anxiety score between 12 and 20 (mild anxiety), 52.6% had a score between 20 and 25 (moderate anxiety), and 26.31% had a score > 25 (severe anxiety).

**Conclusion :** A nephroblastoma in children has major psychological repercussions on parents. Parents are the fixe partners in medical carein pediatric oncology. The relational profiles of these partners should always be taken into consideration by the medical team. It would be appropriate to establish psychological support and evaluate its effectiveness.

### Lung and Thoracic Cancer

#### 209 : PD-L1 testing and Immunotherapy in the Tunisian Context: Real-Life Challenges in non-small cell lung cancer (NSCLC)

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**Introduction :** Immunotherapy (IO) represents a revolutionary approach to NSCLC by enhancing the immune system's ability to recognize and eliminate cancerous. PD-L1 expression is a cornerstone predictive biomarker. In this study, we aimed to describe our real-life experience in terms of timelines in accessing testing and obtaining immunotherapy.

**Materials and Methods :** We conducted a retrospective study including a series of 33 patients with metastatic NSCLC treated with IO, 2018 and 2023. We collected follow-up data from the time of testing prescription to the time of treatment acquisition.

**Result :** Prescribed molecular biology testing was performed in 24/33 cases (72%). Among them, only one patient had a KRAS mutation (G12C), 2 patients had EFGR gene (exon 19 and exon 20). No ALK or BRAF mutations were detected. EGFR, ALK, and ROS1 mutation tests were performed at the same time as PDL1 testing in all cases. PDL1 status was tested in 82% of cases, using either the Clone IHC411 method or the SP263 ventana test. Only the tumor proportion of PDL1 was taken into account in interpreting the results. PDL1 expression was <1% in 4% of cases,  $\geq 1$  and <50% in 59% of patients and PDL1 $\geq 50\%$  in 37%. Median time between diagnosis and PDL1 testing was 5 weeks [1-24 weeks] and median time from PDL1 testing to immunotherapy administration was 3.5 months [1 -11 months]. In the group of PDL1≥50%, only 6% had IO monotherapy, patients started chemotherapy pending confirmation of PDL1 status and availability of immunotherapy. Among the 18 patients who progressed on 1st-line therapy, only 10 were able to benefit from 2ndline IO, with a median delay between the date of progression and the start of immunotherapy of 7 weeks [2-19 weeks]. The time of IO 2nd line initiation was significantly longer then the time of 2nd line Docetaxel initiation, (7 weeks vs 3.5 weeks, p=0.01).

**Conclusion :** Access to PDL1 testing and IO remains a significant challenge in Tunisia due to several factors such as high costs, limited availability, and lack of awareness among both patients and doctors. Therefore, it is essential to focus on implementing policies that promote reimbursements for PDL1 testing and treatment, as well as increasing awareness and promoting research on immunotherapy.

# **210 : Immunotherapy-related toxicity in non-small cell lung cancer (NSCLC): Insights from Clinical practice**

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**Introduction :** Immune checkpoint inhibitors have revolutionized the treatment of metastatic NSCLC worldwide. However, patients treated with immunotherapy (IO) may face a new profile of unexpected systemic toxicities. We aimed to describe the toxicity profile of immunotherapy among Tunisian patients.

**Materials and Methods :** We conducted a retrospective study including 33 patients with metastatic NSCLC who received treatment with IO between 2019 and 2022. All patients were treated with either Nivolumab, Pembrolizumab, or Atezolizumab, and all lines of therapy were permitted for inclusion. We collected data about toxicity according to the recommendations of the Common Terminology Criteria for Adverse Events (CTCAE) 5.0

**Result :** The mean age was 57 years [24-78], sex ratio of 9:2 and exposure to tobacco was 79%. At treatment initiation, ECOG PS was 1 in 78% and PS 2 in 12%. Adenocarcinoma was the most frequently histological type, in 76% of patients, followed by squamous cell carcinoma in 18% of cases. Atezolizumab was used in the majority of the study population (66.7%) followed by Pembrolizumab (24.2%) and Nivolumab (9.1%). The average

number of cycles of immunotherapy was 13 cycles [3-34]. All toxicities were G1-2, except for 1 case of toxic death from myasthenia crisis. No clear etiological cause could be identified, suggesting a possible association with the toxicity of immunotherapy. Arthralgia was the most reported adverse event observed in 64% of patients, followed by fatigue in 52%. Four patients developed a non-severe diffuse interstitial pneumopathy, the diagnosis was CT-scan based either incidentally during evaluation (2) or following symptoms such as dyspnea or recent cough. Thyroid dysfunction was seen in 21% of the patients (7 patients), including one case of autoimmune thyroiditis. Anorexia was reported by 17% of the patients, and acute colitis by 20%. Cutaneous toxicity was a rash in 23% and pruritus in 17%. Three patients (10%) experienced polyneuropathy. Conclusion : Immunotherapy showed a new toxicity profile. Multidisciplinary management and education are essential to raise awareness about optimal interventions. Immunotherapy showed a new toxicity profile. Multidisciplinary management and education are essential to raise awareness about optimal interventions.

### 211 : Tyrosine kinase inhibitors in EGFR mutated metastatic non small cell lung cancer ; A Tunisian retrospective study

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**Introduction :** Our study aims to report the epidemiologic, anatomoclinical, molecular data and analyze the therapeutic results about a retrospective serie of metastatic NSCL harboring an EGFR mutation, treated with tyrosine kinase inhibitors.

Materials and Methods : We collected retrospectively, from Jan 2015 to dec 2023, patients presenting a metastatic histologically confirmed NSCL with an identified tumoral EGFR mutation at initial diagnosis or during therapy. EGFR molecular testing was performed by using RT-PCR. We analyzed the epidemiologic, anatomoclinical and biomolecular data. Patients were explored by classic imagery and for some of them Tep-scans. Systematic liquid biopsies were performed for the last 20 patients at diagnosis and during TKI inhibitors treatment. We calculated the overall and disease-free survival and evaluate the tolerance-toxicity of therapies. Result : From December 2014 till October 2023, we collected 55 patients, with a median age of 64,9 years(40 to 80 years), mostly females 30/19, with a SR at 1.57. They were non smokers in 42 cases and smokers in 7 cases with a cessation from 2 to 30 years. Exon 19 was the site of mutation in 36 cases, 21 in 10 cases, exon 20 in 1 cases and L858R identified in 4 cases. EFGR mutation was researched at diagnosis in 29/49 cases, more frequently for patients diagnosed after 2022. Erlotinib was administered as 1st line TKI Inhibitor in 44 cases, after 1-3 lines of palliative chemotherapy in 16 cases and adjuvant in 3 cases. Osimertinib was gived in 1st line in 4 cases and gefitinib in 2 cases. Mean survival was 26 months varying from 6 to 108 months.

**Conclusion :** Management of EGFR mutated NSCLC is a new challenge in medical oncology.

# **212** : Adherence to guidelines in the management of non-small cell lung cancer (NSCLC): challenges in limited resources context

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**Introduction :** Adherence to guidelines remains a guarantee of optimal management of cancer but it faces challenges depending on country

resources. In recent years, we observed a radical change in the management of NSCLC which increased the pressure on limited resources healthcare systems like in Tunisia. We aimed to report adherence rate to guidelines in terms of work-up, therapeutic strategies and implementation of personalized medicine.

**Materials and Methods :** We retrospectively selected 375 patients, with NSCLC treated between 2019-2023. Data about work-up procedures, timelines, molecular testing, multidisciplinary management (MDT) were reported and analyzed according to adherence to ESMO guidelines.

**Result :** All patients had confirmed histological diagnosis of NSCLC showing 66.5% adenocarcinoma and 28% squamous cell carcinoma, subtype could not be defined in only 2% of cases. Stages were: I-II in 13%, III in 41% and stage IV in 46% of cases. Diagnostic procedures included bronchoscopy in 78.3% of cases, CT scan in 100%, among them 82.8% had Brain CT scan. In Operated cases, only 10% had PET-CT, time between biopsy and surgery was 25 days, between surgery and adjuvant chemotherapy was 69 days. Patients with stage III disease were discussed in MDT in 92% of cases. In stage III patients, only 63% of MDT decision was implemented. Mediastinoscopy/EBUS were performed in 10% of cases. In patients' candidates for chemo-radiotheray, time between diagnosis and the end of therapy was 280 days. In stage IV, time between diagnosis and start of systemic therapy was 120 days. Only 27% of patients had at least one biomarker tested, among them 63% were treated according to ESMO guidelines and had access to personalized therapy.

**Conclusion :** Diagnostic and work-up procedures were highly adherent to guidelines except for mediastinal staging. Improved access to PET-CT in early stage disease and to chemoradiotherapy in locally advanced disease is needed. Much work is needed in order to implement personalized medicine in advanced stage.

### 213 : Impact of type 2 diabetes on manifestations and treatment outcome of pulmonary cancer

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**Introduction :** the aim of this study is to evaluate the impact of type 2 diabetes on clinical aspects and oncological outcomes of the treatment within patients diagnosed with a pulmonary cancer.

**Materials and Methods :** retrospective, descriptive and analytical study including 56 patients who were treated in our medical oncology department in Monastir between 2022 and 2023 for lung cancer.

Result : Median age was 65 years [47-81 years]. The incidence was 30 cases (54%) diagnosed in 2022 and 26 cases (46%) in 2023. The majority (96%) of patients were male. Diabetic patients represented 38% of cases whose diabetes treatment was mainly with oral ant diabetics (91%). The histological type was adenocarcinoma, squamous cell carcinoma and small cell carcinoma in 45%, 27% and 29% of cases respectively. The tumor stage (T) of the disease was advanced in more than half of the cases (T4: 68%; T3: 16%; T2: 14%; T1: 2%). The Nodal status (N) was positive in 64% of cases (N0: 36%; N1: 7%; N2: 40%; N3: 18%). Patients were metastatic in 55% of cases. The site of metastasis was the lung, bone, pleura, liver, adrenal and lymph node in 72%, 72%, 40%, 44%, 43% and 18% of cases respectively. The majority of patients had received primary treatment except four patients whose general condition was precarious. The primary chemotherapy protocol was Taxol-Carboplatin in 35% of cases, VP16-Cisplatin in 29% of cases followed by Navelbine-Cisplatin and Gemzar- Cisplatin in 19% and 17% of cases. The median number of cure received was four. Surgery and radiotherapy represented 23% and 9% respectively of the primary treatment received. After a median follow-up of 10 months [6-27 months], tumor progression was noted in half of the cases (48%) followed by tumor stability in 18% of cases and a partial response to treatment in 14% of cases. Twenty-eight patients underwent second-line treatment, 60% of whom received up to 3 lines in total. In bivariate analysis, diabetic status significantly impacts T stage (p=0.011), N stage (p=0.012), M stage (p=0.045), having other lines of treatment (p= 0.04) and radiotherapy (p=0.023) compared to non-diabetic patients. Progression-free survival (PFS) at 1 year was 57%. In univariate analysis, diabetic status was a factor impacting PFS (p=0.014) (in diabetics; PFS = 42% versus 67% in non-diabetics).

**Conclusion :** diabetic patients with lung cancer seem to have a more advanced stage of the disease with more distant metastasis and therefore a worse prognosis emphasizing the importance of well controlling and balancing diabetes as being a factor promoting tumor growth and oncological outcomes in consequence.

#### 214 : Pulmonary lymphoepithelioma like carcinoma

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**Introduction :** Pulmonary lymphoepithelioma-like carcinoma (PLLC) is a rare form of non-small cell lung carcinoma (<1%). Most patients are often diagnosed in the advanced stage. We aimed to evaluate clinicopathological features, treatment modalities, and prognosis of PLLC. **Materials and Methods :** In this study, a retrospective analysis on patients diagnosed with lung cancer at oncology department of Gabes Hospital was conducted with respect to their clinical characteristics and outcomes, in order to deeply investigate this rare subtype of lung cancer

Result : In our series, two patients were affected by PLLC. They were aged 23 and 56 years respectively and consulted for chest pain with dyspnea. The CT scan has objectified in the first patient a tumor mass in the left upper lobe, obstructing the left main bronchus with latero-tracheal and subcarinal adenopathies. For the second patient, it was a 7 cm right lower lobe tumor with involvement of the brachiocephalic venous trunk and subcarinal lymphadenopathy. The 2 tumors were classified T4N2M0. The anatomopathological examination has objectified а lymphoepithelioma like carcinoma. The 2 patients had chemotherapy with 6 TPF then radiochemotherapy (64 Gy) for the first and 6 Taxol-Carboplatin then 6 Gemzar seeing locoregional progression in the second patient. The evolution was marked by the appearance of brain metastasis in the 2 patients after 2 years and 2 months respectively from the end of treatment. The 2 patients died and the overall survival was 48 and 22 months respectively.

**Conclusion :** Lymphoépithélioma like lung carcinoma have an adenocarcinoma molecular profile. It commonly occurred in non-smoking women. Our patients were female and non-smokers. It also has a better prognosis than the other types of non-small cell lung carcinoma.

### 215 : Lung Cancer Epidemiology in Monastir: Insights for Effective Prevention

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**Introduction :** Lung cancer poses a significant challenge to global public health, emphasizing the need to understand its incidence and distribution to guide health policies. In Monastir, a city exposed to various risk factors, continuous epidemiological surveillance is crucial to fill data gaps and guide public health interventions. Our aim was to analyze lung cancer incidence, temporal trends, and epidemiological characteristics in Monastir to inform prevention and management strategies in the region.

**Materials and Methods :** A descriptive, single-center study was conducted in Monastir from January 2002 to December 2013. The study examined all cases of invasive cancers diagnosed in residents of Monastir during this period, including those diagnosed and treated outside the region. Data were collected from clinical sources in the public and private sectors, primarily from the central registry and regional hospital morbidity registry.

**Result :** Lung cancer was the most common cancer, representing 15% of total cases, with higher prevalence in men (22.9%) compared to women (3.9%). The standardized incidence rate for lung cancer was 26.88 per 100,000 person-years (PY), significantly higher in men (49.9 per 100,000 PY) than in women (6.13 per 100,000 PY). Age-specific analysis revealed lung cancer as the second most common cancer among adults aged 40-59 years and the leading cancer among those aged 60 years and above. Median age at diagnosis was 61 years  $\pm$  interquartile range (IQR) =[51-70] for men and 55 years  $\pm$ IQR=[44-67] for women. Temporal analysis showed a significant increase in lung cancer incidence over the years, with an annual average growth rate of +2.8% (p<0,001) in men and +14.1% (p<0,001) in women. Projection until 2030 suggests a potential increase in lung cancer cases to 280 with confidence interval (CI)= [197; 399], with an estimated incidence of 45.1 per 100,000 PY with CI =[31,7; 64,2].

**Conclusion :** Our study highlights the concerning prevalence of lung cancer in Monastir, underscoring the need for urgent measures to mitigate its impact on the population. Effective prevention strategies should include awareness campaigns targeting modifiable risk factors and early lung cancer screening programs for at-risk groups.

#### 216 : Two cases of uncommon metastatic sites in Non-Small Cell Lung Cancer

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**Introduction :** Lung cancer is the most frequent malignancy and 50% of cases present distant metastases at the time of diagnosis. Gastric and tongue metastasis, while rare, account for roughly 0.2-1.5% of cases.

Materials and Methods: In this report, we present two cases of stomach and tongue metastases originating from non-small cell lung cancer (NSCLC).

Result : The first patient is a 61-year-old heavy smoker, previously treated for superficial bladder cancer two years ago, who presented with dysphonia for two weeks. Laryngoscopy revealed reduced mobility of the left vocal cord. A CT scan identified a 6 cm mediastinal and hilar mass involving the recurrent laryngeal nerve, main stem bronchus, and left pulmonary artery, along with enlargement of left hilar lymph nodes. Bronchoscopy and biopsy findings confirmed an undifferentiated NSCLC staged as T4N1M0 and induction Alimta-cisplatin chemotherapy was initiated. Following one cycle, the patient developed dysphagia. Upper endoscopy revealed 2 gastric lesion and biopsy confirmed metastatic localization of NSCLC. Genetic testing for EGFR mutations, ROS1 and ALK rearrangements returned negative While PDL1 expression was notably high with a CPS score of 100%. Patient is now undergoing platinum-based chemotherapy. Atezolizumab has been requested as a part of treatment plan. The second patient is, a 53-year-old, with smoking history, who presents with radicular leg pain, anorexia and weight loss for 4 months. Physical examination revealed an ulcerated lump at the base of the tongue. CT scan findings indicated a lung lesion in the left lower lobe with hilar lymphadenopathy along with multiple liver metastases, bone osteolytic lesions and involvement of adrenal glands. Bronchoscopy and biopsy confirm a lung adenocarcinoma while tongue biopsy reveals a lingual metastasis originating from the lung adenocarcinoma. The tumor is staged as T3N2M1 and the patient is proposed for paclitaxel-carboplatin chemotherapy and palliative radiotherapy. Genetic testing for oncogenic mutations has been requested to guide further treatment decisions

**Conclusion :** Gastrointestinal or oral cavity metastasis from lung carcinoma are rare. Only several cases of lingual or gastric metastases are available in the literature. Pathological diagnosis is mandatory in such scenarios. Additionally, subsequent reporting of these cases may contribute to a better understanding of the clinical features and outcomes.

### 217 : Primary synovial sarcoma of the lung: a case report with literature review

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**Introduction :** Primary synovial sarcoma of the lung is extremely rare, accounting for less than 0.5% of all lung malignancies. The pathological features of this unusual entity are reviewed.

**Materials and Methods :** A 77-year-old male, presented with a 2-month history of gradually increasing dyspnea. The patient, an active smoker, had no relevant medical history. A Chest computed tomography (CT) revealed a solid heterogeneous mass in the upper lobe of the right lung. A CT-guided biopsy was performed.

**Result :** Microscopic evaluation showed a tumor proliferation of moderate to high cell density, made of monomorphic spindled cells. Neither glandular nor squamous cell differentiation was found. Tumor cells showed moderately atypical nuclei with numerous mitosis. The stroma was fibrous with a hemangiopericytoma-like vascular pattern. On immunohistochemistry, the tumor cells strongly expressed TLE1, with a focal staining of cytokeratin AE1/3. The STAT6, PS100, TTF1, and p40 staining were negative. Monophasic synovial sarcoma was therefore diagnosed with a note to emphasize the importance of thorough investigation to exclude a primary extra-pulmonary soft tissue synovial sarcoma. Subsequently, a whole-body survey revealed no evidence of such tumor, thus confirming the diagnosis of primary synovial sarcoma of the lung.

**Conclusion :** This case report highlights the challenging diagnosis of primary monophasic synovial sarcoma of the lung. It is important to consider this rare entity, after ruling out the much more frequent metastasis to the lung of an extra-pulmonary synovial sarcoma as well as other primary tumors of the lung such as solitary fibrous tumor, leiomyosarcoma, MPNST, and spindle cell carcinoma.

### Head and Neck cancer

#### 218 : Weight loss as a prognosis factor in Head and Neck cancer

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**Introduction :** Patients with Head and Neck cancer often experience nutritional problems, which are worsened by treatments and their toxicities. It is shown that involuntary weight loss is associated with a reduced local control and overall survival. The aim of the study is to identify factors of weight loss during treatment and its impact on progression free survival.

**Materials and Methods :** Retrospective study of 30 patients with Head and Neck cancer, treated at the Salah Azaiz Institute between 2012 and 2022. The data collected included aspects of diagnosis and therapeutic tolerance. Weight measurement were recorded both before and after

treatment. A weight loss of less than or equal to 5% was mild, whereas a loss exceeding 10% was considered severe.

**Result :** The majority of the population was aged over 50 years (64%). Nasopharyngeal cancer was the most prevalent caner (50%) followed by laryngeal (33%) and oropharyngeal cancer (10%). Eighteen patients were smokers at diagnosis and did not quit smoking during treatment. Fifteen patients (50%) underwent treatment through a combination of radiotherapy and chemotherapy. Weight loss during the treatment period was observed in 93% of patient, with the majority experiencing mild (36%) and moderate (33%) levels of weight loss. Dysphagia and dysgeusia were common among patients (93%), regardless of dose-volume constraints for the different risk organs. The use of nutritional management was correlated with poor local control, showing a higher rate of locoregional progression in the parenteral nutrition group after a medium follow up of 37 months (p<0.01). The severity of weight loss was associated with an increased risk of locoregional recurrence (p<0.01).

**Conclusion :** Addressing weight loss in Head and Neck cancer patients is not a physical concern, it is a multifaceted challenge that impact patient's healthcare journey and overall survival.

### 219 : Oncocytic cell carcinoma of the thyroid :Salah Azaiez Institute Experience

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**Introduction :** Oncocytic carcinoma is uncommon it represent only 5 % of thyroid carcinomas.It is an aggressive tumor, with high nodal and distant metastatic potential.Our aim was to describe the epidemiological, clinical and anatomopathological particularities of oncocytic carcinomas of the thyroid .

**Materials and Methods :** We conducted a retrospective study of all oncocytic cell carcinoma treated at our institution during the previous 22 years. Clinicopathological information, therapies, and results were all documented.

Result : We collected 14 cases of oncocytic carcinomas of the thyroid. The mean age was 58.15 years with extremes between 30 to 84 years. A sex ratio of 0.18 was noted. All the patients consulted for a basi-cervical tumefaction. It was associated to odynophagia in one case, to dysphagia in two cases and to dyspnea in one case. The mean clinical size of the tumor was 40.77. The mean radiological size was 54.85 mm. All the patients had a lobo-isthmectomy followed by a totalization of the thyroidectomy. A mediastino-recurrential dissection was performed in 38.46% of patients associated to bilateral suprelavicular dissection in 23.07%. A supraclavicular sampling was performed in 23.07% of patients. In the anatomopathological results, all the patients had an oncocytic carcinoma associated to a capsule breach in 53.84% of patients. Vascular emboli were found in 38.46% of patients. Metastatic lymph nodes were found in 15.38% of patients. A postoperative radiation therapy with iodine 131 was performed in 53.84% of patients and 23.07% of patients had external radiation therapy. A lymph node recurrence was found 23.07% of patients, with pulmonary metastasis found in one patient.

**Conclusion :** Surgery is the mainstay of treatment, it must be wide in front of the resistance to radioactive iodine therapy. Oncocytic carcinoma tend to be aggressive, with a high risk of metastasis and a low survival rate.

## 220 : Biomarkers (cytokines and EBV load) in Nasopharyngeal carcinoma and prognostic correlations

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**Introduction :** Nasopharyngeal carcinoma (NPC) is characterized by distinct geographical distribution and is particularly prevalent in east and southeast Asia. Its incidence is increasing in Tunisian population. Grumbling inflammation and infection with the Epstein-Barr virus (EBV) can promote tumor progression, invasion, and metastasis. This investigation aim to assess the serum concentrations of cytokines (IL-1 $\beta$ , IL-6, IL-8, and TNF $\alpha$ ) as well as the presence of EBV DNA and their associations with the prognosis of patients with nasopharyngeal cancer.

**Materials and Methods :** Serum samples were collected in a prospective cohort of 25 patients with NPC before treatment, 7 weeks, 3 months, and 6 months after treatment. The TNF- $\alpha$ , IL1beta, IL6, and IL8 were measured by a solid-phase chemiluminescent immunometric assay that utilized the IMMULITE 1000 automated system, and the detection of EBV DNA was accomplished by real-time PCR.

**Result :** The average age of our patients was 47.8 years (14-80 years) with a male-to-female ratio of 2.57 (18 men and 7 women). We observed a correlation between the highest level of cytokines and the age group between 31-40. While the grater rate of EBV DNA was associated with the 41-50 age group. The study also found that the levels of IL6 and IL1 beta were higher in patients with stage T1-T2, while IL8 was higher in patients with advanced stages. Our research demonstrated that by the seventh week following the conclusion of treatment, the viral DNA burden had decreased and the cytokine levels had increased, these signs indicated a positive response to treatment and a favorable prognosis. Additionally, we observed a significant increase in the EBV load and cytokines in metastatic patients; IL8 (P=0.01), IL6 (P=0.001), and TNF alpha (P=0.038). These are often associated with disease spread.

**Conclusion :** TNF alpha, IL1 beta, IL6, IL8, and EBV all have the potential to be considered as prognostic biomarkers in nasopharyngeal cancer. These biomarkers identifies a reserved prognosis group of patients, that require aggressive treatment and closer monitoring.

### **221 :** The role of neoadjuvant chemotherapy (CT) in the treatment of locally advanced undifferentiated nasopharyngeal cancer (NC)

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**Introduction :** NC were dominated by undifferentiated squamous cell carcinomas. The aim of this work is to evaluate the impact of neoadjuvant CT on long-term survival and to identify prognostic factors.

**Materials and Methods :** We conducted a retrospective study of 30 patients with locally advanced NC treated in the medical oncology department of Jendouba from 2012 to 2017.

**Result :** Our study included 20 men and 10 women (sex ratio=1.5). The mean age was 46 years. Ten percent of patients were classified T1-T2, 57% T3, 30% T4 and 3% Tx. Patients were classified N1 in 33% of cases, N2-N3 in 53%. Fifty six percent were classified stage III, 27% stage IVa, and 17% stage IVb. Twenty-three patients had received neoadjuvant CT followed by concomitant radiochemotherapy(RT-CT). Six patients had received exclusive concomitant RT-CT, one received exclusive radiotherapy(RT). The molecular combinations used were cisplatin/adriamycin in 40% of cases and Docetaxel /cisplatin/5FU in 37%. All patients underwent curative 3D conformational RT to the cavum and cervical lymph node areas. The mean CT-RT interval was 47 days. The response was complete in 22 patients, partial in 2, stability in 2, and progression in 4. Of the 24 patients in overall remission, five patients had a recurrence: metastatic in 4 patients and local in one. The 3-year and 5year overall survival (OS) rates were 87.4% and 77.7%, respectively. OS was 93.3% at 3 years and 82.9% at 5 years for patients who received neoadjuvant CT followed by concomitant RT-CT. The mean recurrencefree survival(RFS) for patients who received neoadjuvant CT followed by

concomitant RT-CT was 32.8 months. Multifactorial analysis shows no prognostic factors significantly correlated with OS or RFS.

**Conclusion :** The combination of concomitant RT-CT and neoadjuvant CT is the best treatment for locally advanced NC. Other therapeutic modalities should be tested such as targeted therapy and immunotherapy.

### 222 : How different are therapeutic results and toxicities in nasopharyngeal carcinoma based on age in the era of IMRT?

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**Introduction :** The purpose of our study is to compare the therapeutic results and toxicities between NPC in children and young adults aged less than 35 years and those aged over 35 years treated in the same period using intensity modulated radiotherapy (IMRT).

**Materials and Methods :** It is a retrospective study including patients with non-metastatic NPC treated with induction chemotherapy (IC) followed by IMRT +/- concomitant chemotherapy, carried out in our Department of Radiotherapy Sfax between October 2016 and July 2022.

Result : Twenty-six patients aged less than 35 years and 126 patients aged more than 35 years were included. At 5 years, overall survival was 92% in patients below the age of 35 versus 73.9% in patients aged over 35. The difference tended towards significancy (p=0.07). Locoregional relapse free survival was 95% versus 81.5% in patients aged less and more than 35 years respectively (p=0.08). A significantly better event-free survival was observed in younger patients (83.6% versus 62.3%; p=0.039). Metastatic free survival was 88.3% in patients below the age of 35 versus 72.8% in the other group (p=1.31). There were no acute grade 3 or 4 toxicities in patients under 35 years of age. However, in patients aged over 35, we observed some grade 3 toxicities with radiodermatitis in 12 patients (9.5%), radio mucositis in 4 patients (3.2%), dysphagia in 3 patients (2.4%) and xerostomia in 2 patients (1.6%). In patients aged more than 35 years, we observed more grade 2-3 radiodermatitis (60% versus 50%), more grade 2-3 radio mucositis (32.8% versus 23%), more grade 2-3 dysphagia (44.7% versus 38.5%) and more grade 2-3 xerostomia (50.8% versus 39%). There were no grade 3 or 4 late toxicities in patients younger than 35 years. Similarly to acute toxicities, there were more late toxicities in patients older than 35 years, with more grade 2 xerostomia (26.3% versus 3.8), more hearing loss (25.9% versus 7.6%), more neck fibrosis (22.8% versus 19%) and more dental toxicity (59.7% versus 30%). Only subclinical hypothyroidism was more frequent in younger patients and was observed in 18% versus 2.9% in older patients.

**Conclusion :** IMRT resulted in excellent locoregional control and a good quality of life in our patients. Despite discovery at more advanced stages, NPC in children and young adults has a better prognosis and less relapses are observed than in patients older than 35 years. Less frequent and severe acute and late toxicities were observed in younger patients except for hypothyroidism.

### 223 : Evaluation of Gemcitabine Cisplatin Protocol in the Treatment of Locally Advanced Nasopharyngeal Cancer

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**Introduction :** Nasopharyngeal cancer, the leading head and neck cancer in Algeria, stands out among aerodigestive tract cancers in terms of

epidemiology, histology, diagnosis, and especially treatment. The advent of chemotherapy as a therapeutic tool has revolutionized its management, especially in locally advanced stages, demonstrating its chemosensitivity. The aim of our study is to evaluate the effectiveness of a therapeutic regimen based on cisplatin-gemcitabine (GP), consisting of 3 cycles followed by radiochemotherapy (RCC), in patients with locally advanced nasopharyngeal carcinoma in terms of overall survival, objective response rate, and treatment tolerance.

**Materials and Methods :** This is a retrospective descriptive monocentric study of patients with locally advanced nasopharyngeal cancer diagnosed and treated at the Medical Oncology Department of the University Hospital of Oran (EHUO) between 2020 and 2023. Data collection and analysis were performed using SPSS v25 software. The determination of response rates was based on RECIST criteria, while tolerance was assessed according to NCI-CTCAE version 4.0 criteria.

**Result :** We included 23 patients with nasopharyngeal cancer, with a maleto-female ratio of 1.3 and a mean age of  $47.7 \pm 12.3$  years [15-64]. Undifferentiated non-keratinizing squamous cell carcinoma (UCNT) was the most common histological type (100% of cases). 30.4% of our patients were smokers. The otological, rhinological, and neurological triad was present, with 43.5% of cases of hypoacusis, 21.7% of epistaxis, and 21.7% of headaches. All patients received GP induction chemotherapy (3 cycles), associated with mainly grade 1/2 toxicity, dominated by nausea (8.6%) and vomiting (9.8%), with hematological toxicity characterized by febrile neutropenia in 26% of cases. All patients received RCC within the scheduled timeframe. The objective response rate was 86.9%, and overall survival was 91.3% at 5 years, with a relapse rate of 26.1%.

**Conclusion :** The results of our study are promising, with a high rate of survival and objective response, as well as an acceptable tolerance profile. However, a larger sample study, longer-term follow-up, and stratification are necessary to better evaluate the effectiveness of this protocol.

#### 224 : Challenges in treating a rare case of Oral Malignant Melanoma

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**Introduction :** Oral malignant melanoma is a very rare aggressive tumor occurring mainly in men. Its local malignancy makes the therapeutic journey very challenging. The standard of care typically involves surgery combined with adjuvant therapies including immune checkpoints and radiotherapy.

**Materials and Methods :** We report the case of a 58-year-old woman with melanoma of the hard palate managed with palliative radiotherapy. This case illustrates the innovative use of immune checkpoint inhibitors and radiotherapy in response to tumor resistance.

**Result :** 59-year-old female patient presented with complaint of swelling in the hard palate that have been progressively evolving for five months. Intraoral examination revealed a non-tender blackish pigmented lesion covering the entire mucosal palatal region. This sessile growth was hard in consistency and measured around 6 cm. Small brown spots were also noted on the left cheek and the inter-maxillary commissure. Neck examination did not reveal any palpable lymph nodes. Oral cavity magnetic resonance imaging showed a mass measuring 7 cm, developing from median palatine bone and reaching the tongue. Lytic extension to the palatine and maxillary bone was noted. Excision biopsy of the lesion was performed. The histopathological examination showed atypical epithelioid melanocyte cells. The lesion was considered non operable. The patient received eight cycles of Nivolumab. Clinical and radiological progression, notably an increase in volume tumor and appearance of a trismus, was noted, thus indicating palliative radiotherapy. Target volume treated included the entire macroscopic palatal lesion with a 5 mm margin. The prescribed dose was 30 Gy delivered in 10 fractions. The irradiation technique used was 3D technique. After a 10-month follow-up, we noted

a regression of tumor volume with subjective improvement of trismus and dysphagia reported by the patient.

**Conclusion :** Oral Malignant Melanoma is a rare and challenging disease despite advancements in treatment modalities. We reported a case of oral malignant melanoma that progressed under nivolumab. Radiotherapy emerges as a crucial option for local control with a notable impact on quality of life.

#### 225 : Sinonasal malignant tumors: a retrospective study of eight cases

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**Introduction :** Sinonasal malignant tumors are rare, accounting for less than 3% of head and neck cancers and 0.8% of all human cancers. They may arise primarily or occur as secondary localizations of other tumors. Tumors in this region typically present with nonspecific and common symptoms, often resembling inflammatory diseases. In our study, we conducted a retrospective analysis of cases diagnosed within our service. **Materials and Methods :** A retrospective study was conducted on cases of sinonasal malignant tumors diagnosed and collected at the Department of Pathology of Habib Bourguiba Hospital in Sfax between January 2015 and March 2024. We excluded cutaneous tumors from this study.

**Result :** This study included 8 diagnosed cases of sinonasal tumors over 6 years. The sex ratio was 3. The average age was 62 years. The onset was progressive in all patients, with 62.5% presenting with a nasal fossa mass and 37.5% presenting with chronic sinusitis. Tumors of the nasal fossa were multiple in our study. They were predominantly squamous cell carcinomas in 3 cases (37.5%), poorly differentiated in one case, and developed on inverted papilloma in one case. Other histological types were chondrosarcomas, diffuse large B-cell lymphomas, infiltration with T/NK cell lymphomas, anaplastic large cell lymphomas, and myeloid leukemias. All these cases were diagnosed based on biopsy specimens. An immunohistochemical study was performed in all cases of lymphoma and the case of poorly differentiated squamous cell carcinoma.

**Conclusion :** Our study demonstrates a clear predominance of cases among male subjects, which differs from the literature where the predominance is observed in females. Clinical presentation is similar to the literature, with patients consulting in 70% of cases for naso-sinusal signs. Due to their rarity, these tumors present diagnostic and therapeutic challenges, highlighting the significance of multidisciplinary collaboration between pathologists, oncologists, and other specialists.

### 226 : Primary extra cranial rhinopharyngeal meningioma: A case report

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**Introduction :** Meningiomas are common intracranial neoplasms but rhinopharyngeal localisation is extremely rare. Our objective is to detail the clinical presentation, histopathological and radiological findings, and the treatment approach for a rhinopharyngeal menigioma.

**Materials and Methods :** We report a case of a 78-year-old male diagnosed with rhinopharyngeal meningioma at our cervico-facial department at Salah Azaiez Institute in 2023.

**Result :** A 78-year-old male with a medical history of diabetes was referred to our department with a 3-month history of right-sided nasal

obstruction and right hypoacusis. No epistaxis or vision loss has been reported. Endoscopic nasopharyngeal examination revealed a smooth tissue mass originating from the nasopharynx and extending to the right choanae. Oropharyngeal examination revealed a protruding, regular mass. Gadolinium-enhanced magnetic resonance imaging (MRI) showed a wellcircumscribed nasopharyngeal mass with hyperintensity on T2-weighted imaging and isointensity on T1-weighted imaging, with moderate diffusion restriction, and moderate enhancement after contrast injection, which originates from the left rosenmuller fossa and extends to the right nasal cavity. An endoscopic sinus surgery was performed. Multiples biopsies were performed. Histopathologic diagnosis confirmed a grade 3 meningioma. The tumor was deemed inoperable after the neurosurgeons opinion. Postoperative radiotherapy was indicated.

**Conclusion :** Primary rhinopharyngeal meningiomas are rare tumors often misdiagnosed, resulting in improper clinical management. Surgical excision is considered the gold standard treatment, with adjuvant radiotherapy being considered based on the histopathological grade.

### 227 : Extranodal head and neck lymphoma: A retrospective study of 6 case series

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**Introduction :** Hodgkin and non-Hodgkin lymphoma is the third most frequent malignant tumor of the head and neck region. The incidence of non-Hodgkin-lymphomas increased up to 35 % in the last approximately 20 years. These tumors mainly involve 4 sites: Waldeyer's ring, the nasal sinuses, the oral cavity and the salivary glands. The aim of this study was to describe the characteristics of patients, the clinical presentation and the treatment approaches in order to optimize its management.

Materials and Methods : We carried out a descriptive retrospective study from 2020 to 2023 in the department of medical oncology at Gabes hospital. We reported the epidemiological, clinical and therapeutic feature. Result : Six patients with head and neck extranodal non-Hodgkin lymphoma (ENHNL) were diagnosed between 2020 and 2023: Four male and two female patients with a mean age at diagnosis of 57 years [37-76]. The most common revealing symptom was a swelling (n=4), followed by dysphonia (n=1) and anosmia and nasal obstruction (n=1). The average time from symptoms onset to consultation and from diagnosis to start of treatment was respectively 3.8 and 1.8 month. Location was Waldever's ring (n=3), nasopharynx (n=1), palate (n=1) and larynx (n=1). Histological subtype was diffuse large B cell non-Hodgkin lymphoma in 5 cases and anaplastic lymphoma in one case. Only one patient had a stage VI disease. All the patients but one was treated by 6 to 8 cycles based on a poly chemotherapy associated with targeted therapy (Rituximab, vincristine, cyclophosphamide, doxorubicin, prednisone) with a complete radiological response. Two of them benefited from loco regional radiotherapy. The mean overall survival was 14 months.

**Conclusion :** ENHNL is a rare pathology with highly variable clinical presentation depending on location. Due to the unspecific symptoms, a histopathological verification of the diagnosis is crucial. The poly chemotherapy had a basic role in the treatment and management of early stage.

### **Urological cancers**

### 228 : Late gastro-intestinal toxicities after radiation therapy of prostate cancers: Which predictive factors?

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**Introduction :** The purpose of the study was to evaluate the predictive factors of late gastrointestinal toxicities in patients treated with radiotherapy for prostate cancer at our department.

**Materials and Methods :** Between November 2011 and January 2019, 181 patients were treated, in our department, for prostate cancer by definitive radiotherapy without or with hormonotherapy. A total of 177 patients (97.8%) were included in this retrospective study. All patients were treated according to conformal technique with intensity modulation (IMRT) for 139 patients (78.5%) and without (RT3D) for 38 patients (21.5%). Acute and late gastrointestinal toxicities were reviewed and graded according to the RTOG scale. Clinical and dosimetric factors which could influence the occurrence of late toxicities were collected.

Result : During RT 108 patients (61%) developed gastro-intestinal toxicities which was RTOG grade  $\geq 2$  in 29 patients (16.4%). Aggravation of the initial symptomatology was noted for 99 patients (55.9%) and 78 patients (44.1%) had stability of their initial symptomatology. Late gastrointestinal toxicities data were available for 177 patients (97.8%). Twentyseven patients (15.25%) developed toxicities which were grade  $\geq 2$  for 5 patients (2.8%). Eleven patients (6.2%) had a deterioration of their symptomatology compared to the end of radiotherapy course. An improvement was noted in 90 patients (50.9%). In univariate analysis, older patients (68.7  $\pm$  7.3 years vs 72.1  $\pm$  6.1 years ; p=0.01), pelvic irradiation (OR+2.2; p=0.04), radiotherapy dose  $\geq$  76Gy (OR=0.3; p=0.01), high prostate volume ( $61.5 \pm 27.7 \text{ cc vs } 71.9 \pm 23.7 \text{ cc; } p=0.04$ ) and high prostate + seminal vesicles (77.4  $\pm$  28.6ccc vs 88.9  $\pm$  27.6 cc; p=0.04) were predictive factors of late gastro-intestinal toxicities. In multivariate analysis, the dose of radiotherapy was the only predictive factor (p=0.02).

**Conclusion :** The results of our study suggest that late gastrointestinal toxicities are more related to dosimetic factors (pelvic irradiation, radiotherapy dose, high prostate and prostate plus seminal vesicles volume than to the clinical ones (age). Neoadjuvant hormonotherapy may help reducing prostate volume and lower gastrointestinal toxicities especially for elder patients.

### 229 : Prostate cancer screening profile at Farhat Hached hospital , Sousse, Tunisia

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#### Farhat Hached University Hospital, Sousse, Tunisia

**Introduction :** Prostate specific antigen (PSA) test is an integral part of current screening for prostate cancer. Together with digital rectal examinations, it is recommended, by the American Cancer Society, annually for men aged above 50 years old. Populations at higher risk, such as those having first-degree relatives with prostate cancer, should be tested more frequently starting from the age of 45. Different forms of PSA, including free PSA, volume adjusted, complexed, intact, or pro-PSA, are currently being used in the screening process. The purpose of our study was to describe the prostate cancer screening profile at Farhat Hached University Hospital, Sousse

**Materials and Methods :** This was a descriptive and retrospective study, covering PSA assay requests received by our laboratory, as part of prostate cancer screening, during the months of January and February 2024. We studied their demographic, clinical and biological characteristics.

**Result :** Out of a total of 114 PSA test requests received, 56 (49%) were prescribed for prostate cancer screening. The departments with the highest demand were the occupational health and pneumology departments. The mean age of patients was 63,7 years old (40-83). 49 (87,5%) out of the 56 requests were indicated for men aged above 50 and 7 (12,5%) in front of

the presence of risk factors. The mean PSA concentration was  $4.6 \pm ng/mL$  (0.1-87.7). Nine patients (16%) had a pathological PSA level, four patients (7%) with a PSA higher than 10 ng/mL, prompting a prostatic biopsy, while five other patients (9%) had a PSA between 4 and 10 ng/mL so a FPSA assay was indicated.

**Conclusion :** Prostate cancer is one of the most common forms of cancer in men, with a significant impact on public health. Due to its high prevalence and ability to progress asymptomatically in its early stages, early detection is considered essential for improving clinical outcomes.

### **230** : Quantification of alpha-fetoprotein and beta-HCG in testis tumor patients

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**Introduction :** Testicular cancer is one of the few solid organ cancers where we have serum tumor markers to help manage the disease. Human chrorionic gonadotrophin (BHCG), alpha fetoprotein (AFP) and lactate dehydrogenase (LDH) are essential for diagnosis, staging and assessing treatment response. The aim of this study is to examinate the different characteristic profiles of BHCG, AFP, and LDH following treatment and to explore the modalities of the dynamic interpretation of these three biomarkers.

**Materials and Methods :** This was a retrospective descriptive study over a period of 4 year between 2019 and 2023. It documented all requests for tumoral biomarker measurements in patients diagnosed with germ cell tumors admitted in carcinology department. AFP, BHCG, and LDH levels were assessed both before and after treatment to evaluate treatment response.

**Result :** Overall, 43 patients were included in the study. The age ranged from 16 years to 69 years with a median age of 33 years. Initially,the mean BHCG level was 8 mIU/mL  $\pm$  5.3 mIU/mL, the average AFP level was 5152 ng/mL  $\pm$  3810 ng/mL, and the mean LDH level was 251.3 U/L  $\pm$  184.9 U/L. Initial tumor markers levels, monitored after orchidectomy and chemotherapy, was noted to decrease in 73% of cases with a mean level of BHCG 0 mUI/ml, AFP 4,1 ng/mL  $\pm$ 2 ng/mL and LDH 231,2 UI/L  $\pm$  103,6 UI/L. After treatment, elevated BHCG levels were observed in 7 patients, whereas elevated AFP levels were detected in 9 patients. Notably, 5 had persistently elevated levels of both BHCG and AFP.

**Conclusion :** Current recommendations support the use of the three biomarkers to monitor treatment response .In practice, individualizing the strategy for patients is crucial, considering the specificities of the clinical context and histological variations.

#### 231 : Young adult with leiomyosarcoma of the bladder: A case report

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**Introduction :** Bladder leiomyosarcoma (LMS) represents 1% of all bladder malignancies. It is associated with substantial morbidity and mortality if not treated early. There remains a paucity of literature regarding this highly aggressive tumor with less than 200 cases reported to date.

**Materials and Methods :** We report the case of a male patient with leiomyosarcoma of the bladder.

**Result :** The patient's age was 39. He was a heavy smoker with no prior medical or surgical history. He experienced from painful terminal hematuria for 3 months. Uroscan revealed thickening of the wall spread

over 35 mm with fat infiltration. The initial biopsy showed malignant sarcoma-like infiltration with necrotic foci. Tumor cells tested positive for anti-desmin, anti-caldesmon and anti-pancytokeratin, and negative for anti GATA3. Pathology could not definitively distinguish between LMS and carcinosarcoma. Two months later, the patient underwent cystoprostatectomy and bricker diversion via laparotomy. The tumor size was 6cm. Pathology confirmed LMS with positive staining for anti-EMA. Rare mitoses were described. The classification was pT3b N0 M0. The patient was referred to fertility preservation consultation then underwent adjuvant chemotherapy with 4 cycles of doxorubicin and ifosfamide followed by adjuvant radiotherapy.

**Conclusion :** Due to its rarity, there is no standard of care for bladder LMS. We opted for aggressive treatment for our patient, given his young age, in hopes of achieving better survival outcomes.

### 232 : First-line Tyrosine Kinase Inhibitors in Metastatic Renal Cell Carcinoma : Covered by the National Health Insurance Fund in Tunisia

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**Introduction :** Renal Cell Carcinoma (RCC) is the most common form of kidney cancer and is responsible for about 2.2% of all cancers diagnoses and 1.8% of deaths worldwide. Systemic treatment for patients who have metastatic renal-cell carcinoma with a clear-cell histologic component has shifted from cytokines to drugs targeting angiogenesis. In Tunisia, Sunitinib and Pazopanib which are two tyrosine kinase inhibitors, have been approved as first-line therapy for the treatment of clear-cell, metastatic renal-cell carcinoma, and they are covered by the National Health Insurance Fund. The objectifs of our study are: The evaluation of the consumption of Pazopanib and Sunitinib from 2021 to 2023 at the CNSS polyclinic of Sfax and analysis of the epidemiological and clinicopathological profile of patients with RCC.

**Materials and Methods :** This is a retrospective study including patients with metastatic RCC which have receive a continuous dose of pazopanib (800 mg once daily) or sunitinib in 6-week cycles (50 mg once daily for 4 weeks, followed by 2 weeks without treatment),during the period from 01/01/2023 to 31/12/2023, covered by the National Health Insurance Fund and provided by the CNSS polyclinic of Sfax.

Result : The consumption on Sunitinib 50mg has increased by 50% between 2021 and 2023, versus 31.7 % for Pazopanib, and 30% between 2021 and 2022. Contrary to sunitinib ,Pazopanib has decreased by 35% between 2022 and 2023 at the CNSS polyclinic of Sfax. The cost of one month of Sunitinib 50mg is around 6,993,450 dT versus 8063.994 dT for Pazopanib 400 mg in 2023. 30 patients were treated by Sunitinib. The median age is 66 years old with extremes ranging from 20 to 90 years old. 70% of cases were males with a M/F sex ratio 2.33. The median duration of treatment with Sunitinib is 7 months (SD: 11.04) with extremes ranging from 3 to 51 months. 80 % of patients were compliant with treatment. 60% of patients have progressed after treatment with Sunitinib. 8 patients have bone metastasis. Only one patient has received Everolimus in the second line and Pembrolizumab in the third line of treatment. 1 patient required treatment with Nivolumab after 39 months of sunitinib. 6 patients were died on the check point of our study. 15 patients were treated by Pazopanib. The median age is 59.5 years with extremes ranging from 39 to 81 years. 73.3% of cases were males with a M/F sex ratio 2.75. The median duration of treatment with Pazopanib is 4.8 months (SD :8.38) with extremes of 3 to 36 months. 60% of cases of patients have progressed after treatment with Pazopanib, of which 3 died, one patient required treatment with Everolimus, and 2 patients were treated with 2nd line chemotherapy after Pazopanib. We have detected only 2 patients who have bone metastasis.

**Conclusion :** Sunitinib and Pazopanib are two standards of care for the first-line treatment of Metastatic Renal Cell Carcinoma. They have similar efficacity in the first-line setting and do not affect outcomes with subsequent second-line treatment.

### 233 : Emerging Challenges in Radio-induced Bladder Carcinosarcoma: A Case Report

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**Introduction :** Radio-induced bladder carcinosarcomas are a rare and complex manifestation of oncological pathology, presenting significant diagnostic and therapeutic challenges. These tumors, characterized by their biphasic histological nature, combine carcinomatous and sarcomatous components and often emerge as an unusual complication in patients who have previously received radiotherapy for gynecological or urological cancers.

**Materials and Methods :** We report a case of radio-induced bladder carcinosarcoma operated on in our institute. We present the clinical, histological, and therapeutic management aspects.

Result : We present the case of an 85-year-old patient who was treated for squamous cell carcinoma of the cervix 30 years ago with radiotherapy and brachytherapy. She is currently consulting for pelvic pain accompanied by hematuria. Physical examination revealed tenderness in the suprapubic region. Cystoscopy with biopsy was performed. Histopathological analysis confirmed the presence of a carcinosarcoma. Further workup included imaging studies showed no distant metastasis. The patient was discussed in a multidisciplinary tumor board meeting, and considering the aggressive nature of the tumor and its radio-induced origin, an anterior exenteration with urinary diversion was recommended. During the surgical procedure, significant adhesions were encountered, likely a result of the previous radiotherapy. Additionally, an aspect of radiation enteritis was observed, making the creation of a bricker ileal conduit challenging. Despite these intraoperative difficulties, the surgical team successfully performed an anterior exenteration. Histopathological examination of the surgical specimen confirmed the diagnosis of radio-induced bladder carcinosarcoma, with negative surgical margins. Postoperative recovery was satisfactory, and the patient was referred for adjuvant chemotherapy and close follow-up.

**Conclusion :** Radio-induced bladder carcinosarcomas are rare and complex tumor entities. The clinical presentation of these bladder carcinosarcomas is often nonspecific. Their diagnosis relies on imaging techniques as well as histopathological examination of biopsies obtained through cystoscopy. The therapeutic management of these tumors remains a major challenge due to their rarity and potential aggressiveness. Surgery remains the mainstay of treatment.

### **234** : A Case of Adult Rhabdomyosarcoma of the Prostate : A rare localization

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**Introduction :** Rhabdomyosarcoma of the prostate is extremely rare, constituting less than 1% of prostate malignancies. Furthermore, Prostatic rhabdomyosarcoma in adults, infrequently reported in the literature,

appears to be more aggressive and less responsive to treatments compared to its pediatric counterpart.

**Materials and Methods :** Patient aged 19 years, without medical history, was referred to our institute in July 2019 for the management of a pelvic mass. The patient's medical history began two months prior, characterized by the onset of micturition disorders with a feeling of pelvic pain.

**Result :** On physical examination, no palpable mass was found, but the patient exhibited pain upon left lumbar percussion and presented with a bladder distension. CT scan was performed showing a voluminous tissue mass of the prostatic lodge of 108\*89\*114 mm pushing back the structures of vicinity without signs of bladder invasion. A scan-guided biopsy was performed, showing a round-cell sarcoma, consisting of cells with sparse cytoplasm and hyperchromatic nuclei, Myogenin-positive and Desminnegative, with the focal presence of cells reminiscent of rhabdomyoblastic cells. Given that the tumor was locally advanced and the patient experienced pain in the pelvis and lower limb, we decided to initiate chemotherapy. The patient had a chemotherapy type MAID. In August 2019, the patient experienced an acute intestinal obstruction, leading to the performance of a temporary colostomy before continuing with chemotherapy. By September 2019, the patient developed an abscess near the anal margin. The abscess was drained, and a biopsy was conducted, revealing prostatic rhabdomyosarcoma. Chemotherapy was resumed on October, 2019, with a VAI regimen. In April 2020, the patient's condition deteriorated significantly, presenting with peritonitis in a state of septic shock, necessitating emergency surgery. Despite undergoing peritoneal lavage and receiving noradrenaline, there was no improvement. The patient suffered a cardiovascular arrest and succumbed to his condition on the same day

**Conclusion :** The treatment for prostatic rhabdomyosarcoma involves a combination of surgery, radiation therapy, and chemotherapy. Although the overall prognosis remains unfavorable, children tend to have a better response to treatment compared to adults.

## 235 : Prostate Cancers at Very High Risk: Management and Evolutionary Profile

### Frikha M, Zouari S, Trigui R, Mnejja W, Siala W, Fourati N, Daoud J

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**Introduction :** The aim of our study was to evaluate the characteristics and therapeutic outcomes of radio-hormonotherapy for localized very high-risk prostate cancers.

**Materials and Methods :** This retrospective study reviewed all patients with non-metastatic prostate cancer treated at the Radiotherapy Department of Habib Bourguiba University Hospital between 2011 and 2018. We selected very high-risk patients with at least 2 high-risk criteria among stage T3-T4 defined on MRI, PSA > 40 ng/mL, or ISUP 4-5. Treatment consisted of conformal radiotherapy with intensity modulation (RT) associated with hormone therapy (HT). Biochemical recurrence-free survival (BRFS) was calculated from the end of treatment until the appearance of metastases or biochemical recurrence. Overall survival (OS) was calculated from the date of histological diagnosis until the date of death.

**Result :** Twenty-four patients were included. The median age was 72 years (51-79). The median initial PSA level was 57.9 ng/mL (4-219). The ISUP score was 4 in 12 patients (50%) and 5 in 2 patients (8.3%). A predominant grade 5 was present in 4 patients (16.4%). The tumor was classified as T3 in 16 patients (66.7%) and T4 in 5 patients (20.8%). The average dose of RT was 74 Gy (70-78 Gy).Fifteen patients (62.5%) received prophylactic nodal irradiation. The total duration of HT was 24 months for 15 patients, 33 months for 2 patients, and 18 months for 2 patients. After a median follow-up of 79 months (54-116 months), 3 patients (12.5%) had metastatic progression, and 6 patients (25%) experienced recurrence, with

3 being biochemical only. The 5-year and 8-year BRFS rates were 53.8%. The 5-year and 8-year OS rates were 87% and 68.8%, respectively.

**Conclusion :** For very high-risk prostate cancers, androgen deprivation therapy alone does not guarantee satisfactory tumor control. Therapeutic intensification by adding second-generation HT allows for more effective androgen depletion, thus improving BRFS and OS rates.

### Epidemiology

# **236 :** The epidemiological profile of patients in the COVID-19 pandemic at the medical oncology department of Gabes

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**Introduction :** Cancer is the second-leading cause of death in the world. It represents a worldwide major public health concern. The aim of this study was to analyze the clinico-pathological and therapeutic characteristics of the patients followed at the department of medical oncology of Gabes hospital.

**Materials and Methods :** We carried out a descriptive retrospective study in the medical oncology department of Gabes. We reported the epidemiologic, clinico-pathologic and therapeutic features for all the patients who were diagnosed and treated for cancer disease during 2021.

**Result :** We reported 216 patients between the 1st January and the 31 December 2021. The mean age at diagnosis was 58 years (18-93). A female predominance was noted (58.3%). A family history of cancer was noticed in quarter of patients. The disease was symptomatic at diagnosis in 95% of cases. The most frequent cancer site was respectively, breast cancer (33.5%), colorectal cancer (18%) and lung cancer (12%). Adenocarcinoma was the most frequent histological subtype (68%). 30% of patients has a metastatic disease at diagnosis and 60% have been diagnosed with a stage III or IV. Nighty three percent of patients have benefited from specific treatment (chemotherapy, radiotherapy, targeted therapy, hormonotherapy in respectively 75%, 31%, 17% and 26% while 6% had only palliative care

**Conclusion :** The knowledge of cancer epidemiology provides essential information on possible causes and population trends of this concern, therefore we can establish appropriate health-care interventions aimed at developing efficient policies for prevention, screening, and diagnosis.

## 237 : Epidemiological profile of women over the age of 70 operated for cancer breast

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**Introduction :** The elderly constitute a large part of the population affected by breast cancer. Advanced age confronts these people with problems of a diagnostic and therapeutic nature. This is a cancer most often observed at an advanced stage. In Tunisia, the number of new cases of breast cancer whose age is greater than 70 years, reached 428 in 2020.

**Materials and Methods :** This is a retrospective observational study conducted over 5 years from January 1, 2015 to December 31, 2023 for all women aged 70 and over who are operated for breast cancer at our service. **Result :** 560 patients were operated on for breast cancer, among them 58 are over 70 years of age, a frequency of 10.3%. The average age is 75.45 years, with extremes of 70 and 85 years.51% of our patients belonged to the southern region.74.1% of women are of urban origin.Personal history of fibrocystic mastopathy was found in 2 patients or 3.4%. Family history of breast cancer was found in 29.3% of cases.There were 33 women who had a menarche at an age<12 years.There is a predominance of

multiparous; 58% of our patients had more than 4 children. The age of the first pregnancy is 19.8 years on average with extremes of 14 to 35 years.Only one patient used oestroprogestative contraception with a duration of 6 months. Breastfeeding was noted in 44 women who had at least one child.No patients underwent mediastinal irradiation or toxic habits. The delay was specified in all patients. The average time from onset to first visit was 21.98 weeks.Breast cancer was discovered in 94.83% of cases by the patient herself. The autopalpation of a nodule was the most frequent mode of discovery since we find in 65.52% of cases. Breast examination objectified an involvement of the left breast in 37 patients or 63.8% of cases.Bilateral involvement was observed in 2 patients.The superior-external quadrant (QSE) was the site of cancer in 39,7% of cases.Inflammatory signs were found in 15 patients.The average tumor size was 5.2 cm, with extremes of 1 to 8 cm.20.08% had tumor size greater than 5 cm.48.3% had palpable lymphadenopathy of which 37.97% had mobile homolateral lymphadenopathy,5 patients or 8.62% had fixed homolateral lymphadenopathy and one patient had axillary lymphadenopathy associated with supraclavicular lymphadenopathy. The presence of a suspicious opacity on mammography was the most found lesion with a rate of 67.24%.21 of our patients died.37 patients are alive or 63.79% and are still under control. It is noted that 25 patients are currently in complete remission.

**Conclusion :** Despite the more favorable biological factors of breast cancer in older women, the tumor is often diagnosed at a late stage. The presence of co-morbidities and the fear of possible toxicities means that this age group is most often under-treated.

## 238 : Cancer in the south-East of Tunisia: Epidemiological and anatomo-clinical characteristics

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### University Hospital of Gabes, Tunisia

**Introduction :** Cancer is a public health problem in Tunisia and around the world. The incidence is continuously increasing and it will likely be the leading cause of death in the world in 2060. The aim of this study is to present the current situation of cancer in the south East of Tunisia and to discuss future perspective.

**Materials and Methods :** A descriptive retrospective study was conducted, we reported the epidemiological and anatomo-clinical features of cancer cases treated in the department of medical oncology at the university hospital of Gabes in 2023.

**Result :** We collected 515 patients between the 1st January and the 31 December 2023. The mean age at diagnosis was 57 years old (20-92). The age groups were distributed as follows:  $66.6 \forall \neg [36-65]$ ,  $28.3 \lor [>65 \lor]$ , 5% [18-35]. Patients were mainly from Gabes, Medenine and Kebeli governorate with respectively 51%, 24% and 11% of cases. The most common tumors treated were: Breast cancer (32.6%), Gastrointestinal cancers (28.2%), Lung cancer (15.5%) Gynecological cancers (6.6%) and Genitourinary cancers (6.1%). Thirty six percent of the patients had a metastatic disease at diagnosis. The molecular profiles of breast cancer were mainly represented by the luminal subtype (56%), followed by the HER2 positive and the triple-negative profile with respectively 30.8% and 13.2%. One third of the patients didn't have a health insurance and benefited from free hospital care services.

**Conclusion :** To improve the cancer situation in the south East of Tunisia, we have to be focused in the prevention, screening and early diagnosis in one hand and to coordinate between the different actors to ensure the availability of innovative treatments for all the patients regardless of their insurance regimen on the other hand.

239 : Perception of family medicine residents at the faculty of medicine of Sousse on palliative care

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**Introduction :** As demographic shifts occur, particularly with an aging population and the rise in chronic and disabling conditions, there's a growing recognition of palliative care as an essential universal health service. Our healthcare priorities revolve around chronic illnesses whereas; the importance of palliative care is still underscored. Hence, this study aims to assess the perception of family medicine residents concerning palliative care in Tunisia

**Materials and Methods :** We conducted a prospective study in 2024 witch concerns the family medicine residents at the faculty of medicine of Sousse from January to March 2024.

Result : The study involved 35 residents, predominantly female (twothirds) and male (one-third), with a median age of 27 years and 65.4% in their second year of residency. A majority (80%) encountered patients needing palliative care, mostly in emergency rooms, oncology units, and regional hospitals. Cancer patients comprised the largest group (94.3%), followed by terminal renal failure (62.9%) and stroke relapse (57.1%). However, only a small fraction (11.4%) of units had designated beds for palliative care. Residents expressed dissatisfaction (77.1%) due to factors like lack of experience, education, and resources. Nonetheless, most agreed (77.1%) on the importance of mastering palliative care. They felt confident (97.1%) in managing palliative patients, yet many (62.9%) lacked formal training, including the prescription of morphine, nutritional and psychological support. They stressed the need to integrate palliative care education into medical curricula. Maintaining specific palliative care units was deemed essential by the majority (94.3%) of residents. However, communicating palliative care decisions to patients proved challenging (85.2%) due to personal impacts.

**Conclusion :** The study shows low knowledge and attitude scores among Family Medicine Residents (FMR). Integrating academic learning with practical experience in palliative care is recommended. There is a need to organize palliative care in our healthcare system.

## 240 : Sertoli-Leydig tumor cells: An epidemiological and histopathological study

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**Introduction :** Sertoli-Leydig tumor cells(SLTC) are rare, accounting for less than 0.5% of all ovarian neoplasms. They are composed of sex cord and stromal elements. This work aims to analyze the clinical and pathological features of this entity.

**Materials and Methods :** Retrospective study involving 10cases of SLTC diagnosed in our department of pathology between 2006 and 2023.

**Result :** The average age was 34 years (extremes26-67). Patients presented with abdominal pain (4 cases), androgenic manifestations (3cases) and abdominal mass (3cases). In all cases tumors were unilateral. At gross examination, the mean tumor size was 11 cm (extremes 8-23 cm). All tumors were solid tan-yellow with cystic components. Histologically, the tumor was well differentiated (4cases),moderatelydifferentiated (2cases), poorly differentiated (3cases), retiform (1 case). Immunohistochemical study showed in all cases positivity for inhibin, WT1, and calretinin, this marquers were negative in retiformvariant. Evolution wasmarked by recurrence in3 cases. Two patients died and others have survived until now.

**Conclusion :** SLTCsare rare ovarian neoplasms, composed of varyingproportions of Sertoli and Leydig cells. They are mostly sporadic but can occur in DICER1 syndrome. The mean age of patients is 25

years, but it can present after menopause. Clinical presentation may include abdominal pain, pelvic mass, or androgenic manifestation. Frequently, tumors are unilateral. Histologically, SLTCs are subdivided into different forms based on the degree of tubular differentiation of the Sertoli cell component and the quantity of primitive gonadal stroma: well, moderately, poorly differentiated, and retiform. The immunohistochemical studyis essential for diagnosis byshowing positivity for inhibin, pan cytokeratin, calretinin, SF1, WT1, and CD56. These markers are negative in poorly differentiated and retiform forms. Prognosis depended on histological subtype, tumor grade, presence of heterologouselements, retiform pattern, tumor rupture and DICER I mutation.

# 241 : Epidemiology and Clinical Profile of Osteosarcoma: Findings from the Oncology Center in Sousse, Tunisia

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**Introduction :** Osteosarcoma, a malignancy primarily impacting long bones, may involve other skeletal sites. With a bimodal distribution, it peaks in the second decade of life and later adulthood. This study delves into osteosarcoma's epidemiological and clinical characteristics, outlining its impact at the oncology center in Sousse, Tunisia.

**Materials and Methods :** The research consists of a retrospective study involving 59 cases of osteosarcoma collected at the oncology department of Farhat Hached Hospital in Sousse between 2002 and 2022.

Result : 59 patients were documented, with a mean age of 26 years and a male predominance demonstrated by a sex ratio of 1.8. 10% of patients had a history of cancer in the family, while 5.1% had a personal history of cancer. Regarding osteosarcoma symptoms. The most common initial presentation was a spontaneously painful swelling or pain following trauma (55.9%). Clinical examination revealed an average tumor size of 20 cm, predominantly affecting the lower limb (69%) while the humerus was affected in 10.2% of cases. Furthermore, inflammatory manifestations were evident in two patients. Metastases were present at diagnosis in eleven patients, seven of whom exhibited pulmonary involvement. Osteoblastic osteosarcoma emerged as the predominant histological type (42.4%). The average time from the onset of the first symptom to clinical presentation was 5,28months. For treatment, chemotherapy followed by surgery was the preferred modality, radiotherapy was reserved for 11,9% of patients. The overall 5-year survival rate was 55.9%. For non-metastatic cases, the average survival was 112 months, whereas for metastatic cases, it was 12,6 months, indicating a significant difference (P=0.000).

**Conclusion :** Osteosarcoma elucidates a male predilection, frequent lower extremity localization, and delayed diagnosis. While the conventional approach involves chemotherapy preceding surgical intervention, the persistently low overall survival underscores the exigency for ongoing scientific inquiry to optimize therapeutic effectiveness in this challenging oncological domain.

### 242 : Neuroblastoma in the oncology pediatric center of Sousse Tunisia: epidemiological, clinical, anatomopathological, and therapeutic characteristics

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**Introduction :** neuroblastoma is a malignant embryonic tumor derived from sympathetic tissue. It represents the third cause of cancer in children, and constitutes the most frequent solid tumor. It has great clinical and prognostic heterogeneity ranging from forms that regress spontaneously to very severe forms quickly fatal. Our work aims to study the epidemiological, clinical, and therapeutic characteristics of neuroblastoma from a series of the Tunisian center.

**Materials and Methods :** We conducted a retrospective study at the medical oncology department of the Farhat Hached University Hospital in Sousse over a period of 27 years from January 1, 1997, to December 31, 2023. We collected 62 patients followed for neuroblastoma

**Result :** The average age was 32.4 months [1 month to 120 months], of which 24 (38.7 %) were less than 18 months old. The most common INSS stage was stage 4 (56.5%).The most frequent discovery circumstances were abdominal distension and abdominal pain respectively in 37.1 % and 22.6 % of cases. Metastatic forms were observed in 61.7% of cases. The study of N-myc gene amplification was performed in 34 patients and was amplified in 52.9% of the cases. Induction chemotherapy according to the NB94 protocol, the POG9341 protocol and the alternation of VP16 carbo/CADO or CO was indicated in 24 patients. Surgery was performed in 26 patients (41.9%). Three patients received intensive chemotherapy followed by autologous hematopoietic stem cell transplantation. The 5-year survival rate was 48%.

**Conclusion :** Neuroblastoma is an extremely heterogeneous disease, with variable location, histopathological appearance, and biological characteristics, and the challenge remains for managing forms of poor prognosis due to lack of resources in our country, which implies the necessity of a national protocol adapted to our resources.

### Hematology

### 243 : Extramedullary relapse of acute lymphoblastic leukemia : A case report

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**Introduction :** B-lymphoblastic leukemia is a neoplasm of precursor lymphoid cells committed to the B lineage, typically composed of small to medium-sized blast cells with scant cytoplasm, involving bone marrow and blood. It is primarily a disease of children. Extramedullary relapse is a recurrence of leukemia in sites other than the bone marrow. Relapses affect various organs but rarely the uterine cervix. The aim of this study was to describe the histological features and immunophenotype of relapse of B-acute lymphoblastic leukemia in uncommon site of involvement.

**Materials and Methods :** we report a case of 17-year-old female with an uterine cervix mass in a context of B-acute lymphoblastic leukemia remission.

**Result :** the biopsy of the mass was performed. Microscopic examination shows the lymphoid proliferation made of small-sized monomorphous cells with a scant cytoplasm. The nuclei were round with dispersed chromatin. The neoplastic cells presented a high nuclear : cytoplasmic ratio. Their immunophenotype were CD79a+, CD34+, TdT+, CD3-. The proliferation index was high (80%). We retained the diagnosis of a recurrence of B lymphoblastic leukemia in the cervix.

**Conclusion :** 75 % of B-lymphoblastic leukemia occur in children under 6 years old. The improved treatments have drastically reduced the mortality of this young people. Approximately 15 to 20 % of children and approximately 50 % of adult patients still relapse. The involvement of the uterine cervix in extramedullary relapse of B-cell acute lymphoblastic leukemia is rare. This case highlights the possibility of a recurrence after the remission. Microscopic examination and immunohistochemistry studies established the exact diagnosis. It has a good prognosis in children, particularly isolated extramedullary relapse.

### 244 : Lymphome MALT thyroïdien après chimiothérapie d'adénocarcinome du côlon et de cancer du sein

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**Introduction :** Toute chimiothérapie administrée pour le traiter une hémopathie ou une tumeur solide peut causer une néoplasie secondaire d'ou l'importance du suivi des patients sur une longue période en post-traitement et recherche des signes d'appel

**Materials and Methods :** Dans ce travail, nous rapportons un cas clinique qui illustre la survenue d'un lymphome de MALT thyroidien aprés chimiothérapie d'adénocarcinome du colon et du cancer du sein

**Result :** Une patiente âgée de 52 ans, aux antécédents de cancer du sein droit et d'adénocarcinome du côlon traités par chirurgie et chimiothérapie, a été adressée à notre service pour complément de prise en charge d'un lymphome MALT thyroïdien diagnostiqué par une biopsie sur une pièce de thyroïdectomie totale réalisée suite à la découverte d'une thyroïde multinodulaire. L'examen physique a révélé une cicatrice de thyroïdectomie propre et des adénopathies jugulo-carotidiennes bilatérales infracentimétriques. Une coloscopie de contrôle n'a montré aucune récidive tumorale au niveau du côlon. Le bilan d'extension a été négatif, notamment l'absence d'hyperfixation métabolique au PET scan. Notre décision était la surveillance étant donné que c'est un lymphome de bas grade réséqué et le risque de générer une autre néoplasie si une chimiothérapie lui a été administrée.

**Conclusion :** Chez un patient aux antécédents de tumeurs solides traitées par chimiothérapie, il est essentiel de maintenir une surveillance à long terme et d'être constamment attentif à tout signe d'appel et de soupçonner la possibilité d'un lymphome secondaire. Il convient également de prendre en compte le rapport bénéfice/risque avant d'entreprendre une nouvelle chimiothérapie intensive.

## 245 : large B-cell lymphoma mimicking a frontal mucocele : case review and review of literature

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**Introduction :** Large B-cell Lymphoma Lymphoma that originates in the paranasal sinuses is an exceptionally rare occurrence. Its initial symptoms can closely resemble those of infectious, and inflammatory conditions. This similarity in presentation often results in a delay in diagnosing the lymphoma. The study aimed to present a case of large B-cell lymphoma originating in the frontal sinus that presented as a frontal sinus mucocele with orbital complications and Nerf palsy.

**Materials and Methods :** A review of a single case including radiographic, intraoperative, and pathologic findings was done, followed by a discussion highlighting relevant literature.

**Result :** This report presents the case of a 65-year-old woman who presented with a 12-week history of a progressively enlarging swelling on the left side of her forehead. The swelling was smooth, firm, and accompanied by changes in the overlying skin. Upon examination, the patient exhibited signs of intracranial hypertension, including grade 2 exophthalmos and ptosis suggestive of an extrinsic 3rd cranial nerve palsy. MRI revealed a left frontal mucocele with intracranial extension and superior left extraconal extension. The surgical intervention involved the excision of the exophytic lesion, which exhibited firm consistency and a poorly vascularized pearly-white appearance. No pus was detected upon frontal sinus trephination. Subsequent histopathological analysis revealed

diffuse large B-cell lymphoma. The patient was subsequently referred to the Hematology/Oncology department for adjunctive treatment.

**Conclusion :** We report a rare case of large B-cell frontal lymphoma mimicking a frontal mucocele. By enhancing comprehension of both ailments, we can heighten clinicians' awareness of the potential presence of frontal sinus lymphoma, even in the presence of mucocele evidence. This, in turn, may prompt earlier tissue biopsies to confirm the diagnosis.

# 246 : Primary Burkitt lymphoma of the posterior fossa: An exceptional case and review of literature

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**Introduction :** Primary central nervous system lymphoma (PCNSL) is a rare diagnosis that has seen an increase in cases among immunocompetent adults. It predominantly manifests as diffuse B-cell lymphomas presenting as a single lesion within the brain parenchyma. Intraventricular localization is exceedingly rare.

**Materials and Methods :** A review of a single case including radiographic, intraoperative, and pathologic findings was done, followed by a discussion highlighting relevant literature

**Result :** We present the case of a 21-year-old patient who exhibited symptoms of increased intracranial pressure (ICP) and static cerebellar syndrome. Brain MRI revealed an expansive lesion in the posterior fossa centered on the fourth ventricle, accompanied by upstream hydrocephalus necessitating urgent ventriculoperitoneal shunting and subsequent open biopsy of the tumor. Histopathological examination confirmed a diagnosis of cerebral Burkitt lymphoma. CT of the chest, abdomen, and pelvis as well as viral serologies showed no abnormalities. The established diagnosis was primary Burkitt lymphoma of the fourth ventricle, representing the third reported case in the literature, all occurring in young, immunocompetent individuals. On imaging, this tumor can be confused with glioblastoma or medulloblastoma. Diffusion-weighted and perfusion MRI can distinguish it through more pronounced diffusion restriction due to hypercellularity, absence of neo-vascularization, and disruption of the blood-brain barrier.

**Conclusion :** Clinicians should consider this diagnosis in cases of fourth ventricle mass lesions in young individuals and promptly initiate radiochemotherapy for improved survival outcomes.

## 247 : Primary Central Nervous System Lymphoma: A Study of 20 Cases

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**Introduction :** Central nervous system lymphoma can arise de novo or as a consequence of systemic disease. These tumors predominantly consist of malignant lymphocytes, with diffuse large B-cell lymphoma being the most common subtype. Despite advancements in treatment, CNS lymphomas carry a poor prognosis, highlighting the need for further research to improve outcomes for affected individuals.

**Materials and Methods :** This retrospective study aims to analyze patient data collected from the Neurosurgery Department at Fatouma Bourguiba University Hospital in Monastir, Tunisia, spanning from 2016 to 2023.

**Result :** This data outlines the clinical manifestations, diagnostic approaches, staging, and therapeutic strategies for primary central nervous system (CNS) lymphoma and secondary CNS lymphoma A total of 20 patients were diagnosed with central nervous system lymphoma at our institute. Presenting symptoms encompass focal neurologic deficits, cognitive impairment, and signs of increased intracranial pressure.

Surgical interventions for all our patients were conducted using one of the following. The median progression-free survival (PFS) for our patients was 24.3 months, and the 3-year survival rate was 38.7%. Treatment protocols vary depending on lymphoma subtype and location, with diffuse large B-cell subtype being predominant and exhibiting aggressive behavior. Initial therapy typically involves methotrexate-based polychemotherapy, yielding high response rates, albeit with common relapses. Consolidation therapies and maintenance regimens aim to mitigate relapse rates. Less aggressive lymphoma forms may be managed with radiation or targeted agents. Such data analysis serves as a foundation for optimizing patient care, informing future research endeavors, and enhancing healthcare delivery in neurosurgical settings. Prompt diagnosis and initiation of tailored therapies are imperative for potentially curative outcomes.

**Conclusion :** This article critically evaluates existing literature in this domain and offers evidence-based recommendations for the management of patients with primary central nervous system lymphoma (PCNSL). However, numerous questions persist unanswered, including determining the most effective treatment for elderly patients and refining the management strategies for intraocular and meningeal disease, which necessitate ongoing scientific endeavors. In addition to therapeutic interventions, advancements in molecular and radiological diagnostic tools hold the potential to enhance our understanding of this disease, facilitating early diagnosis and more precise categorization of patient responses.

### 248 : Management of Primary Mediastinal B Cell Lymphoma: Insights from a Single-Center Study in Tunisia

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**Introduction :** Primary mediastinal B cell lymphoma (PMBCL) represents 2 to 3% of all non-Hodgkin lymphomas, constituting a rare form of large B-cell lymphomas. The aim of the study is to identify epidemiological, clinical and management characteristics of patients with PMBCL, and to analyze their outcomes.

**Materials and Methods :** This is a descriptive retrospective single-center study including all consecutive adult patients with PMBCL managed at the Hematology Department of Farhat Hached University Hospital, Sousse, Tunisia. The study period ranged from January 1st, 2012, to December 31st, 2021. Diagnostic material was obtained through computed tomography-guided biopsy of the mediastinal mass in all patients. Pathological diagnosis was confirmed by the expression of CD19, CD20, CD23, and CD79a antigens without CD15.

**Result :** Fourteen patients were included in the analysis. Mean (±SD) age was 28±9 years; sex ratio at 1. At presentation, 12 (85.7%) patients had bulky disease, 4 (28.6%) superior vena cava syndrome, and 3 (21.4%) constitutional symptoms. Upon scanographic evaluation, 12 (85.7%) patients were Ann Arbor stage IV; 12 (85.7%) two or more extranodal sites and 12 (85.7%) mediastinal bulky disease. International prognostic index was 0-1 in 13 (92.9%) patients. Treatment was conducted by R-CHOP chemotherapy for 5 (35.7%) patients; R-adjusted EPOCH, 7 (50%) and R-CHOEP, 2 (14.3%). Overall, 10 (71.4%) patients responded to chemotherapy; 7 (50%) had complete remission and 3 (21.4%) partial response. Among the complete responders, 3 (21.4%) patients received Radjusted EPOCH; 2 (14.3%), R-CHOEP and 2 (14.3%), R-CHOP. Two (14.3%) patients relapsed. As for the non-responders, one (7.14%) patient had stable disease and one (7.14%), progressive disease. Three (21.4%) patients received autologous stem cell transplant. Mean survival was 36.57±34.9 months.

**Conclusion :** Since the recognition of PMBCL as a separate entity, several studies have compared different treatment strategies. More reports and

randomized controlled trials are required to define the optimal therapeutic approach.

### **Neuro Oncology**

**249** : Pleural metastasis of an intramedullary ependymoma: a case study and a review of the literature

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**Introduction :** Ependymomas are rare tumors of the central nervous system of the glioma type. They account for 18% of intramedullary tumors and 60% of intramedullary glial tumors. Ependymomas most often recur locally and may disseminate along the entire cerebrospinal axis, but rarely outside the brain or medulla.

**Materials and Methods :** We report the case of a young man treated with intramedullary ependymoma who presented with pleural dissemination.

**Result :** This is an 18-year-old patient who presented with pain and paresis of the right lower limb with gait disturbances. Vertebromedullary magnetic resonance imaging (MRI) showed a spinal cord lesion of the terminal cone consistent with an ependymoma at the D11-D12 level of 55x15mm. He had a complete excision of the lesion. Histopathological examination concluded that the patient had a grade 2 intramedullary ependymoma. Two months later, aggravation of neurological signs related to local recurrence and the MRI showed spinal cord lesion in projection of D12-L1 of 16x17mm. He underwent D10-L1 dorsal radiotherapy at a dose of 45 Gy. MRI Evaluation: stability of the expansive process with slight clinical improvement. One year after onset of dyspnea. CT scan showed left pleural effusion. Pleural biopsy confirmed that it is a pleural infiltration by a malignant process consistent with a grade III CK-GFAP+ ependymoma. The patient died shortly after pleural biopsy.

**Conclusion :** The susceptibility to develop metastases outside the central nervous system may be related to the TERTp mutation according to recent research. Therefore, the detection of the TERTp mutation in plasma from circulating tumor DNA can predict extracerebrospinal metastatic spread and could be a means of monitoring patients with ependymoma.

### 250 : Epidemiological, therapeutic and prognostic profile of high grade gliomas : About 19 cases

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**Introduction :** The most prevalent primary brain tumors are gliomas, The latest OMS 2021 classification considers both morphological features and molecular alterations including IDH mutation, 1p/19q codeletion, TP53, and ATRX mutations. Despite the treatment, the prognosis for high-grade gliomas remains poor.

**Materials and Methods :** We conducted a retrospective study based on the records of 19 adult patients treated for high grade glioma between 2018 and 2022 in the oncology department of military hospital.

**Result :** The study involved 19 patients, 63.4% male and 36.6% female (sex ratio 1.8). Median age was 49 years-old, female population was younger with median Age of 34 years-old (vs. 56 years-old for male). All patients had histologically confirmed high grade glioma. According to the OMS 2021 classification, Glioblastoma was present in 15 patients (78.9%) and oligodendroglioma in four patients (21.1%) Tumor locations were the frontal lobe in (42.1%), temporal lobe (21.1) spinal cord (10.5%), brainstem (5.3%), corpus callosum (5.3%). Surgery was performed on

78.9% of patients (21.4% had complete resection and 78.6% incomplete resection). Among them, 89.5% had adjuvant treatment (52.6% according to STUPP protocol), Afterward, 61% of patients relapsed, 22.2% had disease stability, and 16.7% discontinued monitoring. median time of relapse after surgery was 13 months, second line therapy was Irinotecanbevacizumab (44.4%), Temozolomide rechallenge (10.5%), 45% received best supportive care due to low performance status. In our cohort female patients presented with more agressive tumors and relapsed earlier compared to the general population, this could be explained by tumor location, two out of the seven female patients included had spinal cord gliomas while one had unresectable butterfly glioblastoma of the corpus callosum.

**Conclusion :** In high grade glioma, certain tumor locations can worsen the outcome in populations that have a favourable prognosis such as an age under 65 years old and female gender.

## 251 : Multicentric Study on Infratentorial Glioblastoma : Clinical Characteristics and Prognosis

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**Introduction :** World Health Organization (WHO) grade 4 gliomas, previously called glioblastoma, represent the most common and highly malignant subset of gliomas. These tumors constitute 45% of all malignant primary brain and Central Nervous System (CNS) neoplasms, 54% of all gliomas, and 16% of all primary brain and CNS tumors. However, their occurrence in the cerebellum is relatively rare, and as a result, our understanding of their pathogenesis and prognosis in this location remains limited. Studies have been limited to case reports and small case series.

**Materials and Methods :** We conducted a multicentric study spanning the years 2013 to 2023, focusing on surgically treated cerebellar glioblastomas in Tunisia

Result : We aimed to identify unique features of infratentorial glioblastomas. Our investigation has uncovered significant clinical differences between glioblastomas located in the cerebellum and those in supratentorial regions. Remarkably, our findings indicate that cerebellar glioblastomas tend to have a more favorable prognosis at the time of diagnosis compared to glioblastomas located in supratentorial areas. Cerebellar glioblastoma typically manifests in individuals around 30 years of age, although our cases have been found in patients as young as 14 months and as old as 55 years. There is a higher incidence among males, with a male-to-female ratio of 2 to 1. The most common preoperative symptoms observed in our study were ataxia, affecting 5 patients, and headaches, reported by 6 patients. Additionally, 33.33% of patients developed hydrocephalus, necessitating the insertion of a shunt. Surgical interventions predominantly involved subtotal resection (STR), which was performed in 83.33% of cases, while gross total resection (GTR) was carried out in 16.66% of cases. The median overall survival (OS) from the time of glioblastoma (GBM) diagnosis was 10 months.

**Conclusion :** These findings underscore the importance of recognizing the unique features and clinical behavior of cerebellar glioblastomas, shedding light on their distinctive course and prognosis.

## 252 : Managing Tumours in the Pineal Region: Insights from a Multicentred Study

#### Trifa A, Ghorbel M, Mâamri K, Daoued AA, Darmoul M

Department of Neurosurgery, Fattouma Bourguiba University Hospital, Monastir, Tunisia **Introduction :** Tumours of the pineal region (PRT) are rare. Despite advances in neuroradiology and microsurgery, the management of pineal tumours is complex due to their deep intracerebral location and histological diversity.

**Materials and Methods :** We conducted a descriptive and retrospective national study of PRT operated on at various neurosurgery departments across the country, including the National Institute of Neurology in Tunis, the University Hospitals of Sfax, Monastir, and Sousse, the Main Military Instruction Hospital in Tunis, and the Traumatology and Burns Centre of Ben Arous over a period from 1995 to 2018 (23 years).

**Result :** We collected 75 cases of operated PRT. The mean age at the time of surgery was 28 years. Our series included 31 females (41.3%) and 44 males (58.7%). The average duration of symptoms was 3.8 months. The main reason for consultation was symptoms of increased intracranial pressure (ICP). Clinical symptoms were predominantly neuro-ophthalmological signs. MRI was the preferred diagnostic modality. Tumour marker levels were useful in the diagnostic approach. Our series comprised 26 germ cell tumours (34.8%), 30 pineal parenchymal tumours (40%), and 19 nonspecific pineal parenchymal tumours (25.2%). Treatment of pineal region tumours involves surgery, radiotherapy, and chemotherapy, tailored to the histological nature and extent of tumour spread. Pineal parenchymal tumours are associated with high mortality, while germ cell tumours have a better prognosis. We also demonstrated that complete tumour resection correlates with improved outcomes.

**Conclusion :** PRTs are a rare pathological entity with a wide variety of histological types. Their management involves a multidisciplinary approach including surgery, radiotherapy, and chemotherapy. The prognosis depends on the histological type and extent of resection.

## 253 : Single-Institution Experience: Five Cases of Atypical and Malignant Meningiomas

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**Introduction :** Atypical and malignant meningiomas correspond to WHO grade II and III meningiomas. They represent approximately 20% of all intracranial. Their clinical management represents a real problem because of The high risk of recurrence. The indication for further treatment is still questionable

**Materials and Methods :** We conducted a retrospective study on five patients with atypical or malignant meningiomas treated in our institution over the past ten years. The histological classification used was WHO 2007 and the final diagnosis was each time verified by a pathologist experienced in neurooncology.

**Result :** Our patients are three males and two females (Sex-Ratio: 1.5). The average age was 53 years. In four cases the histopathological diagnosis was a grade II meningioma and only one patient had a grade III meningioma. Tumor resection was complete in four patients. Adjuvant radiotherapy has been used in all patients and none received chemotherapy. Four patients relapsed within the first five years after their surgery and were operated on again. The five-year survival is 80%.

**Conclusion :** Despite the small number of patients studied, it appears that these unusual forms have a greater potential for recurrence than grade I meningiomas. A study including a greater number of cases over a longer period would be necessary in the future.

# 254 : Olfactory Neuroblastoma Extending into the Intracranial Region: a challenging case and Literature Review

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**Introduction :** Olfactory neuroblastoma (ONB) is a rare form of head and neck tumor, and ONB presenting an intracranial extension is extremely rare. At the present time there is no established therapeutic standard supported by oncological studies.

**Materials and Methods :** We report the clinical features of an ONB patient managed successfully by initial chemotherapy followed by a combined transcranial and transnasal approach for tumor excision and postoperative radiation therapy.

**Result :** A previously healthy 46-year-old female had experienced occasional nasal obstruction for 2 years. The symptoms gradually worsened and she consulted our hospital on May 2014. Otolaryngological examination revealed an easily bleeding left nasal cavity mass and a left exophthalmia. Computed tomography followed by magnetic resonance imaging showed a large mass in the left ethmoidal sinus and nasal cavity extending into the left frontal base through the left cribriform plate. These radiological observations led us to consider the mass as a malignant tumor and a biopsy under local anesthesia was performed. The tumor was identified as an ONB and no distant metastases were found. Preoperative chemotherapy was administered and the tumor excision was carried out using both transcranial and transnasal approaches. Post-operative radiation therapy was indicated. The patient showed no evidence of recurrence till the most recent follow-up examination, one year later.

**Conclusion :** ONB can extend to the intracranial region despite the absence of distant metastasis. Surgical removal using a combined transcranial and transnasal approach, in addition to chemo-radiation therapy, can successfully address this lesion. Long-term follow-up is mandatory.

## 255 : Gliosarcoma of the Brain: A Retrospective Analysis of Nineteen Cases and Literature Review

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**Introduction :** Gliosarcoma is a rare and aggressive type of malignant brain tumor that exhibits characteristics of both glioblastoma multiforme (GBM) and sarcoma. It is characterized by the presence of both glial and sarcomatous components within the tumor. Gliosarcomas typically occur in adults and commonly present with symptoms such as headaches, seizures, neurological deficits, and changes in mental status. Despite advances in treatment modalities, including surgery, radiation therapy, and chemotherapy, gliosarcomas have a poor prognosis

**Materials and Methods :** This study presents a retrospective review of patients managed for intracranial Gliosarcoma at the departments of neurosurgery of Fattouma Bourguiba University Hospital, Sahloul University Hospital, and the Tunisian National Institute of Neurology during the last fifteen years.

**Result :** Between 2000 and 2015, 19 cases (7 males and 12 females) of histologically proven Gliosarcomas were treated. The mean age at diagnosis was 47 years (range 6-66 years). Signs of raised intracranial pressure were the most common presenting symptoms. The median tumor size was 5.1 cm (range 3–8 cm). In only one case the tumor localized in the posterior fossa. All patients underwent tumor resection followed by postoperative radiation therapy. Surgical resection was complete in 37 % of cases and subtotal in 52 % of others. Chemotherapy was only administered to the last four cases. Median survival was 9 months (range 6-14 months). Recurrence was observed in 17 cases. All of them died.

**Conclusion :** Given the rarity of Gliosarcoma and the variability of its radiographic appearance, the diagnosis may be apparent only upon biopsy of the lesion. This high-grade tumor is still associated with a poor survival even under multimodal treatment.

### 256 : Oligodendrogliomas: A Comprehensive Analysis of 10 Cases and review of literature

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**Introduction :** Oligodendrogliomas(ODs) represent 5% of primary brain tumors. They are mainly supratentorial tumors that constitute a particular group within the glioma classification.

**Materials and Methods :** A retrospective study was conducted at the Neurosurgery Department of FB Monastir, concerning 10 histologically confirmed cases of ODs collected over 15 years from January 1, 1995, to December 31, 2010. This study aims to investigate the clinical characteristics, diagnostic and therapeutic approaches, and compare them with the literature.

Result : The mean age was 41 years with a clear male predominance (7M/3F). The mean diagnostic delay was 3.91 months. Seizures were inaugural in 7 cases and increased intracranial pressure (ICP) was present in 8 cases, with 3 cases being inaugural. CT scan showed a hypodense lesion with inconsistent contrast enhancement. MRI revealed a lesion with T1 hyposignal and T2 hypersignal with contrast enhancement in 75% of cases. A cystic appearance with both cystic and solid components was noted in 3 cases. Total resection was achieved in 4 cases and subtotal in 7 cases. Six cases were grade II ODs and 4 were anaplastic. Radiotherapy (RT) was recommended in 9 cases. No patient received chemotherapy. Two cases of recurrence were noted with no malignant transformation. The average survival rate was 50% at 3 years and 40% at 5 years. ODs are tumors of young male adults, with a relatively progressive evolution, predominantly located in the frontal region. Treatment primarily relies on surgery, supplemented by postoperative radiochemotherapy. The literature review concurs with the findings of our series and highlights 5 favorable prognostic factors: young age, isolated seizures, as complete resection as possible, low histological grade, and postoperative radiochemotherapy. It is noteworthy that ODs show real chemosensitivity to the PCV protocol as well as Temozolomide.

**Conclusion :** The diagnostic management of ODs has been transformed by the introduction of modern imaging techniques (CT and MRI). Therapeutic management relies on surgery but also on adjuvant treatment: postoperative radiochemotherapy.

# 257 : A National Multicenter Study of Intracranial Pilomyxoid Astrocytoma in Tunisia

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**Introduction :** Pilomyxoid astrocytoma (PMA) is a recently recognized World Health Organization (WHO) Grade II tumor distinct from pilocytic astrocytomas (PA). They may be more aggressive with a different clinical course compared to PA due to its greater propensity for local recurrence and cerebrospinal dissemination. Most cases arise from the hypothalamic/chiasmatic region. Few large studies report the characteristics of the lesion. The authors discuss the clinical, and radiological features, postoperative course and the prognosis of this tumor. **Materials and Methods :** This is a multicentric retrospective study including 16 patients operated for a cerebellar PMA treated between January 2007 to December 2019 at the neurosurgical departments of Hospital of Monastir, the hospital of Sousse, National Institute Mongi Ben Hmida of Neurology and Burns and Trauma Center. Clinical, radiological, and prognostic features were reviewed. The follow-up was 1 to 7 years.

**Result :** The age of the patients varies from 9 to 420 months (35 years) with an average of 134 months (or 11.16 years). The male / female sex ratio is equal to 3. The functional signs are dominated by the signs of intracranial hypertension, gait disturbance, visual disturbance, macrocrania, weakness of a limb or hemi-body and seizures. More rarely, it was a consciousness disorder. On imaging, 85.7% of the tumors had a double component: cystic and solid. The solid component was the most dominant in 75% of the cases and typically hypodense in 100% of the cases. The MRI tumor signal was consistent in all cases. The tumors showed a frank hypo-signal in T1 (100% of the cases) and a frank hypersignal in T2 (100% of the cases). Intra-tumor hemorrhage was present in only 1 case (6.25%). Gross total excision was obtained in 8 cases (50%), subtotal in 1 case (6.25%), partial in 6 cases (37.5%) and biopsy in 1 case (6.25%). Post-operative follow-ups were simple in 11 patients (68.75%). Morphological and immunohistochemical studies confirmed the diagnosis of pilomyxoid astrocytoma. Adjuvant chemotherapy was administered to 4 patients (25%). Conventional external radiotherapy was performed for 5 patients (31.25%). Out of the 16 cases included in this sample, 2 local recurrences were noted, that is 25% of the cases after surgery considered complete excision (for 8 patients). There were 4 cases of tumor progression, which is in 50% after surgery deemed to be subtotal, partial excision or biopsy (for 8 patients). Altogether, we noted 37.5% recurrence and tumor progression. There has been one case of distant metastasis with leptomeningeal encephalic and medullary dissemination.

**Conclusion :** Intracranial pilomyxoid astrocytomas are rare tumors, the clinical revelation is non-specific. Radical surgical excision and young age represent the best prognostic factors. The large tumor size appears to have a negative influence on the survival of these patients and the place of radiotherapy remains to be defined. Better knowledge of this pathology, particularly on the genetic level, will probably allow targeted anti-tumor therapy and better therapeutic control.

### 258 : Primary Meningeal Pleomorphic Xanthoastrocytoma Outside the Brain Parenchyma: A case report and review of literature

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**Introduction :** Pleomorphic xanthoastrocytoma (PXA) is a rare astrocytic tumor, constituting less than 1% of astrocytomas, initially identified as a distinct entity by Kepes in 1979 and later designated as a WHO grade II tumor in 1993. Its classification has since evolved to encompass anaplastic features, leading to the recognition of Grade III tumors known as "anaplastic PXA" in the 2016 WHO classification.

**Materials and Methods :** A review of a single case including radiographic, intraoperative, and pathologic findings was done, followed by a discussion highlighting relevant literature.

**Result :** A 23-year-old female without significant medical history presented with recurrent episodes of nausea and confusion resembling temporal seizures. Imaging revealed an extra-axial dura-based lesion in the right temporal fossa, with surgical resection confirming a diagnosis of temporal extra-axial pleomorphic xanthoastrocytoma (PXA). Following surgery, the patient remained seizure-free during a 2-year follow-up period, with imaging showing no evidence of tumor recurrence. Intracranial gliomas originating primarily in the leptomeninges are rare, with only 31 reported cases of solitary meningeal glial masses in the literature. Most primary meningeal gliomas (PMGs) are astrocytomas followed by glioblastomas. Our case presents the fourth reported instance of an extra-axial pleomorphic xanthoastrocytoma (PXA), initially suggestive of meningioma but confirmed histologically as PXA. The diagnostic challenge lies in differentiating PXA from meningioma due to similar imaging features, despite PXA typically presenting as solid and cystic components. The theories on PXA's origin range from heterotopic

glial nests to pluripotent neural progenitor cells according to the cancer stem cell theory. Surgical resection remains the mainstay treatment for PMGs, with gross total resection (GTR) associated with improved outcomes, although adjuvant therapies have shown limited efficacy. Despite a relatively favorable prognosis, vigilance for recurrence and malignant transformation is crucial, as PXA recurrence rates can reach up to 30% within 5 years, with 10-20% undergoing anaplastic transformation. **Conclusion :** Solitary extra-axial dura-based pleomorphic xanthoastrocytoma (PXA) is an exceedingly rare condition, lacking standardized management guidelines. Similar to parenchymal PXA, optimal surgical resection likely plays a crucial role in determining recurrence-free survival.

## 259 : Clinical Profile and Histopathological Characteristics of Gangliogliomas: A Retrospective Study

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**Introduction :** Gangliogliomas are rare brain tumors composed of a combination of neuronal and glial cells. These tumors are typically benign and most commonly develop in the temporal lobe. Despite their benign nature, gangliogliomas can lead to significant neurological symptoms due to their intracranial location. In our study, we aim to describe the clinical and histopathological characteristics of these tumors.

**Materials and Methods :** A retrospective study was conducted on cases of ganglioglioma tumors diagnosed and collected at the Department of Pathology of Habib Bourguiba Hospital in Sfax between January 2015 and March 2024.

**Result :** This study included five diagnosed cases of ganglioglioma tumors over a span of 9 years. The sex ratio M/F was 4, indicating a clear male predominance (80%). The mean age was 30 years, (Extreme: 7 to 53 years). The most common presenting symptoms were epileptic seizures, observed in three patients (60%). Focal neurological deficits occurred in 40% of the patients. The temporal lobe was affected in three patients (60%), the frontal lobe in one patient (20%), and intraventricularly in one patient (20%). On MRI, solid tumor components were found in 80% of cases, while cystic tumor components were present in one patient. Gangliogliomas grade 1 were identified in 20% of cases, characterized by histology showing low cellular density with minimal atypia. While, Grade 3 gangliogliomas were identified in 60% of cases, characterized by a high cellular density of glial cells associated with florid vascular proliferation and marked atypia. Grade 3 anaplastic gangliogliomas were identified in 20% of cases. Only one patient with ganglioglioma grade 3 had recurrence after 8 years following complete resection.

**Conclusion :** Gangliogliomas remain rare brain tumors characterized by diverse clinical presentations and histopathological features. The interdisciplinary collaboration between pathology and oncology is crucial for accurately diagnosing and effectively managing these tumors.

## 260 : Pathology Of The Nipple-Areolar Complex: A Retrospective Study With Review Of The Literature

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**Introduction :** The nipple-areola complex (NAC) is an important anatomical structure of the breast that can be affected by a wide range of benign and malignant pathologies. We aim to characterize these pathologies in a retrospective cohort in a reference center of Breast pathology.

**Materials and Methods :** Our study included 138 patients with nipple lesions that were diagnosed in the department of pathology at Salah Azaiez institute of Tunis over a period of 19 years (2004-2023)

**Result :** Five of the patients were men (3,6%) and 133 were women (96,4%) (sex-ratio=0,037). The mean age was 50,47 years (extreme: 14-100). 54 patients (39,1%) were diagnosed with benign pathologies and 84 patients (60,9%) with malignant pathologies. The mean age of patients in these 2 groups was respectively 43,25 years and 55 years. All male patients had benign nipple pathologies (3 cases of inflammatory diseases (60%), one case of epidermoid cyst (20%) and one case of nipple abscess (20%)) Benign diseases were inflammatory including eczema in 23 cases, nipple adenoma in 15 cases, hyperkeratosis in 6 cases, epidermoid cyst in 4 cases, one case of nipple abscess and one case of papilloma. Four biopsies had normal histological appearance. Malignant diagnoses includes Paget disease in 58 cases (association with invasive ductal carcinoma in 8 cases and with ductal carcinoma in-situ in 8 cases), invasive ductal carcinoma in 23 cases of melanoma , one case of large B cell lymphoma and one case of microinvasive ductal carcinoma in-situ.

**Conclusion :** Skin pathologies of the NAC are numerous . Eczema, Paget disease and nipple adenoma represent the most common biopsied pathologies. Benign diseases have a peak age between 40 and 50 years and eczema represents the most common pathology in young patients. The incidence of malignant diseases increases after menopause with Paget disease being the most common pathology. Nipple pathologies in males are mainly benign.

#### 261 : Sexual life outcomes after mastectomy in breast cancer

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**Introduction :** Navigating sexuality after breast cancer can be a complex and deeply personal journey. Breast cancer treatment and its aftermath can significantly affect a person's body image, sexual desire, and ability to engage in sexual activity, both physically and emotionally. Here are some aspects and tips for addressing sexuality after breast cancer

**Materials and Methods :** We carried out a retrospective study on 22 patients among 61 patients who underwent radical mastectomy between january 2019 and december 2021. We excluded female having no surgery and dead patients, as well as patients with incomplete file informations. We studied the impact of the surgical treatment on libido, orgasm and the relationship with the partner.

**Result :** In start of treatment, 68 % of sexually active women before their breast cancer experienced a significant change in their intimate and sexual lives.7 This change consists of notably in a drop in frequency (38%) or a complete cessation of all sexual activity (32%).In addition, 42% of women who stopped all sexual activity at the start of treatment, remain sexually inactive two years later.

**Conclusion :** All these data show to what extent the impact of breast cancer and its treatments on sexuality represents an important problem and this on the duration.Each stakeholder should assess at their own level whether there are demands or difficulties in the sexual sphere and discuss treatment options.

### Sarcomas

262 : Spectacular response using pazopanib in metastatic soft part alveolar sarcoma (SPAS)

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**Introduction :** SPAS is a rare malignancy. It represents less than 1% of all sarcomas, and is typically associated with late metastases and a poor prognosis. It predominantly affects teenagers and young adults, often involving the muscles and deep soft tissues of the extremities. Due to its rarity, treatment guidelines are limited.

Materials and Methods : We present a case of a 28-year-old patient diagnosed with SPAS in the neck and successfully treated with pazopanib. Result : OH aged 28 years old was first diagnosed with SPAS of the neck. The patient presented with a noticeable bump on the right side of the neck measuring 11 cm, with two sub clavicular lymph nodes, each measuring 2 cm. A surgical biopsy of the lymph nodes has been made. Pathology exam showed a malignant proliferation with large cells with a distinct architectural pattern. The bulky cells exhibited pseudo-epithelial features with well-defined boundaries and abundant granular cytoplasm. Vascularity with thin-walled capillaries. was sparse Immunohistochemistry revealed a positive result for vimentin and a negative result for cytokeratin. These features are suggestive of a soft tissue alveolar sarcoma. Computed tomography (CT) scan revealed metastases of the liver, lungs and bones. The patient was put on pazopanib as a first line therapy at an 800mg per day with bisphosphonate. A CT scan made after 5 months showed significant reduction of approximately 40% in the size of the right cervical tumor process, measuring 60mm. The secondary lesions remained stable.

**Conclusion :** This case report proves the use of pazopanib can improve the prognosis for patients with advanced and metastatic SPAS. It remains a rare malignancy with poor prognosis. New targeted therapies might improve the prognosis and increase overall survival for patients.

## 263 : Low-Grade Fibromyxoid Sarcoma with Superficial Localization: An Exceptional Presentation in a Child

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**Introduction :** Low-grade fibromyxoid sarcoma (LGFMS) is a malignant tumor of soft tissues, first described in 1987 by Evans. LGFMS typically arises in the deep soft tissues of proximal limbs or trunk regions, less commonly in superficial soft tissues, and in children. Despite its slow, indolent course and histological appearance without atypia, this sarcoma is associated with a high risk of local recurrence and metastasis.

**Materials and Methods :** We report a case of a child presenting with superficial localization of low-grade fibromyxoid sarcoma.

**Result :** We present the case of an 11-year-old child with no medical history, who presented with a left axillary mass of 7 cm, evolving over 5 months. The mass was resected, and histopathological examination revealed a mesenchymal tumor with "spindle and myxoid" morphology and "MUC4 expression" immunophenotype consistent with low-grade fibromyxoid sarcoma, with narrow margins. Additional wide excision of the tumor bed showed residual tumor, but surgical margins were clear. Staging did not reveal distant metastasis. Simple surveillance without adjuvant treatment was recommended in a multidisciplinary meeting, with a two-year follow-up showing no local recurrence or distant metastasis.

**Conclusion :** The presentation of LGFMS in superficial tissues, especially in children, is unusual. Immunohistochemistry plays a crucial role in

confirming the diagnosis. Despite its slow-growing nature, LGFMS can recur locally and metastasize over time, emphasizing the importance of long-term monitoring in such cases.

### 264 : Local Therapy in rhabdomyosarcoma in pediatric population

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**Introduction :** Rhabdomyosarcoma (RMS) is the most common softtissue sarcoma of childhood. Local therapy is a key pillar of the curative treatment. It can be achieved by surgery, radiotherapy (RT) or both. Our pupose is to illustrate the place of local treatment of pediatric RMS.

**Materials and Methods :** We conducted a retrospective descriptive study from January 2002 to December 2020 collecting all cases of RMS treated at the pediatric oncology unit of Farhat Hached Hospital.

**Result :** A total of forty seven cases of RMS were included. The mean age at the diagnosis was 5 years and 3 months. The most common site was the head and neck orbit (35%). Embryonal RMS was the most common histological subtype (75%). The tumour was metastatic in 19% of cases. Patients were treated according to the SIOP protocols. A surgery was underwent in 89% of patients. Eighteen patients underwent primary surgery with microscopically complete resection achieved in 44% of cases. For localized RMS, RT was indicated for twelve patients. It followed chemotherapy for 9 patients. Seven irradiated tumors were classified as IRS III, two as IRS II, and three as IRS I alveolar type. For metastatic RMS, RT to the tumour bed was performed in 55% of patients. Tumour recurrence was observed in 18 patients. Of these, 55% had initially incomplete resection of the primary tumor. The status of the patients was as follows: 19 in complete remission, 18 deceased, and two patients were experiencing ongoing tumor progression while still undergoing treatment at the time of the study.

**Conclusion :** The optimal treatment of RMS requires a multidisciplinary approach. The local treatment remains limited due to the absence of facilities for hyperfractionated radiotherapy, brachytherapy and the unavailability of targeted therapies in Tunisia.

### **265 : Exploring Therapeutic Modalities and Prognostic Factors in** Osteosarcoma: Insights from the oncology center of Sousse

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**Introduction :** Osteosarcoma stands as the primary bone sarcoma prevalent among adolescents and young adults. This research aims to study the therapeutic modalities and prognostic determinants in Osteosarcoma, fostering a deeper understanding of its clinical landscape.

**Materials and Methods :** The study comprises a retrospective analysis of 59 osteosarcoma cases from Farhat Hached Hospital in Sousse, spanning 2002 to 2022.

**Result :** The average age of the patients was 26 years, with a sex ratio of 1,8. The mean duration from the initial symptom onset to clinical presentation was 5.28 months. Clinical evaluation reveals an average tumor dimension of 20 cm, with the lower limb being the predominant site of involvement (69%). Metastatic dissemination was detected in 11 patients at presentation, with pulmonary involvement observed in seven cases. Osteoblastic osteosarcoma emerged as the prevailing histological

type, accounting for 42.4% of cases. 26 patients exhibited joint involvement, while soft tissue damage was observed in forty-five patients. Additionally, 20% of patients presented with a tumor involving vascular structures. Initial chemotherapy was warranted in 87.7% of patients, with a response rate of 17%. It was followed by surgical treatment in 67.9% of cases, with 84.6 % being poor responders histologically. Margins were clear in 82.4 % of cases. A chemotherapy regimen for poor responders was then indicated in 66.7% of cases, with tumor relapse occurring in 23.7 % of cases. The aggregate 5-year survival rate was 55.9%. Average survival durations were 112 months for non-metastatic cases and 12,6 months for metastatic cases, showing a notable divergence (p=0.000). Localized disease at presentation and histologic type were linked to enhanced prognoses (p=0.000).

**Conclusion :** Neoadjuvant chemotherapy and complete surgical excision have markedly enhanced the prognosis of osteosarcoma, yet diagnostic delays present significant management challenges. Multicenter studies are imperative to refine strategies for refractory and metastatic cases.

## 266 : Management of adult fibro sarcoma loco-regional recurrence: A report of two cases

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**Introduction :** Adult fibrosarcoma (AFS) is a very rare and aggressive malignant soft tissue tumor accounting for only about 1-3.6% of all soft tissue sarcomas in adults. It usually arises from malignant spindle-shaped fibroblasts and has a high potential for recurrence. While surgery is considered the primary therapy option for most patients with resectable tumors, the treatment of loco-regional recurrence and metastasis remains unclear.

**Case report:** We here report our experience in the management of 2 cases of locoregional recurrence of fibrosarcoma.

Case N1: We report a case of 50 50-year-old with a medical history of leg epidermoid carcinoma and right arm grade 2 fibro sarcoma operated in 2020. The patient had wide excision with a disease-free margin. He didn't receive any adjuvant treatment. Four years later, he was referred to our center for a right axillary mass. Physical examination didn't find any sign of local relapse on the right arm. However, a 10 cm firm and fixed axillary mass with no cutaneous signs was found. The patient had a CT scan that showed a 13 cm lymphadenopathy involving the right subclavian artery. The case was discussed in the multi-disciplinary meeting and the patient was referred to the medical oncology department for preoperative chemotherapy.

Case N2: We report a case of 39 years 39-year-old woman with no medical history referred to our center for grade 2 trunck fibrosarcoma. The patient had wide excision with clear margins and adjuvant radiotherapy. One year later she presented to our department with back pain. Physical examination found a 10 cm firm and fixed subscapular mass. CT scan was performed showing multiple liver and bone metastases which were confirmed by a bone scintigraphy. Fine needle hepatic biopsy was performed and histologic examination was consistent with fibro-sarcoma metastasis. The case was presented to our multi-disciplinary team and the patient was referred to her oncologist for chemotherapy. She progressed under 3 lines of chemotherapy and was lost of view 3 years after diagnosis.

**Conclusion :** Adult fibrosarcoma has a poor prognosis due to its aggressive disease course. All patients should undergo routine medical follow-up in an expert center and by trained specialists in musculoskeletal tumors.

### 267 : Lipoblastoma in Children: Clinical and Therapeutic Features

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**Introduction :** Lipoblastoma is a rare benign mesenchymal tumour of foetal adipose tissue arising from the continued proliferation of immature adipose cells postnatally. It is a ubiquitous tumour, with the trunk and extremities being the preferred sites. It can be worrying due to its large size and rapid progression.

**Materials and Methods :** We collected 14 cases of lipoblastoma managed in our department during 18 years.

**Result :** There were 8 boys and 6 girls aged between 7 months and 9 years. The clinical finding was a soft mass in 12 patients and abdominal pain in 2 patients. The diagnosis was made on imaging and confirmed histologically. The lipoblastoma was located in different sites (mediastinum in one case, thighs in 2 cases, buttocks in 2 cases, inguinoscrotal region in 2 cases, greater omentum in 2 cases, latissimus dorsi in 3 cases, cervical in 1 case and left axilla in 1 case). The lesion measured between 5 and 15 cm. Excision was complete in all cases. Mean follow-up was 35 months, with no recurrence.

**Conclusion :** It is important to consider lipoblastoma as one of the causes of a rapidly progressive soft mass in children. Complete resection is the only therapeutic alternative. However, this tumour has a tendency to recur despite complete.

### 268 : Phrenic rhabdomyosarcoma: a rare site with an unpredictable evolution

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**Introduction :** Rhabdomyosarcoma (RMS) accounts for 60-70% of mesenchymal tumours in children. The most common sites for RMS are the head and neck, the genitourinary system and the limbs. Several rare sites have been reported in the literature

**Materials and Methods :** We report here two observations of RMS with a phrenic origin, with completely divergent evolutions.

Result : First observation : This case involved a girl aged 6 years at the time of diagnosis, in whom the tumour was diagnosed following the appearance of an abdominal mass. The initial CT scan showed a large tumour measuring 14\*10\*11 cm, of which there was some doubt as to whether it was of hepatic or phrenic origin. Biopsy confirmed the diagnosis of RMS. The patient underwent neoadjuvant chemotherapy. A follow-up CT scan showed a tumour in the diaphragm invading the liver and pericardium, with segmental portal thrombosis II and III. The patient underwent surgery and had a macroscopically complete resection of the tumour at the cost of resection of the upper pole of the spleen, a pericardial flange, a diaphragmatic flange and a left lobectomy. Pathological examination showed healthy surgical margins of the resected specimen, but there were metastatic epiploic lymph nodes. The patient underwent adjuvant chemotherapy. The course was marked by metastatic recurrence of the retroperitoneal tumour enveloping both ureters. Subsequent treatment was palliative and the patient died after 1 year of surgery. Second observation: This was a 5-year-old boy with a thoracoabdominal mass. The initial CT scan showed a polylobed thoracoabdominal tumour, hypodense and heterogeneous, measuring 12 cm in long axis, encompassing the IVC over 270° and exerting a mass effect on the right heart with consequent abundant pericardial, bilateral pleural and peritoneal effusion. The child underwent surgical biopsy of the tumour and pericardial drainage because of the compression of the right heart. Pathological examination concluded that the RMS was embryonal. After 4 courses of neoadjuvant chemotherapy, the tumour was completely regressed on the follow-up CT

scan, with the persistence of a slight diaphragmatic thickening that could not be measured. The child is currently undergoing chemotherapy and surgery is out of the question for the time being.

**Conclusion :** Phrenic rhabdomyosarcoma presents a major therapeutic challenge because of its anatomical location. However, its evolution remains unpredictable and enigmatic. Palliative care

### 269 : Thromboembolic Management in Pancreatic Cancer: The Experience of the Medical Oncology Department at EHU Oran

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**Introduction :** Pancreatic cancer (PC) is one of the most thrombogenic cancers. The occurrence of a venous thromboembolic episode (VTE) is associated with a decrease in progression-free survival and overall survival. Primary prophylaxis with low molecular weight heparins (LMWH) during chemotherapy is recommended for patients with locally advanced or metastatic PC. The aim of our study is to evaluate the survival outcomes of patients with pancreatic cancer, with or without a VTE, undergoing treatment.

**Materials and Methods :** Descriptive, retrospective, and single-center study conducted at the Medical Oncology Department of Oran University Hospital over a period of 3 years, from January 2020 to December 2022, involving patients with locally advanced or metastatic PC. Data collection and analysis were performed using IBM SPSS software version 25.

**Result :** In total, 80 patients with locally advanced or metastatic pancreatic cancer were included during the study period. The mean age of the patients was  $66.8\pm2.3$  years, with a sex ratio of 1.2. Weight loss was the primary reason for consultation (45%). Tumors in the head of the pancreas were the most common (54%). Ductal adenocarcinoma was the most frequent histological type (91.3%). The majority of tumors were classified as T3 (50%), N1 (57.4%), and M1 (52.5%). Gemcitabine was the main treatment (44.3%). 14% of our population had a VTE and received curative treatment. 41% of our population received preventive anti-thromboembolic treatment, while the remaining 45% received nothing. The median overall survival was 6 months [4.1-7.9]. There was an average survival of  $11.2\pm4$  months in patients who received thromboembolic prophylactic treatment compared to a poorer survival in patients who received nothing, 7.8±2.2 months (p=0.05).

**Conclusion :** The prophylactic anti-thromboembolic treatment at the outset in patients with locally advanced or metastatic pancreatic cancer undergoing chemotherapy has an impact on overall survival.

### 270 : Understanding Healthcare Professionals' Perspectives on Complementary and Alternative Medicine Integration in Oncology: Insights from a Multicenter Study in Tunisia

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**Introduction :** Over the past decades, complementary and alternative medicine (CAM) has become increasingly relevant in the context of

oncological care. Communication between healthcare professionals (HCPs) managing cancer patients regarding the use and adverse effects of CAM is crucial to avoid any potential interference with conventional treatments. This study aims to assess healthcare professionals' knowledge, attitudes and practices with regard to the integration of CAM in the management of cancer patients.

**Materials and Methods :** A descriptive, cross-sectional, multicentric study was conducted in April 2022 amongst health professionals working in the oncology and pneumology departments of the Farhat Hachad University Hospital in Sousse and the haematology, oncology and pneumology departments of the Fattouma Bourguiba University Hospital in Monastir. The survey was conducted using a self-administered questionnaire. Data were input and analysed using SPSS 20 software.

Result : Of the 116 medical professionals who responded to the questionnaire, a significant proportion were paramedics (53%), while 47% were medical doctors. The mean age of this population was 33.08 years with a standard deviation of 7.6 years. Approximately 63% of the participants had been exposed to complementary and alternative medicine (CAM). However, the majority of health professionals (78.4%) reported limited knowledge in this field. Out of those who had used a source of information about CAM (45.7%), the most commonly cited source was the internet (37.1%). Almost half of the sample (49.1%) had no knowledge of the adverse effects associated with CAM. In addition, 71.6% of health professionals felt it was essential to consult a health professional before using CAM. Although more than half of the sample (56%) expressed a positive stance towards the use of CAM, the vast majority (87.9%) had not received any specific training in this area. However, a high proportion (73.3%) expressed a desire to expand their knowledge in this subject, and 78% considered that adequate training in CAM and its integration into their professional career were necessary. Most participants felt that CAM was effective in managing the side effects of chemotherapy, and 70% felt that CAM therapies used in a palliative context should be covered by health insurance. When it came to prescribing CAM to cancer patients, 65% of healthcare professionals felt it was the responsibility of the oncologist. In their professional practice, 61.2% of participants had never recommended CAM to their patients, and 25% reported that their patients had never asked them about it.

**Conclusion :** This study highlights the urgent need for in-depth training in complementary and alternative medicine (CAM) for healthcare professionals, and the importance of enhancing communication between healthcare professionals and patients regarding the use of these therapies in oncology, for more integrated and effective management.

## 271 : Eating behavior in patients with digestive system cancer undergoing chemotherapy

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**Introduction :** Cancer patient's eating habits are often overlooked despite the disturbances their diet can experience. A balanced diet is all the more crucial for the treatment efficiency in patients with digestive system cancer. We aimed to evaluate the eating habits as well as the effect of chemotherapy on the nutritional balance of these patients.

**Materials and Methods :** A cross-sectional study was conducted in the medical oncology department of the Salah Azaiez Institute, from February to March 2023. It included patients undergoing chemotherapy for digestive malignancies. A dietary survey was conducted and anthropometric measures were collected at the Human Obesity Research Unit of the Nutrition Institute of Tunis.

**Result :** We included 50 patients. Mean age was 58 years old (24-69), with a slight masculine predominance (58%). Common observed symptoms

were a decreased appetite and early satiety (60%). A negative energy balance was observed in 84% of the patients, with a mean caloric deficit of 494.12 kcal/d. Daily caloric intake was below 30kcal/kg in 84% of the patients and daily protein intake was below 1.2g/kg in 60% of the patients. Other observed deficiencies concerned micronutrients and fibers. Various eating habits were observed in this population, as well as different levels of malnutrition. Of all patients, 10% practiced a ketogenic diet and 6% an intermittent fasting, while 32% are on a protein restriction and 20% on a caloric restriction. Malnutrition was diagnosed in 64% of the patients, and was mild in 36% of the patients and severe in 28%. It was significantly correlated to ketogenic diet (p=0.03), number of chemotherapy cycles undergone (p=0.028), physical activity (p=0.048), gustative distortion (p=0.046), and tumor location (p=0.03).

**Conclusion :** Nutritional care should be integrated as part of cancer patients' treatment. Dietary education is crucial before and during the treatment in order to unlearn the cultural stereotypes and ensure an optimal energy balance.

## 272 : Effect of Palliative Radiotherapy on Quality of Life and Pain in Patients with Bone Metastases

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**Introduction :** Palliative care is defined by the World Health Organization as an approach that improves the quality of life of patients and their families. Bone metastases are common in patients with advanced cancer, causing pain and other complications such as fractures and compression. Palliative radiotherapy plays a crucial role in the management of these conditions. This study aims to evaluate the impact of analgesic radiotherapy on the quality of life of patients with bone metastases, using the EORTC QLQ-C15 PAL.

**Materials and Methods :** Twenty patients received analgesic radiotherapy in the oncological radiotherapy department of the Salah Azaiez Institute was selected in this prospective study. Three weeks after treatment, these participants underwent an assessment of their quality of life using the specific EORTC QLQ-C15 PAL questionnaire.

Result : The median age of patients was 54 years [28-80]. Among them, 60% were men. Breast cancer was the most common primary cancer (35%), followed by prostate cancer (20%), bronchopulmonary cancers (15%), clear cell renal tumors (10%) and other rare locations represented by 20% of cases. Among the irradiated locations, the spine was the most frequent location in 55% of cases followed by lesions of the pelvis, sacrum, shoulder and finally the ribs. Radiotherapy was delivered in a single fraction in 65% of patients and hypofractionned (20 Gy in five fractions or 30Gy in ten fractions) in 25% of patients. Pain assessment at three weeks revealed a complete response in only 5% of patients, while 60% reported a partial response. In 7 patients, the pain remained stable and none experienced worsening pain. Similarly, a reduction in the morphine dose was noted in 10 patients (50%). Constipation was relieved in 45% of patients. Additionally, improvement in insomnia was observed in 13 patients (65%). The median scores for quality of life and physical and emotional functions were 51% [40-62%], 40% [36-44%] and 77% [63-91%], respectively.

**Conclusion :** These results highlight the crucial role of palliative radiotherapy in the effective control of pain in patients with bone metastases in the palliative stage, as well as its significant impact on improving their quality of life. These observations reinforce the importance of considering radiotherapy as an essential component of palliative care.

### 273 : The Management of Cardiac Tamponade in Patients with Cancer: Case series

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**Introduction :** Cardiac tamponade constitutes a critical oncologic emergency necessitating immediate intervention. Pericardiocentesis often leads to swift symptomatic relief; however, the long-term therapeutic approach and survival outcomes for patients with malignant cardiac tamponade remain uncertain.

**Materials and Methods :** Between 2022 and 2023, pericardiocentesis procedures were executed in the medical oncology and cardiovascular surgery departments of Abderrahmen Mami Hospital for diagnostic and therapeutic purposes in eight patients with underlying malignancies. This retrospective case series was examined to improve our understanding of the clinical features, appropriate diagnostic assessments, and optimal management strategies for this oncologic crisis.

**Result :** All patients presented with advanced disease, featuring distant metastasis in 100% of cases, pleural effusion in 88%, and clinical Stage N2 or N3 disease in 75%. Cardiac tamponade manifested as the inaugural sign of cancer in merely three patients; for the remainder, it indicated disease progression. Cytological examination of specimens yielded positive findings in 88% of cases. The duration between pericardiocentesis and drainage tube removal spanned 8-12 days (median, eight days). Two patients succumbed within 24 hours post-pericardiocentesis due to complications associated with cardiac tamponade. Two patients passed away five and six months post-intervention due to cancer progression. The remaining patients remain alive to date.

**Conclusion :** Pericardiocentesis emerged as an effective intervention, successfully managing cardiac tamponade in 75% of cases. These findings advocate for an aggressive palliative approach in addressing this oncologic emergency, entailing pericardiocentesis coupled with tailored systemic therapy for appropriately selected patients.

### **Rae Tumors-Nurses Session**

# 274 : Evaluation of nurses' knowledge and experience in manipulating and administering chemotherapy

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2) Radiation Oncology Department, Abderrahmen Mami Hospital, Tunis, Tunisia

**Introduction :** Manipulating chemotherapy is a specialized skill that not all graduating nurses master. Our study aims to delineate nurses' experience in manipulating and administering chemotherapy.

**Materials and Methods :** We observed 14 nurses administering chemotherapy and utilized a 3 part observation grid. Subsequently, we distributed an 18-item questionnaire to the same 14 observed nurses.

**Result :** Seven female nurses and 7 male nurses responded to our questionnaire. The majority of nurses (71%) had less than 5 years of experience. One nurse had received specific training in the manipulation of chemotherapy agents and 64% attended continuing education sessions in manipulating chemotherapy. Sixty-four per cent rigorously applied the knowledge gained from these sessions. Reasons for not applying what they learnt included heavy workloads (38%), lack of adequate material (31%), insufficient time (23%) and lack of motivation (8%). The majority (79%) were aware of the risks associated with exposure to anti-cancer drugs. All respondents prepared at least 1-2 chemotherapy per day. Chemotherapy

preparation was conducted following appropriate procedures in a dedicated environment in 43% of cases, at the nurses' desk in 36% and at a laminar flow hood in 21%. The majority of nurses (93%) were knowledgeable about protective measures when handling chemotherapy. Forty-three per cent underwent annual medical checkups. Eighty six per cent wore masks, 57% used disposable gloves and 14% wore scrub caps. Eighty six per cent prepared chemotherapy at a laminar flow hood. All nurses verified doctor prescriptions, patient names and prescribed drugs and doses. Ninety-three per cent paid attention to premedication (hydration, steroids, anti-emetics). All nurses wore gloves during chemotherapy administration and 79% use sterile pads. Seventy-nine percent explained duration of chemo session to patients.

**Conclusion :** It is imperative to train nurses in manipulating and administering chemotherapy. Continuing education serves as an essential tool to enhance nurses' skills.

## 275 : Knowledge, attitude, and practice of nurses dealing with patients treated for breast cancer presenting sexual disorders

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**Introduction :** Investigate and identify the knowledge, attitude and practices of nurses to Ward female breast cancer patients with sexual disorder.

**Materials and Methods :** A descriptive study with a quantitative approachuing a self-administered questionnaire was conducted among 30 nurses at the Farhat Hached University Hospital in Sousse and the Fattouma Bourguiba Université Hospital in Monastir.

**Result :** The results of the study showed That 80% of the respondents had not received training in the management of négativeémotions experienced by women in distress. For 77% of the nurses, a women with sexual disorders needs compréhensive care, and more than two thirds of our respondents (70%) consider that sexual disorders in women after breast cancer treatment are temporary Among the factors thats most affect sexuality in women with breast cancer, our respondents cited mastectomy first (87%), followed by chimiothérapie and its effects (57%). The most Common signs encountered in thèse patients are, in descending order; decreased sexual desire (73%),pain (67%),and fertility disorders and /or early menopause (53%). Our simple,77% of respondent stry to establish a relation ship of help and trust with women with sexual disorders.

**Conclusion :** Our study showed that nurses have sufficient knowledge about the problem of sexual dysfunction and that they maintain a relationship of support based on empathy with patients in the majority of cases. However, our study reveal two serious findings: the lack of professionnal training for most nurses in the management of negative emotions in women in distress and the lack of psychological support for nurse who care for these women, which could have conséquences for their mental health.

### 276 : Opioids handling: knowledges valuation of nurses in medical oncology department

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**Introduction :** Cancer is a disease that affects all organs, all people, at all ages. The role of the nurse in collaborating in the management of the pain of the person at the end of life, i.e. the components of total pain, its evaluation and the description of certain clinical tools, treatment

modalities, as well as the principles of administration of morphines. The objective of this work is to describe their perceptions when using morphine in practical training, namely with regard to clinical indications, frequency and routes of administration, to evaluate the knowledge levels of nurses relating to the therapeutic use of morphine.

**Materials and Methods :** a simple descriptive study carried out in the medical oncology department of CHU Farhat Hached (Sousse); he chose 27 nurses based on a questionnaire.

**Result :** of the analysis show support from nurses on the topic of pain and the use of morphine. A total of 27 nurses were surveyed. Among respondents, 97% stated that the main needs of morphine were to relieve pain. We note from the respondents that the evaluation (24%) is done according to treatment efficiency and lack of knowledge of the scales which to evaluate. We find that 86.8% of nurses prescribed or administered morphine. As shown in Table III, the venous (33%) and oral (60%) routes are the most frequently used, the main indication is pain, of different types and origins.

**Conclusion :** that oncology nurses play an essential role from the reception of patients. They provide information on care, possible treatments and administrative procedures. They ensure attentive monitoring throughout the patient's journey, establish a bond of trust, and respond to their concerns. So,Morphine is widely used as an analgesic, especially in cases of intense pain due to cancer.

### 277 : Evaluation of the quality of life of patients with colorectal cancer with and without astoma

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**Introduction :** The incidence of colorectal cancer continues to increase everyy earthroughout the world. The improvement of the prognosis and the extension of the survival period thanks to scientific progress gives importance to the concept of quality of life which becomes a basic element in the therapeutic care of patients. The objective of our work is to measure the quality of life of patients with colorectal cancer with and without a stoma, identify its determinants and different particularities of stoma patients.

**Materials and Methods :** this was a cross-sectional studycarried out among 110 patients with colorectal cancer with and without a stomafollowed in the generalsurgery and oncologydepartments at CHU Farhet Hached Sousse and CHU Fatouma Bourguiba Monastir, over a period of 3 months. QOL was assessed by the EORTC QLQ-C30 scale and itsspecific colorectal cancer module QLQ-CR29.

**Result :** Our worknoted that the medianage of our patients was 61 years old with a femal epredominance (54%). The overall mean score of the EORTC QLQ-C30 is 42.04 and a standard deviation of 14.82. The emotional dimension is the most altered in the functional scale. Fatigue, insomnia, diarrhea and loss of appetite are the symptoms most seriously perceived by our patients according to the QLQ-C30 scale. Anxietyis the mostaffected dimension with a score of 49.69+/- 22.91. Embarrassment. flatulence, increased frequency of stools and loss of taste are the symptoms most encountered in our patients according to the OLO-CR29 scale. The univariate analysis proved that the factors negatively influencing QOL wereage (p=0.02), level of education (p=0.01), rural origin (p=0.05) ,unemployment (p=0.02), rectal location of cancer (P=0.04), advanced stage of cancer (p=0.04) and type of treatment (p=0.05). The comparison between patients with and without an ostomyshowed a difference in body image (p=0.01), as well as in stoolfrequency (p=0.00), flatulence (p=0.00), fecal incontinence (p<0.00) and embarrassment (p<0.00).

**Conclusion :** Having a stomanegatively influences all aspects of the patient's quality of life. Measuring QOL in clinical routine is essential for the rapeutic decision-making or over all patient care. Scientific studies on

a national scale must be considered in order to better study the factors significantly influencing the QOL of cancer patients.

### 278 : Occupational stress among paramedical oncology staff: Perspectives from two centers in Tunisia

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2) Department of radiation oncology, F. Hached Hospital, Sousse, Tunisia

**Introduction :** Oncology medical personnel are consistently dealing with chronic stress, which can result in a decline in the quality of care provided to patients. This study aims to assess the psychological impact and mental workload of working in a radiation oncology and a medical oncology center among paramedical staff

**Materials and Methods :** This is a cross-sectional survey of working conditions that included 31paramedical staff: 6 from the medical oncology department at Fattouma Bourguiba Hospital in Monastir and 25 from the radiation oncology department at Farhat Hached Hospital in Sousse. The survey employed a personalized psycho-somatic questionnaire and an MBI (Maslach Burnout Inventory) score.

Result : The study included2 supervisors,10 nurses,10 technicians,3 physicians,1 dietitian,4 secretaries, and 2 cleaning personnel. They worked 6 days a week, 6 hours each day, except on-call duty. Approximately 40 patients receive treatment daily, totaling 600 patients per department annually. Just 27% of individuals expressed satisfaction with their employment, while 53% reported feeling productive, and 33% had a sense of professional fulfilment. Approximately, 83% of the individuals indicated dissatisfaction with job conditions, while nearly 40% expressed career regret. The main challenges at work are anxiousness, lack of team coordination, low motivation, and limited skill development opportunities. Additionally, 49% reported not receiving sufficient instruction. Autonomy and soft skills were satisfactory for 40% and 90% of individuals, respectively. However, half of the participants expressed unhappiness with treatment management, while 77% were unhappy with the timeline. 60% of individuals reported being involved with patients. 93% of the participants acknowledged experiencing feelings of guilt, exhaustion, fatigue, or sadness at least once. 43% of individuals reported anxiety or sadness, while 73% experienced bodily symptoms due to work. Over 53% of the individuals experienced sleeping difficulties, and 56%% had to take a leave of absence because of mental tiredness. In addition, 37% of individuals sought psychological aid and 17% received psychiatric therapy. Around 60% reported discontentment with working conditions, with more than 90% feeling not being adequately compensated. Positively, the majority (83%) expressed optimism for improved work circumstances. while 90% endorsed the establishment of a psychology section for caregivers. MBI score was used to evaluate burnout level. Emotional weariness, depersonalization, and personal accomplishment were assessed as moderate, with scores of 20, 9.5, and 30.28, respectively.

**Conclusion :** healthcare personnel working in cancer departments face considerable stress, especially in our country where resources are limited. It is crucial to give top priority to enhancing working conditions and allocating resources to enhance professional development. These endeavors are vital for improving patient results and the overall performance of the healthcare system.

## 279 : Traditional And Complementary Medicine Use In Pediatric Oncology In Tunisia

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**Introduction :** The use of Traditional and complementary Medicine (T&CM) is common in pediatric oncology. Due to the lack of prior research on the use of T&CM in pediatric oncology in Tunisia, our objective was to evaluate its use in a single cancer center located in Sousse, Tunisia.

**Materials and Methods :** A convenience sample of 32 parents of children with cancer completed the survey at the medical oncology department of Farhat Hached University Hospital. We adopted a short proxy-report T&CM questionnaire that have evidence of initial validation.

**Result :** The median age of children was 7 years (range=1-16). The majority were on cancer treatment (93%) with male predominance (62%). The sarcoma, nephroblastoma, and nasopharyngeal carcinoma diagnoses accounted for 29%, 22.6% and 16%, respectively. About 12% of parents were illiterate and 94% married. All parents used T&CM for their children including 60% during chemotherapy, 15% during radiation, and 62% during other treatments. Parents deciding using T&CM in 81% of the sample and 12% of children made decision. The types of T&CM utilized included nutritional, psychological, and physical approaches, with respective usage rates of 53% patient felt better. Prayer was the predominant method for nutritional approaches (94%), while the predominant method for nutritional approaches was the use of herbs (83%). Approximately, 40% of the parents plan to use the T&CM in the future.

**Conclusion :** T&CM is frequently used by the children with cancer in Tunisia. However, most parents do not discuss the use of T&CM with the treating HCPs. Thus, initiating routine clinical dialogue about T&CM by HCPs is crucial to help parents make informed decision of using T&CM and avoid any potential risk of interaction with conventional treatments.

### 280 : Quality of life in metastatic Prostate Cancer Patients

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**Introduction :** Survival outcomes in prostate cancer patients has been significantly improved after the ontroduction of castration and endocrine therapy , even in the metastatic setting . Quality of life is an important aspect of care to take into account in long-surviving cancer patient Our objective is to evaluate and highglight the importance of Quality of life in our prostate cancer patients treated at Sousse and Monastir hospitals .

**Materials and Methods :** A multi-institution cross-sectional study was conducted from March until May 2023, at the medical Oncology Department of Farhat Hached University Hospital of Sousse, and at the Urology department of Fattourna Bourguiba University Hospital of Monastir and Sahloul University Hospital of Sousse. The sample included was metastatic prostate cancer patients and the survey was conducted using the UCLA and SF-36 scales. Demographic, socio-economic and medical data were also collected

**Result :** Sexty-one patients were included. Mean age was 71.18 years (range 59-85).Patients aged above 65 years represented 77% of the population. Patient were married in 78,69%, windower in 11.48% and divorced in 9.84% of the cases. Most (68%) were retired and 33.4% has a stable income. In evaluation of urinary symptoms, the mean overall score of UCLA was 39.54 and the mean score Quality-of-life scale SF-36 was 41.29. the most prevalent dysfonction was urinary (important in 54.1%) and sexual (imprtant in 41%).In univariate analysis, strong correlation were observed between the QoLscore and age (p=0.006), socio-economic status (p=0.009), psychological support index (p=0.004), sexual dysfuntion (p=0.004) and urinary dysfonction (p=0.002)

**Conclusion :** Quality of life is an important aspect of care for longsurviving patients, and yet, it is still an unmeet need. Adapting provided care to most described dysfonction can significantly improve prostate cancer patients quality of life.

### 281 : Prognostic value of lymphocyte infiltration in bladder cancer

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**Introduction :** Bladder cancer is the most common malignant tumour in the urinary tract. It is a major public health problem. The aim of this work is to study the prognostic value of lymphocyte infiltration (TILs) in bladder cancer.

**Materials and Methods :** We investigated the prognostic impact of TILs in urothelial carcinomas in a cohort of 30 patients treated in the department of medical oncology of Jendouba over a period of 4 years. The quantification of TILs was performed on Hematoxylin-Eosin (HE) slide most representative of the tumor then analyzed in three groups TILs: low (less than 10% of immune cells in the stromal tissue of the tumor), intermediate (10-50%) and high ( $\geq$ 50%).

**Result :** Average age was 67 years (46-86 years). All patients were men. Median follow-up was 10 months. Median overall survival (OS) was 9 months $\pm$  1.4 months. Median progression free survival (PFS) was 8,5  $\pm$  1,4 months. For patients with TILs > to 50% OS and PFS was significantly better compared to those with < to 50% rates. Moreover, there is no significant correlation between TILs and different clinical or histoprognostic parameters.

**Conclusion :** TILs evaluation could be a new prognostic and predictive biomarker of treatment response in urothelial bladder carcinoma and particularly useful for identifying patients who may benefit from immunotherapy.

## 282 : Management and prognosis of Cutaneous Merkel Cell Carcinoma: A case report

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**Introduction :** Merkel cell carcinoma is a rare neuroendocrine tumor. Its local malignancy and high metastatic potential are often underestimated by clinicians. Surgical resection with negative margins remains the standard treatment. Nevertheless, its efficiency remains incomplete, highlighting the importance of consolidation treatments.

Case presentation : We report the case of a 26-year-old girl diagnosed with Merkel cell carcinoma of the left foot, unmanaged by surgery alone. Result : 26-year-old girl presented with a cutaneous mass located on the fifth metatarsal of her left foot. No inguinal adenopathy was found. Excision biopsy was conducted to define the nature of the lesion, revealing cutaneous Merkel cell carcinoma. The extent of excision limits was not specified. MRI findings revealed a cutaneous process on the lateral aspect of the left foot, measuring 7 x 4 cm, with invasion of the face of the fifth metatarsal with bone contact. Whole body CT showed no metastasis. Surgical treatment involved wide excision and inguinal lymph node dissection. Definitive pathology analysis confirmed Merkel cell carcinoma with tumor margins and node capsular rupture. External radiotherapy was not performed. After a follow-up of 5 months, PET-TDM showed an extensive local hypermetabolic recurrence spreading across the external iliac and left inguinal regions and the inner left foot. Platinum and etoposide-based chemotherapy were initiated with a clinical favorable response after only three cycles. Consolidation radiotherapy will be discussed.

**Conclusion :** Merkel cell carcinomas are rare skin tumors with a very high growth potential. This case underlines the importance of adjuvant treatment in achieving locoregional control.

## 283 : Pronostic role of serum cytokines TNF alpha, IL1 béta, IL6, IL8 in patients with nasopharyngeal carcinoma

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**Introduction :** Nasopharyngeal carcinoma (NPC) is a distinctive head and neck cancer primarily prevalent in east and southeast Asia, with an increasing global incidence. Factors such as Epstein-Barr virus (EBV) infection, environmental influences, genetics, and chronic inflammation contribute to its complex etiology. Chronic inflammation plays a pivotal role in promoting NPC progression, invasion, and metastasis, with key inflammatory cytokines like IL-1 $\beta$ , IL-6, IL-8, and TNF $\alpha$  implicated in these processes. This study aims to globally assess serum concentrations of these cytokines and investigate their correlations with NPC prognosis. This investigation aim to assess the serum concentrations of cytokines (IL-1 $\beta$ , IL-6, IL-8, and TNF $\alpha$ ) and their associations with the prognosis of patients with nasopharyngeal cancer.

**Materials and Methods :** Serum samples were collected in a prospective cohort of 30 patients with NPC treated in the department of medical oncology of Military hospital of Tunis before treatment, 7 weeks, 3 months, and 6 months after treatment. The TNF- $\alpha$ , IL1beta, IL6, and IL8 were measured by a solid-phase chemiluminescent immunometric assay that utilized the IMMULITE 1000 automated system.

**Result :** We observed a correlation between the highest level of cytokines and the age group between 31-40. The study also found that the levels of IL6 and IL1 beta were higher in patients with stage T1-T2, while IL8 was higher in patients with advanced stages. Our research demonstrated that by the seventh week following the end of treatment the cytokine levels had increased, these signs indicated a positive response to treatment and a favorable prognosis. Additionally, we observed a significant increase in the cytokines in metastatic patients; IL8 (P=0.01), IL6 (P=0.001), and TNF alpha (P=0.038). These are often associated with disease spread. Remarkably, we are the first to document a statistically significant correlation between the initial EBV load and the initial levels of TNF alpha (p=0.011), IL1beta (0.011), IL6 (0.011), and IL8 (0.012), providing novel insights into the intricate interplay between EBV infection and cytokine expression in nasopharyngeal carcinoma.

**Conclusion :** TNF alpha, IL1 beta, IL6, IL8 have the potential to be considered as prognostic biomarkers in NPC. These biomarkers identify a reserved prognosis group of patients that require aggressive treatment and closer monitoring.

#### 284 : Desmoplastic small round cell tumor: A case series

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**Introduction :** Desmoplastic small round cell tumor (DSRCT) is a rare and aggressive mesenchymal tumor affecting young male patients. It has a very poor prognosis with limited data for optimal management.

**Materials and Methods :** We retrospectively reviewed clinical features, pathological findings, treatment and outcome of five patients with desmoplastic round cell tumor at our institute between 2002 and 2023.

**Result :** Three of the patients were men, two were women ranging in age from 16 to 32. The chief complaint was pain. All of the cases originated within the abdominal or pelvic peritoneum. The median size of the tumor was 8 cm. The common imaging finding was multiple peritoneal masses with regular contour situated within mesentery. Liver metastasis were

found in one patient. In one case, moderate ascites was seen. All tumors showed the typical histologic findings of variably sized clusters of small, round, or spindled cells lying in a desmoplastic stroma. Immunohistochemically, all the tumor cells were reactive to cytokeratin, vimentin, desmin and WT-1. The characteristic EWS-WT1 fusion gene could be identified in the FFPE specimens of only two patients who had tissue sections available for RT-PCR analysis. Cytoreductive surgery was performed in 3 patients. Mean duration of survival was 2.3 years (1–5 years).

**Conclusion :** Therapeutic management of DSRCT remains challenging with low efficacy despite the combination of aggressive treatments such as polychemotherapy, debulking surgery and whole abdominal radiation.

## **285** : Study of oncologic emergencies in acute care facilities: Analysis and clinical implications

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**Introduction :** Oncologic emergencies are frequent in emergency medicine. However, they may not present as often in emergency departments that do not serve an oncology population. Additionally, some oncological emergencies may present subtly and be overlooked, leading to increased morbidity and mortality. The aim of our study is to examine the epidemiological characteristics, clinical manifestations, and evolution of patients who seek medical care for these pathologies.

**Materials and Methods :** This study analyzed socio-demographic data, clinical manifestations, and patient outcomes in a tertiary-level emergency department over a 15-month period (January 2023 to March 2024).

**Result :** A total of 53 patients were included in the study, with females comprising the majority (60.8%) and a M/F sex ratio of 0.64. The patients' mean age was 50 years, with a range of 16 to 79 years. The most prevalent age group was over 50 (50%). The main cancer categories were solid tumors (86%), with gynecological tumors being the most common (38.6%), followed by digestive tumors (22.7%) and pulmonary tumors (15.9%). osteolytic bone metastasis was noted in 28.9% of cases, and a significant proportion of patients (34.7%) had already developed distant/multiple metastases. 93.6% of the patients received chemotherapy, and 28.2% received radiotherapy. The most common clinical manifestations were fever (43.1%) and dyspnea (27.5%). Upon admission, 4% of the population experienced respiratory distress, 2% had hemodynamic distress, and 2% had neurological distress. Half of the study population had a temperature≥38°C upon initial examination. The most common oncological emergencies are febrile neutropenia (51%), thromboembolic complications (7.8% DVT and 31.4% PE), hypercalcemia (5.9%), tumor compression syndromes (2%) and tumor lysis syndrome (2%). After appropriate management, a significant proportion of patients (92.2%) had a favorable outcome, with 90.2% requiring hospitalization, mainly in a medical oncology department (71.7%). The median emergency room stay was 6 hours, with a maximum of 4 days. The mortality rate in the emergency room was 6%. Univariate analysis identified respiratory distress at the time of emergency admission, fever, and neutropenia as prognostic factors for mortality (p<10-3). Additionally, pulmonary embolism (PE) had the highest mortality rate (p=0.029). Worsening during the emergency stay was also associated with a higher risk of mortality (p<10-3).

**Conclusion :** A comprehensive comprehension of the clinical presentation and outcomes of oncologic emergencies is essential to optimize patient care in the emergency department. Continuous improvements in awareness, training and protocols for the management of oncologic emergencies are required.

### 286 : Dihydropyrimidine dehydrogenase pharmacogenetics: A brief review

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**Introduction :** Tunisia annually record 20,000 new cancer patients who receive various chemotherapy protocols. 5-fluorouracil (5-FU) remains one of the most prescribed chemotherapeutic drugs for the treatment of numerous malignancies. Dihydropyrimidine dehydrogenase (DPYD) is a key enzyme in the metabolism of pyrimidine bases mainly 5-FU. Genetic variation in DPYD is involved in both drug response to 5-FU and related toxicity.

**Materials and Methods :** This work provides a brief overview of the pharmacogenetic findings of DPYD in Tunisia. Databases were identified using PubMed, ScienceDirect and Google Scholar databases. The search strategy was applied, using the following keywords : pharmacogenetics, dihydropyrimidine dehydrogenase, tunisia, 5-fluorouracil, gene.

Result : To the best of our knowledge, only two studies have investigated DPYD pharmacogenetics in the Tunisian population. The first study focused on the distribution of DPYD gene polymorphisms in Tunisia. Ben Fredj et al. identified twelve different variant alleles in their research. Among these, the DPYD\*5 allele, not linked to DPD deficiency, exhibited a frequency of 12.7%. The second most prevalent polymorphism in Tunisia was DPYD\*9A, occurring at a frequency of 13.7%. Regarding DPYD\*6, an allele not associated with deficiency, it was observed with a frequency of 7.1% in our population. The variant A496G (Met166Val) allele was detected at a frequency of 5.7% in our population, with its impact on DPD function being controversial. Allelic frequencies in Tunisia were largely similar to those found in other populations, except for the deficient variant allele DPYD\*2A, which was absent in the Tunisian population. Furthermore, the study identified a new intronic polymorphism, IVS 6-29 g>t (intron 6), with allelic frequencies of 4.8% in Tunisia. The authors suggested that this variant might be unique to the Tunisian population and neighboring populations, as it was not observed in Caucasian individuals. The DPYD\*9A allele (85T>C, C29R) was found in both heterozygous and homozygous states, indicating its prevalence as a common polymorphism in the Tunisian population. The second study concerns the association of DPYD polymorphisms with 5-FU treatment toxicities in the Tunisian population. In this prospective study by Khalij et al., it was revealed that the polymorphisms 496 A > G were significantly associated with hepatotoxicity. Additionally, DPYD\*9A showed a significant association with mucositis and neurotoxicity.

**Conclusion :** Very limited number of studies on 5-fluorouracil have been identified in Tunisia. Screening for DPYD deficiency holds promise in averting severe and potentially fatal toxicities in cancer patients undergoing 5-FU treatment. Further investigation is warranted to clarify the impact of genetic variations on drug response and to broaden our understanding in this field.

## 287 : Adverse Drug Reactions in Oncology: Insights from the Tunisian Pharmacovigilance database

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**Introduction :** There is an increasing number of cancer patients receiving chemotherapy as a first-line treatment each year. Cancer itself often induces physiological changes, affecting the body's pharmacokinetic processes and altering its sensitivity to various drugs. Furthermore, the introduction of chemotherapeutic agents into a compromised system

places patients at an increased risk of additive toxicity, drug-drug interactions, and adverse drug reactions (ADR). The aim of this work was to investigate the profile of side effects associated with chemotherapy.

**Materials and Methods :** We conducted a 12-month research on the database of the pharmacovigilance center of Tunisia from January to December 2023. The inclusion criteria were: -patients aged >=18 -adverse drug reactions related to systemic anti-cancer drugs -drug imputation was retained according to the French method

**Result :** 155 patients were included. Females comprised 67.1% of the population (n = 104). The median age was 58 years (range : 28-79) with 25.7% (n=42) aged  $\geq$ 65 years. The majority of notifications (69%) were received from oncologists, followed by pneumologists accounting for 9%, dermatologists for 7.7%, gastrologists for 7.1%, hematologists for 6.5%, and a single case from a neurologist. Most patients were diagnosed with gynecological cancers (43.8%) predominantly breast cancer (34.8%) followed by gastro-intestinal cancers (22.5%) and lung cancer (17.9%). The most frequently reported ADR were mucocutaneius manifestations associated with taxanes (22.6%), notably docetaxel. Skin eruptions generally manifested within a median of 8 days, with variations ranging from 24 hours to 10 months. The second common ADR were acute infusion reactions to platinum salts (21.7%), with oxaliplatin being the most prevalent. The majority of these reactions were classified as mild or moderate in severity. Four infusions (12%) were associated with severe reactions, characterized by anaphylactic shock with hypotension. Among these cases, carboplatin and oxaliplatin were the administered molecules in two patients each. Infusion reactions occurred with an average onset delay of 18 minutes, ranging from 2 minutes to one hour. Other frequent reactions comprised acute hepatitis (9.6%) or transient elevation of liver enzymes (4.2%), with ribociclib being implicated in half of the cases, followed by trastuzumab (2.5%), gemcitabine, etoposide, and 5-Fluorouracil, each occurring in two cases. Liver injury typically manifested over one month after initiating drug treatment, with occurrences ranging from 3 days to 8 months. All cases showed a favorable evolution, with no reported fatalities.

**Conclusion :** In this study, we provide a brief overview of the various side effects associated with chemotherapy reported to the Tunisian pharmacovigilance center over a one-year period. Patients with cancer have high levels of multimorbidity and polymedication, which require vigilance for related adverse effects.

### **288** : Predictive Factors of Cisplatin Nephrotoxicity: The experience of a Tunisian Center

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**Introduction :** Cisplatin, an old cytotoxic drug, still have many indications. Its primary elimination through kidneys causes nephrotoxicity. Our study aims to describe cisplatin-treated individuals with reduced renal function and identify key risk factors for renal impairment in this group.

**Materials and Methods :** We conducted a prospective cross-sectional study from January to December 2020 at Salah Azaiez Institute in Tunis, focused on patients with solid tumors treated with cisplatin. The research analyzed clinical, epidemiological, biological, therapeutic, and prognostic features for the entire cohort and those experiencing nephrotoxicity. Additionally, the study investigated potential predictive factors for cisplatin-induced kidney injury (CIAKI) and chronic kidney disease (CKD) through univariate and multivariate analyses.

**Result :** Seventy-five patients were included, with a mean age of 55 years. Thirty-nine (52%) exhibited stage I CIAKI at day 7 (mean age: 58 [32-75]). This group had higher comorbidity (44% vs. 33%), notably cardiovascular diseases and co-medication use (46% vs. 33%). Head and

neck cancers were prevalent, along with low BMI and hypoalbuminemia. CIAKI predictors included age  $\geq 65$  (p=0.030), comorbidities, especially hypertension (p=0.038), diabetes (p=0.005), diuretic (p=0.010) and/or NSAID use (p=0.003), low BMI < 18.5 (p=0.014), and severe digestive side effects (p=0.025, 0.047). Short hydration and oral magnesium supplementation protected against CIAKI (p=0.027, 0.024). Eighteen percent developed CKD post-cisplatin (mean age: 62 [39-74]). Predicting factors included age  $\geq 65$ , comorbidities (hypertension and/or diabetes), diuretic and/or NSAID use, metastatic stage, long hydration, post-C1 AKI, and malnutrition.

**Conclusion :** We emphasize the importance of careful evaluation of the patient profile before initiating cisplatin to identify those at risk of nephrotoxicity and take necessary precautions to prevent it. We also observed the benefits of short intravenous hydration, oral hydration, and magnesium supplementation, as well as the relevance of systematic screening for CIAKI at day 7 to avoid cumulative effects and the development of CKD.

### 289 : Tumor Marker Prescription Profile at Farhat Hached University Hospital of Sousse

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**Introduction :** In medical practice, the prescription of tumor marker assays is frequent, costly and often inappropriate. Numerous publications regularly recall their limits and indications. Despite this, there is often a multiplication of these assay prescriptions, resulting in a significant additional financial cost. The aim of our study was to investigate the prescription profile of serum tumor markers at the biochemistry department of Farhat Hached hospital in Sousse.

**Materials and Methods :** A retrospective descriptive study, of tumor marker assay requests received by our laboratory was conducted during January 2024. From the computerized medical records, we collected the various requesting departments, the tumor markers requested and their indications.

**Result :** A total of 355 requests for tumor marker assays were received in one month. The majority of requests came from the carcinology department (61.4%), followed by gynecology (6.2%), pneumology (5.6%) and occupational medicine (5.4%). The most prescribed marker was CA15-3 (46.2%), followed by CEA (27.7%), CA19-9 (26.8%), and PSA (21.4%). Sixty-six percent of prescriptions included a single parameter, 21.7% included 2 parameters and 12.3% included 3 to 6 parameters. The combination of ACE and CA 19-9 markers was the most frequent. Most requests were for follow-up of known cancer patients (63.1%), 15.5% for diagnosis, 3.1% for screening and 2.3% for primary cancer detection.

**Conclusion :** Despite their limitations for screening and diagnosis, conventional tumor markers are still frequently prescribed for these purposes in our institution. Training and education of prescribing physicians, especially in university hospitals with large numbers of doctors in training, is necessary.

#### 290 : Prior Agreement of PET-CT Scan in oncology by CNAM

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**Introduction :** Evaluation of indications and benefits of Positron Emission Tomography coupled with scanner (PET CT scan) in oncology. **Materials and Methods :** We conducted a retrospective descriptive study on prior agreement request files of PET CT scan submitted between November 2021 (date of starting supporting of this imaging by the CNAM) and 31/12/2022. This study included only the files which received agreements.

Result : 379 patients received at least one agreement of PET CT scan. Oncology occupies the first place with 202 patients while hematology occupies the second place with 174 patients. The average age of patients followed for an oncological pathology is 61 years with a sex ratio of 0.5. 87% of the requests are deposited in CNAM offices of the northern region, 8% in center region and 5% in southern region. Cancers are mainly: lung cancer (28%), breast cancer (16%), and colorectal cancer (15%). The indications are essentially: operability assessment for curative treatment (32%), suspicion of recurrence (25%), equivocal lesion whose nature may change the therapeutic course of action (23%), research of primitive cancer (11%). 17 patients had provided the results of the completed PET CT scan. It allowed to confirm the malignity of an equivocal lesion which could change the therapeutic course of action in 6 patients, to find the primary cancer in 4 patients, to eliminate a residual disease suspected in 2 patients and to diagnose other lesions not detected by other means of imaging in one patient. Furthermore, the PET CT scan had found the same result as standard imaging in 3 patients and it was inconclusive in one patient.

**Conclusion :** By adding a functional dimension to the anatomical and structural analysis of lesions, the PET CT scan is one of the important tools for medical imaging. However, it will not supplant traditional imaging techniques, but rather integrate into multidisciplinary care, allowing to refine the patient's therapy management.

### **291 :** Cowden Syndrome a rare genetic disorder with a broad clinical spectrum

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**Introduction :** Cowden syndrome (CS) is a rare genetic disorder belonging to the PHTS group (PTEN-associated hamartoma tumor syndrome). It is characterized by multiple hamartomas forming in various tissues and an increased risk of developing malignant tumors. CS is autosomal dominant and is due to variants of the PTEN gene. We aim to illustrate the importance of molecular diagnosis in the management and genetic counseling of these patients by reporting a confirmed case of CS.

**Materials and Methods :** We report the case of a 9-year-old boy referred to our genetic consultation for a suspected CS. Molecular study was carried out by sanger sequencing of exons 5, 6, 7 and 8 of the PTEN gene, most frequently mutated in CS.

**Result :** A 9-year-old patient was referred for suspected Cowden Syndrome. He was born to unrelated parents and had family history of colorectal and thyroid cancer. He presented at the age of 7 an intraperitoneal lipoma. Clinical examination revealed a macrocephaly, thickening of the gingiva and papillomatous lesions, macular pigmentation of the glans penis and multiple lipomas. He therefore met the revised PHTS clinical diagnosis criteria. Molecular analysis identified a heterozygous pathogenic germline variant in the PTEN gene : NM\_000314.8) c.445C>T; (p.Gln149\*) confirming the diagnosis of Cowden Syndrome. Cascade screening was performed on our patient's parents and sister who did not carry the variant. This mutation was therefore de novo in our patient, which enabled us to reassure his parents and provide precise genetic counselling.

**Conclusion :** Even though Cowden Syndrome is a rare cause of earlyonset malignancy, its molecular diagnosis is crucial for tailored surveillance programs, timely cancer detection, effective therapy and accurate genetic counseling.

### **292** : Clinical usefulness of measuring several tumor markers in the diagnosis of carcinomas of unknown primary

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**Introduction :** Carcinomas of unknown primary (CAPI) are defined as carcinoma metastases of unknown anatomical origin. They represent 3 to 5% of all cancers. They present a recurring challenge for clinicians, who may need to measure multiple tumor markers "multiparametric approach" to aid diagnosis. Our study aimed to evaluate the efficacy of this approach in diagnosing CAPI.

**Materials and Methods :** This was a descriptive study carried out in our biochemistry laboratory over a period of 6 months (August 2023-January 2024). Any request including the quantification of more than two tumor markers was analyzed. These markers were assayed on the Cobas 6000 automated system (ECLIA method).

**Result :** During the study period, 146 requests were included out of a total of 1825 tumour marker assay requests (8% of cases). The main requesting departments were pulmonology (34%), dermatology (13%), oncology (13%), cardiology (11%), and gynaecology (9%). The average age of the patients was  $55.2 \pm 14.4$  years, with a predominance of females (sex ratio: 0.7). The main indications were a radiological aspect suggesting pulmonary metastases (20%), a paraneoplastic syndrome (18%), and an ovarian tumor (9%). An elevated result of tumor markers was noted in 38.2% of patients. Among patient with pulmonary metastases, elevated levels of CA 125, PSA, and CA 19-9 were found in 28.6%, 14.2%, and 14.2% of cases, respectively.

**Conclusion :** The diagnosis and management of Carcinomas of unknown primary require collaboration between clinicians, pathologists and biologists. Measuring multiple tumor markers could be useful in this context and improve patient management.

#### 293 : Financial difficulties and returning to work in after cancer

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#### Oncology Department at Farhat Hached Hospital Sousse, Tunisia

**Introduction :** Evaluate the financial difficulties and returning to work in post cancer patients treated in Farhat Hached Hospital

Materials and Methods : A descriptive study about 107 patients in remission followed since 1997 for various neoplasias, at the medical oncology department of Farhat Hached hospital in Sousse. Patients are currently under regular surveillance and the end of treatment was at least 6 months ago. Data were collected using a self-administered questionnaire Result : The majority of patients were female (90). The current average age was 57 (29-84) and 50 years (19-80) at diagnosis. The majority (71) were married. Most patients (25) had 2 children (0 to 11). Patients without profession were 53. The commercial sector was the most represented (13) followed by education (12) then administration (8) and agriculture (8). Breast cancer was the most common (72), followed by digestive cancers (14). Only 45 people (83% of active patients) returned to work after the end of treatment with 64% returned to the same job and 36% with modified workstation. 15% of patients decided to retire early and 11% patients wanted to take early retirement. The comparative study showed that patients who had returned to work were younger than those who had not (average age: 47 vs 51). Women were more likely than men to return to work (85% vs 70%), and the public sector more than the private (89% vs 74%). The highest return rate was found in administration sector (100%) and education (92%), and the lowest in commerce (62%). Financial problems were noted in 38% of all population and in 72% of patients who had returned to work. There were no differences according to educational level, marital status or number of children

**Conclusion :** This study shows that financial difficulties and the ability to return to work are common in the after-cancer period. These problems, that can be a delicate and burdensome process for the survivor, are often neglected by healthcare professionals.

### 294 : Incidence of Phosphocalcic disorders in cancer patients

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**Introduction :** Phosphocalcic disorders are prevalent complications among cancer patients, arising from various factors including the malignancy itself, its treatment modalities, or associated paraneoplastic syndromes. This study aims to delineate the common phosphocalcic imbalances observed in cancer patients.

**Materials and Methods :** This is a descriptive study including all patients with neoplasia consulting at our Hospital Farhat Hached Sousse during a period of 2 months (January-February 2024). A phosphocalcic assessment was performed for all patients.

**Result :** A total of 100 patients were included in the study, with an age ranging from 35 to 84 years and a median of 59 years. Among the patients, 64% had breast cancer, 16% had prostate cancer, and 10% presented with colorectal cancer. Bone metastases were confirmed in 16% of the cases. The mean serum calcium level was  $2.4 \pm 0.1$  mmol/L, with hypocalcemia observed in 4% of patients and hypercalcemia in 4%. The mean serum phosphorus level was  $1.13\pm0.2$  mmol/L, with 2% of patients showing phosphorus levels below 0.8 mmol/L, and 6% above 1.45 mmol/L. The average level of alkaline phosphatase was 115 IU/L [33-773 IU/L], with 16% of patients presenting elevated levels. The mean magnesium level was 0.84 ±0.8 mmol/L. Hypermagnesemia was observed in 21% of patients, while 11% exhibited hypomagnesemia. The disturbances in the calcemic and alkaline phosphatase balance are more pronounced in patients with breast cancer and bone metastases, but without significant correlation.

**Conclusion :** Phosphocalcic disorders are common among cancer patients, with many of them not being specific to cancer. Detecting these disturbances is crucial, especially in patients with neoplasms prone to bone metastases.

### 295 : Skin adnexal tumours arising from the follicular unit

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**Introduction :** Skin adnexal tumours originating from the follicular unit present diagnostic and therapeutic challenges due to their rarity and varied clinical presentations. Understanding these tumours is crucial for effective management. We hereby present three cases illustrating the diverse nature of these tumours and their management.

Materials and Methods : -

**Case Report:** Case 1 is a 57-year-old woman presenting with a tumour of the left labia majora who was successfully treated with vulvectomy and bilateral inguinal lymph node dissection, revealing a 1.5-cm trichoblastic carcinoma with perineural and lymphovascular invasion, clear surgical margins, and no positive lymph nodes were found. She underwent adjuvant radiotherapy of the tumour bed at a dose of 45Gy (1.8Gy/fx).

Subsequent follow-up revealed no signs of recurrence or metastasis. Case 2 is 54-year-old man with history of basocellular carcinoma of the forehead recurrent on 7 occasions. Following an 8th local recurrence, the patient underwent a local excision and reconstruction with a local flap advancement. Histopathological findings revealed a 7-cm trichoblastic carcinoma with positive surgical margins, perineural and lymphovascular invasion. Adjuvant radiotherapy at 60 Gy (2Gy/fx) was administered, leading to complete resolution without evidence of recurrence during follow-up. Case 3 is an 87-year-old woman who presented with a left parietal 5-cm sessile cutaneous tumour, slowly growing over 8 years, diagnosed as proliferating trichilemmal tumour. Despite surgery refusal, successful treatment was achieved with radiotherapy at total dose of 70 Gy (2 Gy/fraction, achieving satisfactory tumour control without significant adverse effects. With a maximum follow-up period of 20 months, no evidence of loco-regional or distant recurrence was noted in all three cases. Conclusion : These cases highlight the diverse clinical presentations and locations of skin adnexal tumours arising from the follicular unit. Surgical excision remains the cornerstone of treatment, with adjuvant radiotherapy indicated for adverse features to enhance local control. Understanding these tumours' nuances is crucial for optimal management.

# 296 : Activity of the dermato-oncology committee of Sfax University Hospitals

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**Introduction :** The management of skin cancers has been discussed in monthly multidisciplinary meetings in Sfax University Hospitals since 2014. The objective of this work is to evaluate the activity of the dermato-oncology committee.

**Materials and Methods :** All dermato-oncology meetings report from Sfax University Hospitals between 2014 and 2023 were retrospectively analyzed.

**Result :** Ninety-four multidisciplinary meetings were carried out and 491 cases were discussed. Women represented 43% of patients. The committee's opinion was requested to clarify a diagnosis in 17% and for therapeutic management in 83% of cases. Cancer files represented 35% of cases. Squamous cell carcinoma and melanoma were the most common (56% and 40% respectively). The therapeutic decision was surgery in fifty-five percent of patients, 42 patients had radiotherapy and 38 patients had chemotherapy.

**Conclusion :** The dermato-oncology committee provides diagnostic and therapeutic management of various skin lesions. Only a third of patients have skin cancer.

### 297 : Merkel Cell Carcinoma: a case report

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**Introduction :** Merkel cell carcinoma (MCC) is a rare but aggressive neuroendocrine skin cancer. Risk factors for MCC include advanced age, immunosuppression, exposure to ultraviolet radiation, and infection with the Merkel cell polyomavirus.

**Materials and Methods :** This is a rare case developing in a nonimmunosuppressed Tunisian patient with an unusual primary site.

Result : A 27-year-old Tunisian female patient with no significant past medical history presented with painful swelling of the left foot. An MRI revealed a cutaneous-subcutaneous expansive process on the outer side of the foot, measuring 78x24x38mm. A complementary body scan showed a lymph node enlargement with no other secondary locations. The biopsy of the mass showed small round cells with prominent nuclei and little cytoplasm and immunohistochemical markers concluded to MCC. The patient underwent wide surgical excision with inguinal lymph node dissection with no adjuvant treatment. Three months after surgery, the patient presented with a cutaneous nodule on the left leg with a large swelling of the foot and inability to walk. A PET scan showed extensive local recurrence with multiple carcinoma implants in the foot and left leg, along with multiple lymph node enlargements. Due to the unavailability of Pembrolizumab, the patient received 6 cycles of chemotherapy using Etoposide and Cisplatin with a good clinical and radiological response. Only one month after the last cycle, the patient presented with clear clinical progression. The PET scan showed an extensive local tumor progression with subcutaneous and intermuscular nodular involvement associated with lymphatic spread. The patient is now undergoing second line chemotherapy with VAC regimen: Vincristine-Doxorubicin-Cyclophosphamide. She showed an excellent response after only one cycle and regained walking capacities with decrease of the edema and the nodules.

**Conclusion :** Due to its aggressive nature and high propensity for local recurrence and distant metastasis, MCC management often requires a multidisciplinary approach involving surgery, radiation therapy, and systemic treatments.

### 298 : Malignant eccrine spiradenomas: A case report

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**Introduction :** Spiradenocarcinomas or malignant eccrine spiradenomas (MES) were first described in 1956, and Beekley reported its malignant transformation in 1971. Only a few cases can be found in the literature. MES mostly occur in patients aged between 15 and 35 years, with nearly equal incidence in both males and females. They often present as a small, firm, reddish, painful and solitary nodules. Head and neck are rare locations. MES arises over a prior benign spiradenoma. Etiology is unknown although previous physical trauma is believed to be an implicated factor.

**Materials and Methods :** This is a rare case developing in a Tunisian patient with an unusual primary site.

**Result**: We present the case of a 32 year-old tunisian patient with no previous medical history, presenting with a cervical swelling, measuring 8 centimeters, bleeding and rapidly inscreazing in size. The cervical MRI has shown a left cervical mass with subcutaneous starting point, extended through the platysma towards the cervical fat, respecting the nearby organs .The anatomopathological report first concluded to a high grade carcinoma with stigma of squamous differentiation suggestive of squamous cell carcinoma . The thoraco-abdomino-pelvic CT scan has shown a 12 mm chain III adenomegaly and a non-specific subpleural solid micronodule with no other secondary lesions. We first performed a surgical excision of the left lateral cervical mass. The final anathomopathological report affirmed a degenerated spiradenoma in the form of a sarcomatoid carcinoma of 10 cm, with the presence of lymphatic emboli and perineural involvement, with no signs of invasion on the excision limits. A reconstruction with an anterolateral thigh flap was later made. The patient is now on adjuvant chemoptherapy treatment based on Etoposide-Cisplatine . He will then continue his treatment with radiotherapy.

**Conclusion :** Malignant eccrine spiradenomas are rare skin adnexal tumors. Clinical behavior is aggressive with a high rate of recurrences and distant metastasis.

# 299 : Perineal high-grade epithelioid sarcoma: a rare localization: Case Report

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**Introduction :** Epithelioid sarcoma (ES) represents a rare and aggressive variant of soft tissue sarcoma, characterized by the presence of a deeply situated mass within the proximal regions of the body, typically asymptomatic. It predominantly affects individuals in the age range of 20 to 40 years. Occurrences involving the perineum and genital organs are extremely uncommon, presenting significant diagnostic and therapeutic challenges.

**Materials and Methods :** This report describes a 49-year-old patient who consulted for a sensation of pelvic heaviness evolving over the past 3 months. Clinical evaluation revealed a WHO performance status of 0, with no abnormalities detected upon physical examination, including the absence of any palpable masses. Magnetic resonance imaging was conducted, showing a 62X28mm perineal tissue centered on the fat body of the right ischio-anal fossa, invading the posterior portion of the right corpora cavernosa and adjacent muscular structures, notably the homolateral brevis and minor adductor. Additional diagnostic assessments did not found evidence of disease spread.

**Result :** A biopsy, guided by computed tomography, confirmed the diagnosis of high-grade ES expressing Vimentin, with a Ki-67 proliferation index exceeding 35%, and variably expressing AML, CD56, CD68, and FLI1. The patient underwent six cycles of chemotherapy, achieving a partial response characterized by a slight reduction in the mass's size (53x38mm). The patient underwent a resection of the tumor, including the removal of the ischiopubic branch and a portion of the corpus cavernosum that appeared to be invaded. The postoperative course was uneventful. Pathological examination revealed internal tumor margins were involved. Given the risk associated with mutilating surgery (abdominoperineal resection and emasculation) in the event of reoperation, the decision was made to refer the patient for adjuvant chemoradiotherapy.

**Conclusion :** Epithelioid sarcoma (ES) is a rare variant of malignant sarcoma known for its aggressive behavior, requiring prompt diagnosis and intensive multidisciplinary treatment for optimal management.

## **300** : Clinicopathological analysis of colorectal serrated lesions and polyps: understanding the spectrum and the outcomes

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**Introduction :** Serrated lesions and polyps (SLP) regroup heterogeneous entities defined by the presence of sawtooth-like in-folding of the epithelial crypts. The World Health Organization(WHO) recognizes four categories, displaying different molecular and morphological features. We aim to study these group entities and discuss their pathogenesis, characteristics, and possible outcomes.

**Materials and Methods :** A retrospective case-series study was conducted, including18 histologically confirmed SLP, diagnosed at our pathology department during the period between 2016 and 2024

**Result :** Our series included 18 patients aged between 34 and 78 years, with a mean age of 55.5 years. The sex ratio was 1. A total of 27 polyps were identified. The predominant location was the appendix (7 patients),

followed by the left colon, rectum, and right colon. Histologically, we observed 13 hyperplastic polyps, 9 sessile lesions including 8 with dysplasia, and 5 traditional serrated adenomas.3 cases were associated with colonic adenocarcinoma and one with tubular adenoma with high-grade dysplasia. Patients with adenocarcinomas underwent colonic resection, while the others underwent simple endoscopic resection.

**Conclusion :** Colorectal SLPs include Hyperplastic polyps (HPs) (comprising the Microvescicular type and the Goblet-cell rich subtypes), Sessile serrated lesions (SSLs) with or without dysplasia, Traditional serrated adenomas (TSAs), and unclassified serrated adenomas.These subtypes differ in their cytological and architectural features as well as their location and their molecular pathways. As SLPs, particularly SSLs with dysplasia and TSAs, serve as precursors for approximately one-third of colorectal cancers; understanding their molecular pathways can aid in distinguishing between the different types of SLPs, predicting clinical outcomes, and developing screening protocols.

#### 301 : Retroperitoneal neurofibroma: a case report

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**Introduction :** Benign retroperitoneal nerve sheath tumours occurring in patients with or without neurofibromatosis type 1 are rare, they include neurofibromas and schwannomas. Neurofibromas are benign tumours that develop in and along nerves and nerve sheaths.

**Materials and Methods :** We report the case of a retroperitoneal neurofibroma operated in our institute.We present the clinical , histological and therapeutic management aspects .

**Result :** We present the case of a 58-year-old female patient with a past medical history of intra- epithelial carcinoma of the uterine cervix who underwent hysterectomy in 2009, presenting with right flank pain that has been progressively evolving for a year. On clinical examination, the patient was in good general condition with no palpable abdominal mass and no detectable skin lesions. Pelvic examinations revealed no abnormalities. Abdominal CT scan revealed a well-limited, right pelvic formation measuring 22 x 13 mm and a suspicious retroperitoneal adenomegaly measuring 13mm. Exploratory laparotomy was performed, revealing a 2cm retroperitoneal mass and 3 right iliac adenopathies. The mass and iliac lymph nodes were removed, and the postoperative course was straightforward. Histological examination of the 3 iliac lymph nodes showed no tumoral proliferation, and histological examination of the retroperitoneal mass revealed a spindle cell proliferation arranged in diffuse, poorly limited layers and emitting large extensions expressing S-100 protein, concluding that it was a neurofibroma. No adjuvant treatment was indicated in multidisciplinary committee.

**Conclusion :** Neurofibromas are ectodermal tumours which rarely occur retroperitoneally and are diagnosed histologically. They are clinically silent and can take on significant dimensions. Imaging helps with the topographical assessment, and the unreliability of trans parietal biopsy, given the size of the tumour, makes it difficult to diagnose.

## 302 : Retroperitoneal inflammatory myofibroblastic tumor: A Case Report

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**Introduction :** Recently, the inflammatory myofibroblastic tumor has emerged as a distinct entity with characteristic clinical, pathological, and molecular features. It is a rare mesenchymal tumour, characterized by local and vascular invasion, recurrence and metastases suggesting a true malignant tumor.Its main differential diagnosis is the inflammatory myofibloblastic sarcoma. The commonest site is the lung.Only few cases of retroperitoneal location have been reported, their clinical presentation and radiologic images are non-specific making the diagnosis and management challenging.

**Materials and Methods :** We report the case of a retroperitoneal inflammatory myofibroblastic tumor operated in our institute.We present the clinical , histological and therapeutic management aspects .

**Result :** We present the case of a 32-year-old patient who presented with weight loss and abdominal pain. An abdominal CT scan revealed a left adrenal mass of 128 mm associated to centimetric left lateral aortic adenopathies. CT guided biopsy of the mass was performed. Histological examination concluded to a an inflammatory myofibroblastic tumour. The patient underwent a left radical nephrectomy, removing the adrenal mass measuring 25cm. The postoperative course was uneventful and the final histological and immunohistochemical study confirmed the diagnosis of an inflammatory retroperitoneal myofibroblastic tumor.

**Conclusion :** Inflammatory myofibroblastic tumor is rare and affects children and young adults. Whether this type of tumor is benign or malignant is not clear, and their management is not well codified. Preoperative imaging examination, biopsy, and postoperative histological help to make the diagnosis.Surgical resection remains the main treatment, and close monitoring must be carried out after operation to detect eventual recurrences.

#### 303 : Retrospective Histological Analysis of Testicular Neoplasms

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**Introduction :** Testicular neoplasms (TN) have become increasingly prevalent in recent years, posing significant health concerns, particularly among young men, and impacting fertility and quality of life. These tumors, categorized into germ-cell and non-germ-cell types, exhibit diverse clinical and histopathological features. In our study, we aim to delineate these characteristics.

**Materials and Methods :** A retrospective study was conducted on cases of TN diagnosed and collected at the Department of Pathology of Habib Bourguiba Hospital in Sfax between January 2015 and March 2024.

Result : This study comprised 30 TN cases, with an average age of 40 years (range: 3 to 89 years). All patients presented an asymptomatic palpable mass. In 16 cases, the tumor was on the right side. Tumor size ranged from 2 cm to 21 cm, averaging 7 cm. Germ-cell tumors from germcell-neoplasia-in-situ(NGIS) accounted for 39.6% of cases, with 26.4% being seminomatous. Non-seminomatous tumors from NGIS included embryonal carcinoma (10%), post-pubertal teratoma (6.6%), and yolk sac tumor (6.6%). NGIS was present in 26.7% of cases. Tumors not derived from NGIS represented 3.3%. Stroma and sex-cord tumors comprised 10% of cases, including Leydig-cell, Sertoli-cell, and granulosa-cell tumors (3.3% each). Hematopoietic tumors accounted for 23%, with 13.3% being diffuse large B-cell lymphomas. One neuroendocrine tumor was reported (3.3%). Positive surgical margins were seen in 13.3% of cases. Rete testis infiltration occurred in 33.3%, epididymis infiltration in 26.7%, and albuginea infiltration in 20%. Vascular emboli and perineural invasion were observed in 20% and 33.3% of cases, respectively. Tumors were classified as pT1 in 63.3% and pT2 in 16.7%.

**Conclusion :** A multidisciplinary approach remains essential, fostering close collaboration between pathologists, urologists, oncologists, and other specialists to ensure comprehensive evaluation and optimal treatment of patients with testicular neoplasms.

**304 :** Chest wall reconstruction combining synthetic plates and locoregional flaps: About 13 cases

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**Introduction :** Extensive chest wall reconstruction after massive tumor resection is a challenging procedure that requires a multidisciplinary approach

**Materials and Methods :** We present 13 cases of destruction of the anterolateral and sternal chest wall after wide tumor resections.

**Result :** The histological workup concluded to a chondrosarcoma in most cases and desmoid tumor in one. The mean number of ribs resected was 4+/-1. All patients underwent immediate reconstruction with synthetic mesh and Latissimus Dorsi flap. Bone immobilization appeared satisfactory. There were no postoperative respiratory disorders, with the exception of one case of flail chest. No vascular complications of the flaps were noticed. Follow-up showed only one case of recurrence related to a desmoid tumor

**Conclusion :** Combining synthetic plates with locoregional flaps is a safe, inexpensive surgical solution for managing reconstruction of extensive chest wall defects.

### 305 : Predictive factors of Quality health care satisfaction in an Iraq Oncology center

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**Introduction :** Numerous factors can influence cancer patients' satisfaction with their healthcare experiences, reflecting the intricate interplay between patient characteristics, disease-related factors, and the healthcare system. The study aimed to investigate the factors predict cancer patients satisfaction towards quality of healthcare services.

**Materials and Methods :** A cross-sectional study was undertaken at the Middle Euphrates Cancer Center in Al-Najaf Al Ashraf Governorate from July 1st, 2021, to September 20th, 2023.. The questionnaire's validity was ensured through expert consultation

**Result :** This study centered on examining 400 cancer patients' demographic and clinical profiles. The key findings indicated that 22.0% were recently diagnosed with breast cancer (within the last 19-24 months), and 44.0% underwent chemotherapy as part of their treatment. A majority of participants (54.3%) did not have any comorbidities, while nearly half (49.3%) were in stage I cancer metastasis. Importantly, 50.0% of the patients maintained a normal level of independence: The results of simple linear regression analysis reveal significant predictors of patient satisfaction with the quality of healthcare services. Specifically, the duration since cancer diagnosis ( $\beta$ = -0.222; p= 0.036), the presence of associated comorbidities ( $\beta$ = -0.350; p= 0.000), the stage of cancer metastasis ( $\beta$ = -0.331; p= 0.000), and the level of independence ( $\beta$ = -0.335; p= 0.000) all play pivotal roles in determining this outcome.

**Conclusion :** Key predictors of patient satisfaction include time since cancer diagnosis, comorbidities, cancer stage, and independence level. Healthcare providers should customize their services to improve the wellbeing of cancer patients based on these factors.

## 306 : Quality of health care in an Iraq Oncology center Alnajaf: about 400 patients

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**Introduction :** Cancer patients' satisfaction is a multifaceted measure that encompasses various dimensions of care, including clinical effectiveness, communication, accessibility, and emotional support.

**Materials and Methods :** The present study carried out by descriptive Design, specifically a cross-sectional study, during the period from 1st July 2021 to 20th September 2023, with objective of assess the cancer patients satisfaction level with the quality of healthcare services provided at Middle Euphrates Cancer Center in Al-Najaf Governorate and investigate the differences in satisfaction level. Data are collected through interview using questionnaire tool and analyzed through the application of descriptive and inferential statistical analysis which reveal, the reliability of the questionnaire which is determined through a pilot study and the validity is achieved through a panel of (13) experts

**Result :** The study results showed indicating a high level of dissatisfaction among 400 cancer patients regarding the quality of healthcare services at the Middle Euphrates Cancer Center in Al-Najaf Al Ashraf Governorate, with 53.3% expressing dissatisfaction (M=58.81; SD=29.58), raise several important issues within the context of cancer care and healthcare service provision in this region. Further analysis showed that the time since diagnosis (p= .036), comorbidities (p= .000), cancer metastasis stage (p= .000), and independence level (p= .000) significantly influenced patient satisfaction with healthcare quality. Cancer patients expressed a significant level of dissatisfaction with the quality of health care services provided by doctors and nurses as well as with the services and organization of care, with an overall dissatisfaction rate, and it satisfaction levels varied significantly based on factors such as the timing of their first visit, hospitalization status, duration of stay, different private and general wards, age, gender, geographical location, occupation and income.

**Conclusion :** The study recommends expansion of the center, adding patient wards, doubling the number of beds, providing operating theatres and consultations for other medical specialties such as psychiatry, nutrition, surgery, ophthalmology, dermatology and others related to treating cancer patients to accommodate the large number of patients and provide high-quality health care services for them.

# 307 : Myocardial metastasis from a malignant solitary fibrous tumor: A case report

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**Introduction :** Solitary fibrous tumor (SFT) is a rare mesenchymal tumor primarily found in the pleura (85-90% of cases), but it can also occur in other mesothelial tissues like the pericardium, peritoneum, and various soft tissues and visceral organs. SFT typically exhibits intermediate malignant potential, with 15-20% showing local or distant recurrence.

Materials and Methods : Here, we present a rare case of myocardial metastasis secondary to SFT with simultaneous pleural and pericardial involvement.

**Result :** Case report A 47-year-old man with one month history of dyspnea was admitted to the cardiology department for right heart failure. Physical examination revealed bilateral jugular vein distention, an enlarged and tender liver, and bilateral lower limb edema. Chest X-ray showed multiple left hilar and parenchymal opacities. Transthoracic echocardiography revealed a pericardial effusion compressing the right cardiac cavities with a 50 mm heterogeneous pericardial mass. Emergency pericardial drainage alleviated respiratory symptoms. Postoperative cardiac MRI revealed a 6 cm pericardial mass enhancing variably and compressing the right ventricle and interventricular septum, along with a 13 mm myocardial metastasis within the left ventricular sidewall. Multiple bilateral pulmonary and pleural nodules and masses were also noted. A multidisciplinary consultation meeing led to video-assisted exploratory thoracotomy, revealing a cardiac mass with pleural thickening.

Histological analysis showed a poorly circumscribed mesenchymal proliferation infiltrating smooth muscle fibers, composed mostly of spindle cells with rare mitotic figures and focal necrosis. Immunohisto-chemistry revealed diffuse BCL2 staining, negativity for CD34, and low Ki67 expression (5%). The diagnosis of malignant SFT with pleural involvement, myocardial, and pulmonary metastases was established

**Conclusion :** The incidence of cardiac metastasis in SFT shows significant variability, spanning from 2.3% to 18.3%. Myocardial metastasis originating from malignant SFT is exceptionally rare. Histological and immunohistochemical assessments are pivotal for diagnosis and prognosis, given the rarity of these tumors and the unpredictable behavior observed in some SFT cases.

### 308 : The Giant cell tumor of soft tissues: A Case Report

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**Introduction :** The Giant cell tumor (GCT) of soft tissues (GCT-ST) is a rare, slow-growing entity. It is recognized by the WHO as a tumor of good prognosis, very close to conventional bone GCT. It affects members selectively. Although gold standard remains carcinological surgical resection, bisphosphonates are beginning to prove their benefit in the treatment of TCGTM.

**Materials and Methods :** We report a rare case of a young patient with GCT-ST in Salah Azaiez Institute.

Result : We report the case of a 45-year-old man, who consulted at the age of 37 for a painful swelling of the right elbow, extended to the upper third of the forearm. The radiological assessment revealed the presence of an infiltrating lesion of the soft parts upon peri-articular muscles of the elbow and the muscles of the right forearm, measuring 19\*7cm, with an intraarticular extension and bone lysis of the lateral condyle of the right humerus. An ultrasound-guided biopsy of the right elbow was performed. Histological examination concluded to a GCT-ST showing a nonencapsulated richly vascularized tumor proliferation made of layers of histiocyte cells without atypia nor mitotic figures. Giant cells and siderophages were also present. Carcinological surgery was not possible given the intra-articular extension of the tumor. The case was discussed in a multidisciplinary consultation meeting indicating medical treatment with Zoledronic Acid given the unavailability of Denosumab. The patient received two years of monthly injections of Zoledronic Acid. The imaging of the elbow and right forearm concluded to tumor stability. The patient is now receiving the Zoledronic Acid every three months since 2018 with clinical stability. The last imaging showed a radiological tumor response. Conclusion : Most reported GCT-STs show a benign evolution. The malignant form is still discussed in literature. GCT-ST is a tumor that contains many osteoclasts. It would therefore seem logical that bisphosphonates could have a place in its treatment essentially when surgery is not feasible.