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PO-01

Inflammatory breast cancer in the south of Tunisia

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Introduction: Inflammatory breast cancer (IBC) is the most aggressive form of locally advanced breast cancer. It is a rare disease representing between 2% and 5% of breast cancers. Objectives: To report epidemiological, anatomo-clinical features, to assess therapeutic strategies and to evaluate prognostic factors of IBC in the center of Tunisia. Material and method: retrospective study including 272 Tunisian patients with a clinically diagnosed IBC treated at the center of Tunisia, from 1995 to 2015. We collected data on epidemiological, anatomo-clinical and biological features. Results: The frequency of IBC is 9.15%, the patients had a median age of 49 years (23-90). A tumor mass was found in 61% of cases (167 patients). On histology, invasive ductal carcinoma represented 90% of cases (224 patients). Hormone receptors were negative in 29% cases (78 patients). HER2 was over-expressed in 25% cases. Fifty-six patients (20.6%) had metastasis at time of presentation. Two hundred and twenty nine patients were treated with curative intention (84%) by neoadjuvant chemotherapy followed by modified radical mastectomy for 224 patients (98%), loco regional adjuvant radiation therapy was given to 199 patients (87%) in a dose range from 50 Gy to 72 Gy with a normofractionated regime for all the patients. Adjuvant chemotherapy was given to 123 patients (45.3%) and hormonal therapy to all the patients with positive hormone receptors as adjuvant therapy. Forty-three patients (16%) had a palliative care. At a median follow-up of 23.6 months, the OS at 5 and 10 years respectively of 13.2% and 4.5%. Improvement in OS was seen in patients with a consultation period < 3 months, without metastasis at time of diagnosis and who achieved complete clinical or pathological response after neoadjuvant chemotherapy. Conclusion: IBC is a rare and deadly subtype of locally advanced breast cancer. It imposes a multidisciplinary and urgent therapeutic strategy.

PO-02

Cytokines as biomarkers of inflammatory breast cancer

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Objectives: Breast cancer (BC) is the most prevalent malignancy in females worldwide, and the first cause of cancer related to mortality in women. Inflammatory breast cancer (IBC) is the most aggressive form of BC because of its rapid progression and high mortality rate. In Tunisia, it represents 5% of BC. Early screening of IBC plays an important role in improving disease prognosis, and reducing IBC-associated mortality. Research of new biomarkers of IBC is subject of current studies. In the present work, we conducted a prospective case-control study in order to evaluate four inflammatory cytokines (IL-1β, IL-8, IL-21 and IL-23) as potential IBC biomarkers in Tunisian women. Methods: Cytokines were assayed in 30 patients with IBC and 25 healthy women using two methods: the Immulite 1000 technique and the EASIA immunoassay technique. All statistical analysis were performed by SPSS 24.0 Results: obesity and early menarche may modulate the susceptibility of the disease. Statistical studies reveal a significant difference for IL-1β (Pvalue= 0.0004) and IL-21 (Pvalue= 0.01) serum levels between patients and controls. In the other hand, we don’t found any association between IL-8 and IL-23 serum levels and susceptibility to IBC. Conclusions: High serum level of IL-1β is associated with higher IBC risk. Wherease, high serum level of IL-21 is associated with a lower risk of IBC.
PO-03

**ALDH1 expression in inflammatory breast cancer tumor using Real-time RTPCR gene expression quantific**

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Inflammatory breast cancer (IBC) is a rare but aggressive type of breast carcinoma. There are few diagnostic and prognostic biomarkers in IBC. Aldehyde dehydrogenase 1 (ALDH1) is a putative stem cell marker in a variety of cancers. Our study aims to investigate the expressions of the ALDH1 in a cohort of IBC tumors and to assess the relationship of their expression with Notch1 and clinical-pathological characteristics.

Methods: We investigated the status of ALDH1 and Notch1 in 81 female IBC cases. Total RNA was extracted from formalin-fixed paraffin-embedded tumor tissues. Pure RNA was used for the synthesis of cDNA, which was used for quantitative real-time RT-PCR (q-RT-PCR) analysis of relative expression levels of target genes. q-RT-PCR was used to measure the expression of ALDH1 and Notch1 in technical triplicates starting with the same cDNA using SYBR Green I technique. The expression levels were calculated based on the 2-ΔΔCT method.

Results: Positive ALDH1 (ALDH1+) and Notch1 (Notch1+) expression was observed in 69 (85%) and 69 (85%) out of 81 IBC cases, respectively. Among the ALDH1+ tumors, 36 (52.2%) showed slight, 18 (26.1%) moderate, and 15 (21.7%) strong expression. There were 1 (1.3%), 11 (13.5%), 11 (13.5%), and 58 (71.7%) patients in ALDH1+ /Notch1-, ALDH1+/Notch1+, ALDH1+/Notch1-, and ALDH1+/Notch1+, respectively. ALDH1 expression is significantly correlated with age, response treatment and Notch1 expression.

Conclusion: This finding reflects that the assessment of ALDH1 expression may have a potential role in incidence of IBC and be helpful tool in the future anticancer strategies.
Inflammatory breast cancer versus locally advanced breast cancer: patterns of relapse according to receptors status.

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Introduction: The aim of our study was to compare the relapse profile between inflammatory breast cancer (IBC) and locally advanced breast cancer (LABC). Methods: We retrospectively collected data on all patients diagnosed with histologically confirmed IBC (T4d) and locally advanced breast cancer (T3-T4(a-b-c)/N2-3) from 2010 to 2016. Only cases with non-metastatic disease treated with curative intent were included. Patient demographics, disease characteristics and treatment outcomes were analysed. We compared relapse rate between different groups using Khi2 test, p<0.05 was considered significant. Results: We collected 113 (59%) LABC cases and 81 (41%) IBC cases. Tumours were luminal in 64.4% of cases, triple negative in 14.4% and HER2 enriched in 21.2%. Patients with IBC had significantly higher relapse rate (46% vs 29% p=0,03). In Luminal sub-group the difference in relapse rate was also significantly higher in IBC patients (45% vs 28%, p=0.04). We did not find a significant difference in TN sub-group (p=0,7) and HER2 sub-group (p=0,2 ). In pN+ patients, relapse rate was higher in IBC patients (38% vs 27%, p=0.043). There was no impact of age<40 (27% vs 23%, p=0.6), obesity (21% vs 20%, p=0.43), tumour grade (17% vs 15%, p=0.9) on relapse rate between IBC and LABC patients. The impact of histological response was not evaluated because of missing data. Conclusion: IBC showed higher relapse rate compared to non-inflammatory LABC, this difference was maintained in the luminal subtype and in pN+ .

In aggressive histological groups TN and HER2 +,we did not observe a difference in relapse rate.

Epidemiological Profile of Inflammatory Breast Cancer: About 79 Cases

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Background: Inflammatory breast cancer (IBC) is rare and associated with a poor prognosis. The therapeutic management must consider the histopronostic features and evolutive patterns of this entity. Patients and methods: We retrospectively reviewed the records of 79 patients with metastatic and non-metastatic IBC treated at Salah Azaiez Institute from January 2010 to December 2016. We described clinicopathological features and outcomes. Survival Curves were performed using the Kaplan-Meier method. Results: The mean age was 49 years [range 24 -80 years] with 43% of non menopausal women. Thirty patients (38%) presented with comorbidities. The clinical stage was 72.2% (n=57) IIIB, 11.4% (n=9) IIIC and 13% (n=13) IV. Invasive ductal carcinoma was the most prevalent histologic type (94.4%) followed by invasive lobular carcinoma (3.8%) and carcinosarcoma (1.3%). The distribution of pathological subtype was as follow: 39.2% RH+/HER2- tumors (n=31), 12.7% RH+/HER2+ tumors (n=10), 20.3% RH-/HER2+ tumors (n=16), 22.8% triple negative tumors (n=18) and unknown in four cases. From all, 72 patients underwent radical surgery (91.1%) followed by adjuvant radiation therapy of the chest wall, axilla and subclavicular nodes in 55 cases (69.6%). All patients received chemotherapy. Adjuvant hormonal therapy was administrated in 27 women (34.2%): selective estrogen receptor modulation treatment in 15 cases (55.5%) and aromatase inhibitor in 12 cases (44.4%). We indicated castration in 8 patients (10.1%). T argeted therapies were indicated in 13 patients (16.5%) including Trastuzumab in 11 cases (84.6%) and Bevacizumab in the two others (15.3%). Pathologic complete response (pCR) was achieved in 10% of cases (n=7). The median follow-up was 27 months [range 5-99 months].The 3-year overall survival of patients with stage IIIB, IIIC and IV was
62.6%, 42.9% and 9.7% respectively \((p=0.002)\). Conclusion: Collaborative studies are warranted to establish the epidemiological characteristics and management of IBC and improve its survival rates.

**PO-07**

**Patterns of Presentation, Treatment and Outcomes of Metastatic Inflammatory Breast Cancer**

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Background: Inflammatory breast cancer is characterized by a poor prognosis with a high risk of metastatic spread. Intensive management of the metastatic (MIBC) by systemic therapy is usually performed. However, the place of multimodal treatment is still debated. Patients and methods: This was a retrospective study of 79 IBC patients with 13 cases of metastatic disease at diagnosis treated at Salah Azaiez Institute from January 2010 to December 2016. We analyzed clinico-pathological features and outcomes of metastatic IBC patients. Results: The median follow up was 27 months. For non MIBC, the median follow up was 34 months. Distant relapses occurred in 27 cases (40.9%) within a median of 7 months. The 5-years DFS was 47.2%. The study of the distribution of metastatic sites according the molecular subtypes showed a high probability of bone metastasis in HR+ groups, liver and lungs in HER2+, and brain and lung in TN group. Hormone therapy (HT) and chemotherapy (CT) represented the main treatment approaches in 74% of cases. Radiotherapy (RT) was indicated in 18.5% \((n=5)\) of patients for painful bone metastases and central nervous system involvement and 22.2% of patients \((n=6)\) received supportive care. The median survival of MIBC patients was 16 months. Bone metastasis was the most frequent site \((n=9/13)\). All patients received CT and four patients received HT. Radical surgery of the primary tumor was performed in 7 patients with bone metastases and 2 with lung metastases followed by locoregional RT in 5 cases. Mastectomy in MIBC patients resulted in a higher 3-year overall survival than those who did not undergo surgery \((13\% \text{ VS } 0\%\text{, } p=0.001)\). Conclusion: Our results suggest that the determination of the appropriate strategy for the management and the follow up of MIBC depends on the molecular subtype of the primary tumor as well as the site of metastasis.

**PO-08**

**Inflammatory breast cancer in Tunisia: Epidemiological features and treatment challenges**

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Objective: Inflammatory breast cancer (IBC) is a rare and aggressive clinicopathological entity of breast cancer, being described as more common in Tunisia and the north Africa region. The management of IBC is multidisciplinary and treatment response is influenced by several factors including the tumor microenvironment. Herein, we aimed to assess clinicopathological features of IBC and to identify new prognostic and predictive biomarkers for neoadjuvant chemotherapy. Methods: The studied cohort comprised pre-treatment tumor samples from 82 patients with invasive breast adenocarcinoma treated at Salah Azaiez Institute and Abderrahman Mami Hospital et al. Genealogical as well as clinical-
anatomopathological data were collected. Written informed consents were obtained from all participants prior to specimen collection according to institutional guidelines. Results: Our preliminary results showed that 15.85% of patients are diagnosed with IBC. The median age at diagnosis of IBC cases was 57.69 years (range 35–68) and 92.3% of them had postmenopausal status. The mean age at menarche was 12.81 years and the average age of first birth was 26.6 years. Consanguinity was observed in 61.5% of IBC patients and family history of breast cancer was present in 30.7% of cases. Regarding histology, ductal carcinoma was the predominant subtype associated with medium to high nuclear grade and the average score of Ki67 was 52%. Hormone receptors were positive in 63.63% and HER2 was overexpressed in 27.27% of IBC cases while 18.18% of patients had triple negative profile. Conclusions: In Tunisia IBC seems to have particular epidemiologic characteristics. Better disease management it is important to define predictive biomarkers for standard and advanced therapies such as immunotherapy. These will be further elucidated in our future analyses.

**PO-09**

**Outcomes of Inflammatory breast cancer by hormonal receptor defined subtypes in the center of Tunisia**

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Inflammatory breast cancer (IBC) is an aggressive form of locally advanced breast cancer (LABC). It is highly angiogenic and angioinvasive. The purpose of this study is to determine the impact of hormone receptors (HR) expression as a prognostic factor in IBC. Patients and methods: A retrospective study about 117 women with HR tested IBC treated between 2007 and 2012 in the medical oncology department of Farhat Hached University hospital in Sousse, Tunisia. Results: Seventy one patients (60.7%) were HR positive (HR+) and 46 (39.3%) were HR negative (HR-). In the HR+ subgroup, mean age was 52 years with 5.6% patients aged under 35 years. The disease was metastatic in 41.4%. Mean tumor size was 6.2 cm. Lymph nodes were involved in 71.4%. Patients had chemotherapy in 91.4%, surgery in 63.8% and hormonotherapy in 64.7%. Fifty percent of patients relapsed and had mainly a metastatic recurrence (83.3%). Mean Overall Survival (OS) was 28.3 months. In the HR- subgroup, mean age was 53 years with 4.3% aged under 35. The disease was metastatic in 32.2%. Mean tumor size was 7.1 cm. Lymph nodes were involved in 65.2%. Patients had chemotherapy in 97.8%, surgery in 67.4%. Relapse rate in this subgroup was 38.5%. Mean OS was 24.1 months. Univariate study of the factors liable to influence disease free survival and overall survival of IBC was negative. Conclusion: IBC has a poor prognosis and HR expression impacts the therapeutic attitude. IBC treatment is still a challenge in Tunisia due to lack of access to new targeted therapies.

**PO-10**

**Inflammatory breast cancer (IBC) with HER2 defined Status: Clinical, pathologic features and the prognostic impact**

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Introduction Breast cancers are the most common malignancies in women worldwide and are the second most common cause of death. The purpose of this study was to define the clinical, pathologic features and the prognostic impact of HER-2 status on survival outcomes of patients with IBC. Materials and methods: It is a retrospective study over 5 years. It has been carried out among 86 women treated for IBC in the department of medical oncology in Farhat Hached hospital – Sousse, Tunisia. Results: A total of 57 patients (66.3%) had HER-2-negative disease (HER2-) and 29 (33.7%) had HER2-positive disease (HER2+). The median of age was 52 years (23-89 years). Fifty-three patients (61.6%) had a tumor size greater than 50 mm including 37 (43%) with HER2- and 16 patients (18.6%) with HER2+. The SBR grade was high for 30 patients (34.8%) with HER2- and 11 patients (12.7%) with HER2+. The lymph node involvement was observed in 44 patients (51.1%) including 27 patients (61.6%) with HER2- and 17 patients (31.3%) with HER2+. The overall survival was 26 months for HER2-group compared with 23 months for HER2-group. Univariate analyses of factors that influenced overall survival was negative. Conclusion: HER-2 status remains an important and necessary prognostic factor to be clarified in order to improve the prognosis of the disease.

Inflammatory breast cancer: Experience of Gabes medical oncology center.

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Objective: Inflammatory breast cancer (IBC) is an aggressive clinicopathological entity of breast cancer. It is also characterized by rapid progression and higher metastatic potential. The aim of this study was to report our experience in the management of IBC. Methods: Among 385 treated with breast cancer committee between January 2013 and December 2017, 26 (14.6%) had inflammatory form classified T4d treated in the department of medical oncology of Gabes hospital. Results: we registered 26 cases of IBC. The median age was 52 years. Inflammatory symptoms revealed the diagnosis for 8 patients (30%). The tumor average size was 6.6 cm. Seven patients (27%) had metastases disease at the diagnosis. The invasive ductal carcinoma was the most common histological type with 96.2% of all the cases. All the patients have received anthracycline-based ± taxane chemotherapy followed by local treatment with irradiation, with or without mastectomy. Axillary lymph node dissection was performed for 13 patients (50%), lymph node metastases N+ were found in 7 patients with ≥ 4N+ in all patients. Hormone receptor were positive in 12 patients (46%). Over expression of HER2neu was observed in 6 patients (23%). One patient with over expression HER2neu received trastuzumab. The overall 5-year survival is 37%. Conclusion: IBC is a special entity of breast cancer. The therapeutic approach can only be multidisciplinary. The ability to identify new targeted therapies allows us to control the aggressive phenotype of IBC. Molecular biology and genomics are very likely to play an important role in the diagnosis and management of IBC.
Characteristics of inflammatory breast cancer compared to non-inflammatory locally advanced breast cancer in Tunisian patients: A retrospective study on epidemiological and clinico-pathological features

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Objective: Inflammatory breast cancer (IBC) is a rare and aggressive form of breast cancer. Rapid disease progression and early distant dissemination are well described hallmarks of IBC and seems to have worse prognosis than non-IBCs. This study aimed to compare the epidemiological, clinico-pathological and therapeutic features of IBC versus non IBC locally advanced breast cancer (LABC) in Tunisian patients. Methods: This retrospective study included 137 Tunisian breast cancer patients; 47 IBC and 90 non IBC (LABC), treated at the Oncology department at Abderrahmane Mami Hospital, Tunisia, from 2011 to 2015. We collected data on epidemiological, clinicopathological features and histologic response to neoadjuvant chemotherapy. Overall survival was calculated by Kaplan Meier method. Results: IBC represented 34.3% of the studied cohort. The two groups did not differ significantly in age at diagnosis, family history of breast cancer, lymphatic nodes involvement, tumor size, recurrences and other clinico-pathological parameters… High SBR grade (II-III) was more frequently identified in the IBC group (p = 0.019). Further, high Ki 67 expression (>20%) was evident in the IBC group (83%) (p= 0.016). Significant difference was also observed for negative hormone receptors status between IBC and non-IBC LABC cases (p=0.006). We found no differences in the distribution of pathological complete or partial response among the two groups as well as in survival. IBC aggressiveness is confirmed in our study and this entity has a worse prognosis compared to non-inflammatory LABC.

Conclusions: Despite the multidisciplinary approach used for the treatment of IBC, the identification of clinico-pathological particularities of this breast cancer aggressive form in a defined population can contribute to the development of new therapeutic approaches to improve the prognosis of patients.

PO-13

Inflammatory breast cancer in a Tunisian university hospital: clinical-pathological features and outcomes

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Introduction Inflammatory breast cancer (IBC) accounts for 5-7% of all breast cancer in Tunisia. The disease begins in the breast duct tissue and spreading quickly to the lymphatic vessels in the skin and surrounding tissue. The aim of our study was to evaluate the clinical-pathological parameters and outcome of IBC. Materials and methods Patients with IBC treated at University Hospital Farhat Hached at the center of Tunisia from 2007 to 2012 were reviewed. Patients who had presented with IBC as a recurrence, or who had a neglected and advanced breast cancer that simulated an IBC were excluded. Results During 5 years, 1260 patients were treated in the Oncology department at University Hospital Farhat Hached at the center of Tunisia from 2007 to 2012 were reviewed. Patients who had presented with IBC as a recurrence, or who had a neglected and advanced breast cancer that simulated an IBC were excluded. Results During 5 years, 1260 patients were treated in the Oncology department at University Hospital Farhat Hached of Sousse (Tunisia) for breast cancer, among them 100 cases (8%) had inflammatory forms. The median age at diagnosis was 51. 30% younger than 45 years. IBC occurred during pregnancy in 4% of cases. The histopathologic types were invasive ductal carcinoma 85%, while 5% were infiltrating lobular carcinoma. Tumor grade was II-III in
88% of cases, HER2 was over expressed in 36.3% while triple negativity was found in 33% of the cases. Lymph node involvement was observed in over 42% of the IBC tumors. 43% had metastases at the time of presentation. Among the patients who received preoperative chemotherapy, 8 patients had a pathologic complete response. 57.5% patients with HR-positive tumors received endocrine therapy consisting of tamoxifen alone (28.5%); aromatase inhibitors (18%); sequential association (11%). Among the 24 patients with over expressed Her-2 tumors, 5 received trastuzumab for a year. Modified radical mastectomy was done in 40 patients (2 in metastatic disease). 21 patients received hormonal treatment in palliative setting. Only one patient received Trastuzumab in metastatic disease. Conclusion IBC is an aggressive subtype of locally advanced breast cancer. Timely diagnosis and treatment, increased awareness of the disease.

PO-14
**Influence of Molecular Subtype of Inflammatory Breast Cancer on Survival Outcomes**

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Background: Inflammatory breast cancer (IBC) is the most aggressive form of breast cancer. It represents a heterogeneous disease with different molecular subtypes that affect survival rates and outcomes. Patients and methods: This was a restrospective study of 66 clinical stage T4dM0 IBC patients treated in Salah Azaiez Institute from January 2010 to December 2016. We analyzed clinicopathological features and outcomes of our patients. Curves of survival rates were performed. Results: In our cohort, clinical stage IIIb was found in 86.4% of cases and stage IIIc in 13.6%. Pathologic complete response (pCR) in the breast and the axilla was 10.6% (n=7) from the 62 patients who underwent surgical treatment. After a median follow-up of 34 months [5-99], 28 patients experienced disease recurrence. Contralateral breast cancer occurred in 10 patients (15.2%) within 9 months. Univariate analysis of IBC specific survival (IBCSS) differed significantly by biologic subtype: 5-years IBCSS was 62.7% in RH+/HER- tumors, 47.2% in HER+ tumors and 20.5% in triple negative (TN) tumors (p=0.005). Additional therapeutic factors were associated with an increased IBCSS in univariate analysis including radiation therapy (RT) (p<0.0001) and hormone therapy (HT) (p<0.001). Multivariate analysis demonstrated that RT (p<0.001,HR=0.177,95%CI [0.177-0.467]) and HT (p=0.002,HR=0.171,95%CI[0.039-0.754]) were the only independent factors of IBCSS. In the univariate analysis, the 5-ye ars DFS was significantly correlated with the molecular subtypes (71.5% in RH+/HER-tumors, 53.1% in HER+ tumors and 24.5% in TN tumors, p= 0.014), the presence of tumor necrosis (59.4% vs 37.5%,p=0.033) and adjuvant RT (59.5% vs 0%,p<0.0001) and HT (77.2% vs 39%,p=0.006).In multivariate analysis, adjuvant RT was the only independent prognostic factor of DFS (p=0.001,HR=0.225,95%CI[0.073-0.699]). Conclusion: Although IBC is considered as an aggressive subtype of breast cancer, the pathological profiling of these tumors may allow administrating more effective therapy. Optimal treatment requires further studies to characterize the biology of IBC.

PO-15
**Inflammatory non metastatic breast cancer: what are the prognostic factors?**

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Objective: Inflammatory breast carcinoma (IBC) and non inflammatory locally advanced breast carcinoma (NILABC) are both associated with poor prognosis. This study aimed to compare the epidemiological, clinical and pathological features of IBC versus non-inflammatory LABC. Methods: This is was a retrospective study enrolling 186 cases of
locally advanced breast carcinoma diagnosed in Salah Azaiez institute of oncology between January 2012 and December 2012. Patients were divided into two groups: IBC(n=21) and NILABC (n=165). Two-tailed Student’s t tests and Chi square or Fisher’s exact tests were used in univariate analyses of continuous and categorical variables, respectively, to compare clinicopathological differences between IBC and NILABC. Results: IBC represented 11.3% of LABC. The median age was 49.5 years (range, 25-94 years). The mean tumor size was greater in IBC than NILABC (50.61mm vs 43.41mm, p=0.218). Lymph node invasion was more common in the IBC (71.6% versus 94.1%; p=0.045) with a higher lymph node ratio (0.51±0.336 vs 0.23±0.26 respectively p=0.004). An SBR grade 3 was more frequently noted in the IBC (47.6% vs 26.7%, p=0.046). IBC were characterized with more frequent negative hormone receptors tumors compared with NILABC (57.1% vs 29.7%, p=0.012). Estrogen receptors were expressed in 68.5% of NILABC and 42.9% of IBC (p=0.02). Progesterone receptors were more expressed in NILABC (59.4% vs 23.8%, p=0.002). C-erbB-2 overexpression was present in 42.9% of IBC tumors compared to 20% of NILABC tumors (p=0.018). There was a significant difference in the distribution of molecular subtypes between the two groups with more luminal tumors in NILABC compared to IBC (70.9 vs 42.1%, p=0.002). Conclusions: IBC and NILABC seemed to be distinct biologic entities, as indicated by different prognostic factor profiles.

PO-17

Prognosis factors of inflammatory breast cancer in Tunisia: retrospective study about 100 cases

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Introduction Inflammatory breast cancer (IBC) is the most aggressive and deadly form of breast cancer and is frequently misdiagnosed and therefore considered a rare entity. The aim of our study was to analyze prognostic factors influencing overall survival of IBC.

Materials and methods Patients with IBC treated at University Hospital Farhat Hached at the center of Tunisia from 2007 to 2012 were reviewed. Patients who had presented with IBC as a recurrence, or who had a neglected and advanced breast cancer that simulated an IBC were excluded. Results One hundred patients had IBC. The median age was 51 years. The median duration of symptoms was 8 months. The American Joint Committee on Cancer stage (AJCC) distribution was Stage III- 57 and IV- 43 patients. Estrogen receptor (ER), progesterone receptor (PR) positivity and human epidermal growth factor receptor2 (HER2/neu) positivity were 57%, 46% and 36 %, respectively. Triple negativity was found in 33 % of the cases. At a median follow-up of 149 months, 28 patients had relapsed, of which eight patients had a loco regional and twenty patients had a systemic relapse. The most frequent site of first recurrence was lung (61, 5%). The median time to relapse was 12 months and 3-year recurrence-free survival was 15 %. Overall survival at 5 years was 28 %. Median survival was 40 months for stage III and 13 months for stage IV. Of 72 deaths, 70 were certified as due to breast cancer, 2 as not due to breast cancer. Overall survival influencing factors were estrogen receptor positivity (P = 0.05), presence of extracapsular extension (P = 0.001), lymph vascular space invasion (P = 0.001) and stages IV (P=0.001).

Conclusion In summary, the results from this preliminary analysis support the benefit of early initiation of aggressive treatment and neoadjuvant targeted therapy for IBC.