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ORAL PRESENTATIONS

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FEASIBILITY OF SHORT STAY PROGRAM FOR BREAST CANCER PATIENTS TERTIARY CENTER WITH HIGHER RISK POPULATION EXPERIENCE

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Introduction: Short-stay program for breast cancer patients undergoing surgery is a well-accepted management protocol in many countries worldwide, but not in the Middle East yet. In our study we are evaluating the feasibility and safety for more than 500 patients who underwent breast cancer surgery under short-stay program. Our study is unique, as our tertiary care center's targeted population is different – most of them from rural area with general low education level and higher risk factors- and the admission period is shorter – from 4 to 23 hours only- which makes early discharge more challenging.

Methods: Retrospective chart review of almost 500 patients who were operated upon as short-stay program with less than 24 hours stay post operatively, between August 2010 and June 2018. Type of surgeries were unilateral mastectomy, bilateral mastectomy, therapeutic reduction mammoplasty, breast conserving surgery, axillary dissection or axillary sentinel lymph node dissection by two surgeons at King Abdul-Aziz Medical City- Riyadh. Patients demographic data (in form of medical record number, age, BMI), pathology, type of surgical intervention, final stage, lymph node status, receptors status, comorbidities, ASA classification, length of stay, re admission rate, pain control assessment, wound infection, seroma formation, hematoma formation, number of ER visit with complaint related to surgery, drain's related complication post operatively all will be assessed during data collection process. All patients were assessed by special physical therapist pre & post-operatively and were followed by home health care nurse post-operative as well.

Results: Still in the data analysis phase. Further update will follow in 6 – 8 weeks.

Conclusion: Preliminary – as the final statistically proven results will follow – the short-stay program for breast cancer patients found to be feasible and well accepted by patients & surgeons as well beside the well-known cost-effective advantage. Moreover, it helped the breast surgery section achieved the goal of no waiting list! As the maximum acceptable period between seeing the patient for the first time and the surgery is no longer than 10 working days.

LOCOREGIONAL TREATMENT OF DE NOVO STAGE IV BONE-ONLY METASTATIC BREAST CANCER; METASTATIC BREAST STUDY GROUP

BREAST SURGERY

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Aim: Surgical treatment is a controversial first treatment for primary tumors of stage IV metastatic breast cancer. A randomized Turkish study (MF07-01) showed that loco-regional treatment has both survival and locoregional progression advantages. Our aim in this study is to detect the prognostic advantage of primary breast surgery of de novo stage IV bone-only metastatic breast cancer patients.

Material-Methods: The retrospective records of 172 patients who were admitted to the hospital between November 2007 and December 2017, who were treated due to de novo stage IV bone-only metastatic breast cancer, were evaluated. The primary surgical approach was recorded as group 1 and only systemic treatment was recorded as group 2. The inclusion criteria were: primary breast cancer that was suitable for complete surgical resection and patients who could be treated by systemic treatment. The exclusion criteria were: patients with inflammatory breast cancer or bilateral breast cancer, patients who could not be treated by systemic treatment, or patients who were not suitable for follow-up.

Results: The mean patient age was 55.9 ± 12.7 and the mean follow-up time was 29 ± 18 months in group 1 and 29 ± 22 months in group 2. In the follow-up time, 51 (30%) patients died, of whom 12 (21%) were in group 1 and 39 (34%) were in group 2 (p=0.15). The median overall survival was 62 months for group 1 and 56 months for group 2 (HR=0.62, 95%CI: 0.32-1.19; p=0.15). The median overall survival for solitary bone metastatic patients in group 1 was 10 months longer than those in group 2 (HR=0.73, 95%CI: 0.29-1.81; p=0.50). No locoregional progression was seen in solitary bone metastatic patients who underwent surgery, but it was seen in 4 (9%) patients in group 2. Locoregional treatment significantly decreased systemic [Group 1 33% vs. Group 2 51%; p=0.048] and locoregional progression [Group 1 0% vs. Group 2 13%; p=0.003] in Her2/neu (-) patients (Table 1).

Discussion: Primary breast surgery has prognostic advantage at the de novo stage IV bone-only metastatic patients. During the 25-month median follow-up time, there was no statistically significant survival difference. However, locoregional treatment had an average 6-month overall survival advantage in all patients and an average 10-month overall survival advantage in solitary bone metastatic patients. The locoregional progression rate was 4 times higher in the systemic treated group compared with the surgical group. Prospective studies with long follow ups may show the benefit of primary surgery in these patients.

MEDICAL ONCOLOGY

S-014 Abstract: 186

PSYCHOLOGICAL DISTRESS IN NEWLY DIAGNOSED BREAST CANCER PATIENTS UNDERGOING CHEMOTHERAPY

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Objective: Chemotherapy is one of the most widely used treatment approaches in breast cancer (BC). Most newly diagnosed cancer patients express concern over chemotherapy before starting the treatment. Majority of these patients think that the side effects of chemotherapy will be intolerable. This study aimed to investigate the factors that affect patients' perception of chemotherapy.

Methods: A sample of newly diagnosed breast cancer patients (N=50) were asked to fill out a psychosocial evaluation question-naire and Hospital Anxiety and Depression Scale (HADS) before their first chemotherapy cycle and after their last cycle. So far, 37 patients completed the questionnaire before chemotherapy and 6 patients completed postchemotherapy questionnaire.

Results: The mean age of the participants was 47.3 years. Twenty patients were married and twentyfive patients had children. Twenty patients graduated from university, seven patients were high school graduates, one patient graudated from primary school. Two patients refused to fill out the questionnaires reporting that the guestions might make them upset. Five out of 37 patients showed clinically significant levels of anxiety symptoms, while 10 patients showed clinically significant depressive symptoms in HADS. Except for four patients, none of the 37 patients received prior psychotherapy for reasons other then their current diagnosis. Only six patients reported being on psychiatric drugs. Three major concernsof the patients before starting chemotherapy were: efficacy of chemotherapy, family and social environment becoming negatively affected, chemotherapy side effects. The most scary side effects of chemotherapy were reported as: 1. hair loss and 2. risk of infection. Only six patients out of the sample completed all their chemotherapy cycles. According to the postchemo evaluations, most patients experienced muscle and bone/joint pain. Postchemotherapy evaluations are ongoing.

Conclusion: Both anxiety and depression symptoms were present in 40 % of participants. Patients with a high Anxiety HADS score also tend to be high on the Depression score. Once the chemotherapy cycle is over, the Anxiety and Depression scores tend to go down. Patients react to the diagnosis and planned chemotherapy differently

S-005 Abstract: 76 S-006 Abstract: 128

IMPACT OF CHEMOTHERAPY ON COMPLICATIONS AFTER NIPPLE-SPARING MASTECTOMY WITH RECONSTRUCTION: A RETROSPECTIVE ANALYSIS

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Nipple and areola-sparing mastectomy(NASM) has recently been shown to yield satisfactory results in a carefully selected group of breast cancer patients. Implant-based breast reconstruction (IBR) after NASM can have complications that require explantation of a tissue expander or permanent prosthesis. The aim of this study is to determine the impact of chemotherapy and the timing of chemotherapy on postoperative outcomes after mastectomy and immediate breast reconstruction.

A retrospective data analysis was performed on a consecutive series of 118 breast reconstructions in 110 patients. All complications after surgery were recorded from hospital database. 60 prostheses were implanted after neoadjuvant chemotherapy, and in all other cases surgery was the primary treatment for cancer. Chi-square test was used for statistical analysis.

110 patients underwent NASM and immediate breast reconstruction with prosthesis between 2013 January and 2017 January, with a mean postoperative follow-up of 2.5 year. All of the patients were female and mean age was 39,2 (range 26-58). 56% (n:66) of the patients had expander reconstruction, while 44% (n:52) underwent implant reconstruction, 60 patients received neoadjuvant chemotherapy and 44 received postoperative chemotherapy. 10 patients (10/60; 16%) in the neoadjuvant chemotherapy cohort developed postoperative infections, compared with 14 patients (14/44; 31%) in the adjuvant chemotherapy group whereas none of the 6 patients who did not receive any chemotherapy developed wound infection. Although there were more patients in adjuvant chemotherapy group with wound infection, no statistically significant difference could be shown between two groups. Overall, 5 patients (5/60; 8%) in neoadjuvant chemotherapy group and 4 patients (4/44; 9%) had an infectious complication requiring an unplanned return to the operating room ended with expander or implant removal; this rate did not differ between groups.

Although the highest rate of surgical site infections was in the adjuvant chemotherapy group, there was no statistically significant difference between groups with respect to unplanned return to the operating room resulting with expander loss. The timing of chemotherapy administration did not significantly affect the complication rates after NSAM and immediate breast reconstruction in this population.

IS SKIN SPARING MASTECTOMY BETTER FOR EARLY BREAST CANCER?

BREAST SURGERY

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Purpose: Skin sparing mastectomy with sacrifice of nipple-areolar complex (SSM) and immediate reconstruction with a subpectoral prosthesis can be an advantageous alternative to breast conserving surgery (BCS) in early breast cancer.

Materials and Methods: We retrospectively analyzed our breast cancer operations (April 2016- January 2018). Sixty-six of 172 operations were for early breast cancer (stages 0-I-IIA-IIB) and 16 of those were SSM.

Results: Mean age of 16 cases was 50.12y (range, 37-67y) and five were postmenopausal with no hormone replacement therapy. One with strong family history and diffuse microcalcifications in contralateral breast had bilateral SSM and SLNB. One with invasive lobular carcinoma had also bilateral mastectomy with SLNB but nipple-areolar complex was preserved at prophylactic side. Five with macrometastasis in sentinel node had AD (table 1). An expander was preferred in 15. No radiotherapy was planned for 8 out of 16 cases (table 2).

Mean follow-up after the operation was 10.81 months (range, 6-15mo). No local or systemic recurrences detected during that short follow-up period. One had tamoxifen-induced endometrial hyperplasia at 11mo.

Conclusions: Half of our patients were protected from radiotherapy which causes unwanted skin and nipple changes together with damage to other organs such as the lung, heart, brachial plexus and the lymphatics. Removal of whole breast and subpectoral placement of prosthesis resulted in easier follow-up. All patients had a chance to have reconstructive procedures for the other breast. Thus SSM is a better alternative for early breast cancer, especially when other factors do not necessitate adjuvant radiotherapy.

S-007 Abstract: 134 S-010 Abstract: 68

COMPARISON OF ROLL AND MOLL FOR NON-PALPABLE LESIONS: A PHANTOM MODEL STUDY

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Purpose: Our aim was to compare radio-guided localization (ROLL) and magnetic tracer localization (MOLL) techniques by using a phantom model we previously developed which can provide an accurate simulation for excision of non-palpable breast lesions

Materials and Methods: A total of 0.2 ml of liquid radioactive tracer was injected in 10 green peas in the ROLL group and 0.2 ml of magnetic tracer was injected in 10 green peas in the MOLL group (Figure 1). We designed 20 phantom models (10 MOLL, 10 ROLL group) for localization. A handheld gamma probe for the ROLL group and a manual magnetometer (SentiMag) for the MOLL group were used to test the ability of the modality to detect olives in turkey breasts (Figure 2). The excision time for each procedure, specimen size, and weight of the specimens removed from the turkey breasts were recorded (Figure 3).

Results: Both techniques resulted in 100% retrieval of the lesions. The mean time for operative excision of the lesion was 4:40 minutes (range, 3:30-5:31 minutes) for MOLL and 4:07 minutes (range, 3:12–5:00 minutes) for ROLL (P 0.23). Specimen volume was similar in both groups, although the specimen weight was slightly smaller for ROLL (P 0.08).

Conclusion: This experimental trial found similar success rates for ROLL and MOLL in localization of occult lesions using the turkey breast phantom model. MOLL can be performed in clinics without the need for a Nuclear Medicine team and radiation safety procedures.

EFFECTS OF HYPOFRACTIONATED RADIOTHERAPY ON THE BRACHIAL PLEXUS

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RADIATION ONCOLOGY

Whole breast hypofractioned radiotherapy technique are used routinely for indicated early stage breast carcinome patients. However some of the patients irradiation portals should cover whole breast and SCF+axillary region (SAR). In this study we wanted to learn SCF+axillary region. In this study we wanted to learn SAR dose end effect of the brachial plexsus.

Material Method: Radiotherapy regions are planned as high tangential regions. Breast or mastectomy tangental regions' top edge is planned as to be at the lower tip of the clavicula. By doing so, a relatively small SCF and aksilla radiotherapy portal is created for the peripheric lymphatic region. A treatment plan is made to irradiate the breast after the breast conserving surgery by either 3Gy*13 fr and or 3.3Gy*13 fr daily doses followed by a 200cGy*5 fr boost dose. In the same way, a second treatment plan has been made with either 3Gy*13 fr and 3.3Gy* 13 fr to be applied on the chest wall after mastectomy. Brachial plexus was contoured on each computerized tomography slice, which were taken in treatment position. Planning technique is chosen to be IMRT and it has been done with Eclipse planning system. Brachial plexus doses have been analyzed over these plans.

Sonuçlar: The results are given in the table below. Regarding the application of radiotherapy, if the dose is applied in a hyporfractioned fashion with 3.3Gy/fr13 and if α/β ratio is taken as 3, average dose becomes 61-61.7Gy.

Conclusion: It is unclear whether the brachial plexus Dmax or partial volumes receiving high doses of radiation is more important in radiation induced brachial plexopathy. However, literature shows us an absolute additional 12% occurence of paresthesia due to regional radiation therapy with V40Gy ≥ 13.5cm3. In hypofractioned breast irradiation stage, SAR can be included in the treatment region. However, the risk of brachial neuropathy increases when fraction dose is chosen as 3,3Gy. Considering that this group of patients are going to live long and that neuropathy can arise years after the treatment, it is advised not to exceed 3Gy/fr dose limit and to add brachial plexus as OAR to RTOG breast cancer atlas

S-009 Abstract: 89 S-011 Abstract: 28

COMPARISON OF INTRAOPERATIVE AND POSTOPERATIVE BOOST RADIOTHERAPY IN TERMS OF LOCAL RECURRENCE AND COSMETIC OUTCOMES.

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Aim: To compare intraoperative (IO) and postoperative (po) Boost Radiotherapy (RT) in terms of local recurrence and cosmetic outcomes in patients with early-stage breast cancer during breast-conserving therapy (BCT).

Materials and Methods: Patients who received BCT at our clinic in the past 60 months were analyzed based on their recorded data. Ninety-eight patients who received IO Boost RT during breast conserving surgery were classified as Group A and 99 who received po.Boost whole-breast RT afterward were classified as Group B. Patients were graded using the LENTSOMA (V06-7/2003) scale and compared using the chi-square test based on local recurrence and cosmetic outcomes at 1 year after the end of all RTs.

Results: Mean age of patients in Groups A and B was 49 (37-64) and 52 (42-68) years; mean follow-up was 35 and 38 months; tumor diameter was 18 (4-30) mm and 19 (6-30) mm; and lymph node involvement was observed in 11 and 17 patients, respectively. The molecular subtypes were either luminal A or B in both groups. Histological analysis revealed 90 and 84 invasive ductal carcinomas, 8 and 5 invasive lobular tumors respectively, and 10 mixed structure in Group B. The Boost area was planned so as to cover 15-20 mm of the surrounding tumor bed area in both methods. Local recurrence was not detected in Group A; however, it was detected in two patients in Group B at 20 and 32 months. According to the LENT-SOMA scale, 34 and 24 patients in Groups A and B had Grade 0, 41 each had Grade 1, 21 and 29 had Grade 2, and 2 and 5 had Grade 3, respectively, but there was no significant difference between the two groups (p>0,05).

Conclusion: Corporation Based on the relatively superior results demonstrated by Group A, IO Boost RT can potentially improve both local control and cosmetic results.

ASSESSMENT OF JORDANIAN RADIOLOGIST PERFORMANCE IN THE DETECTION OF BREAST CANCERS

RADIOLOGY

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Purpose: The variability in radiologists' performance when reading mammograms is a concern across both screening and diagnostic mammography. Identifying causal factors for this variability is a first step towards optimising diagnostic accuracy. This study aims to monitor diagnostic accuracy amongst Jordanian mammography readers and identify parameters linked to higher levels of performance.

Materials and Methods: In this study we have used the BreastScreen Reader Assessment Strategy (BREAST) platform to allow 27 radiologists to read a case set of 60 digital mammograms, of which 20 cases included cancers. Each case consisted of the four standard cranio-caudal (CC) and medio-lateral oblique (MLO) projections. All radiologists were licensed to read mammograms at their workplace. Each reader was asked to locate any malignancies, provide a confidence rating using a scale of 1-5, and identify the type of appearance. All images were displayed using 8 MP monitor, supported by radiology workstations with full image manipulation facilities. Results were evaluated using receiver operating characteristic (ROC) analyses and area under the curve (AUC). Demographic obtained from each radiologist regarding their experience, qualifications, breast reading activities and physical characteristics and these were correlated against ROC scores using Spearman techniques.

Results: The mean ROC curve (AUC) was 0.78 (95% confidence interval (CI): 0.75, 0.82). Higher performance was directly related to number of years since professional qualification (r=0.69; p = 0.001), number of years reading breast images (r= 0.62; r= 0.005) and number of mammography images read per week (r= 0.57; p= 0.015). On the other hand, higher performance was inversely linked to the frequency of reading other modalities per week (r= 0.48; p= 001). No other statistical differences were significant.

Conclusion: Radiologists' performance can be improved by increasing the number of mammograms reads per week, and by focusing their duties towards mammogram reading.

Clinical Relevance statement: The variability in performance of breast readers is concerning and likely affects many women with and without breast cancer. Ways to improve the interpretive performance of screening mammography should be investigated.

RADIOLOGY

S-012 Abstract: 81 S-013 Abstract: 137

MAGNETIC RESONANCE IMAGING IN THE FOLLOW UP NEOADJUVANT CHEMOTHERAPY

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Introduction: Magnetic resonance imaging is one of the most sensitive imaging used in breast cancer. Neoadjuvant chemotherapy is initiated in locally advanced breast cancer. To investigate the role of contrast-enhanced and diffusion-weighted magnetic resonance imaging in evaluating neoadjuvant chemotherapy response in locally advanced breast cancer, we compared the pre-and post-treatment lesion size and ADC values and evaluated their relationship with the Ki-67 index.

Material and Method: 39 female patients with locally advanced breast cancer who administered neoadjuvant chemotherapy and surgical operation between 2010 and 2017 were retrospectively reviewed. Lesion size was measured from magnetic resonance imaging before and after neoadjuvant chemotherapy, ADC value was obtained from diffusion weighted images and these were compared. The size measured after neoadjuvant chemotherapy was compared with the surgically removed tumor size. The relationship between tumor size and ADC value before the treatment and Ki-67 index was investigated.

Results: Lesion size which was measured with magnetic resonance imaging after neoadjuvant chemotherapy was correlated with surgically removed tumor size. Significant reduction in tumor volume and increase in ADC value were observed with treatment (p<0.001). While pretreatment ADC values of tumors with high Ki-67 index were low (p = 0.031), ADC values of large lesions; which are surgically removed were high (p<0.001).

Conclusion: Tumor sizes and ADC values obtained with magnetic resonance imaging before the treatment are important parameters to follow response to neoadjuvant chemotherapy in locally advanced breast cancer. It may also guide treatment management if used combined with Ki-67 index.

VALUE OF SECOND-LOOK ULTRASONOGRAPHY FOR MRI-DETECTED NONMASS ENHANCING LESIONS

RADIOLOGY

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Purpose: To review and analyze the role of second look US for evaluation of MRI-detected nonmass enhancing lesions.

Materials and Method: Ethical committee approval was obtained. A retrospective review of four institution's MRI database from January 1, 2016, through May 30, 2018, identified nonmass enhancing lesions (NME) on breast MRI examinations. Five radiologists re-reviewed the images and selected cases of BI-RADS categories 4 and 5. Second look US (SLUS) images re-reviewed by same radiologists and categorized as mass and nonmass lesions. Nonmass lesions classified as ductal lesions, focal or regional heterogeneity, and focal irregular lesions. MRI and SLUS findings, histopathological results were recorded.

Results: Mean age of 287 women was 49 years (22-78 years). Mean lesion size was 32 mm (6-112 mm). One hundred-ten of 287 lesions (38%) were detected with SLUS. Malignancy rate was %59 for US-correlated lesions, and %21 for non-correlated lesions. For ductal lesions, heterogeneity and focal irregular lesions, PPV was respectively 61%, 46%, and 67%.

Discussion: In our study, malignancy rate of US-correlated lesions was found significantly higher than non-correlated lesions. Almost all SLUS-detected lesions were sonographic nonmass lesions.

There is need to design prospective studies for diagnostic importance of this heterogeneous lesion group. On the other hand, the results of this study suggest that radiologist should aware of malignancy possibility of nonmass lesions during routine sonographic examination.

RADIOLOGY

S-022 Abstract: 157 S-019 Abstract: 5

RELATIONSHIP BETWEEN BACKGROUND PARENCHYMAL ENHANCEMENT ON BREAST MRI AND PATHOLOGICAL TUMOR SUBTYPES

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Objective: Breast background parenchymal enhancement (BPE) is referred to as normal fibroglandular breast tissue enhancement on the breast MRI after injecting contrast agents, which is known to be evaluated qualitatively according to the BI-RADS lexicon or measured quantitatively by a fully automated computerized scheme. The purpose of this study is to association between background parenchymal enhancement on breast MRI and pathology.

Materials and methods: We included 96 patients (age range, 25-83 years; mean age,51,6 years) with breast cancer were confirmed by core needle biopsy.

Results: Patients were separated into pre-menopausal (30 patients) and post-menopausal groups (66 patients). Of the 96 patients, 22 (22.9%) were minimal, 41 (42.7%) were low, 26 (27.1%) were moderate, and 7 (7.3%) had high levels of BPE. Pearson Correlation test showed there was no statistical correlation between BPE and pathological tumor subtypes (P> 0.05). Student T test showed no difference between the groups (P> 0.5).

Conclusion: There is no significant relationship between BPE and pathological tumor subtypes. We think that there is a need for large-scale analyses that quantifies BPE.

BIOACTIVITY AND MOLECULAR MECHANISM OF SKULLCAPFLAVONE AGAINST MULTIDRUGRESISTANT HUMAN MCF-7 BREAST CANCER CELLS

BREAST SURGERY

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Purpose: Skullcapflavone I (5,2-dihydroxy-7,8-dimethoxyflavone) was tested against tamoxifen- and doxorubicin-resistant human MCF-7 breast cancer cells. The molecular mechanisms underlying the bioactivity were also investigated and herein reported.

Materials and Methods: CD133+ cancer stem cells (CSCs) from HER-2 overexpressing multidrug-resistant MCF-7 were purified via flow cytometry. Skullcapflavone was isolated from the pods of Andrographis paniculata with chemical structure elucidated by extensive 1D and 2D NMR spectroscopy followed by bioactivity testing in MCF-7 CSCs via PrestoBlue® viability assay. Gene expression involving HER-2, CD133, survivin, Bcl-2, cfos and cjunwere accomplished by qRT-PCR and Western blotting. Specific inhibitors were applied to deduce signaling mechanisms involved.

Results: Skullcapflavone was highly toxic on tamoxifen-resistant (IC_{50} =4.32 µg/mL) and doxoribucin-resistant (IC_{50} =3.86 µg/mL) HER-2+/CD133+ MCF-7 CSCs. Expressions of anti-apoptotic survivin and Bcl-2 were significantly downregulated while pro-apoptotic cfos and cjun were significantly upregulated versus controls (P < 0.05). A significant decrease in expressed Her-2 and CD133 (P < 0.05) was also observed. Surprisingly, a remarkable decrease in extracellular signal-related kinase (ERK) activation in HER-2+/CD133+ MCF-7 CSCs, similarly observed in samples treated with specific inhibitors of ERK and phosphoinositide-3 kinase (PI3K), showed inhibition of survivin upregulation.

Conclusions: Overexpression of HER-2 promoted anti-apoptotic survivin and Bcl-2 upregulation in CD133+ MCF-7 CSCs via ERK activation and Pl3K signaling. Skullcapflavone treatment showed similar trends observed with ERK and Pl3K specific inhibitors, which significantly downregulated Her-2 expression and in turn downregulated survivin and Bcl-2 while upregulating pro-apoptotic cjun and cfos expression. These results provide insight into the mechanisms of the anticancer activity of skullcapflavone against breast cancer cells which may lead to a potential discovery of a new chemotherapeutic drug.

S-008 Abstract: 172

CLINICAL IMPORTANCE OF NEUROENDOCRINE MARKERS IN BREAST CANCER

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Introduction: Neuroendocrine tumors of the breast are considered a rare entity, and for this reason there are no data on clinical features and outcome. The aim of this study is to investigate the importance of level of neuroendocrine markers in tumor characteristics, behavior and effect of patient outcome.

Method: Between May 2007 and Jan 2017, 52 patients who were operated for breast cancer tumors with neuroendocrine markers (chromogranin A and synaptophysin) positivity were included in the study. Two groups were formed. Group 1 was composed of patients whose breast tumor was expressing a neuroendocrine marker in at least 50% (true neuroendocrine group). The patients whose tumors were stained 20%-50% with neuroendocrine markers were recruited in Group 2. These two grouposterps were compared in terms of demographic, clinical and pathological features and outcome. Student T test, Chi Square test, Kaplan Meier Survival test and Log Rank test were used for statistical analysis.

Results: There was only one male patient in Group 2 among all the female patients. The mean age of Group 1 and Group 2 was found as 66.8 ± 13.7 and 56.1 ± 15.7 , respectively.

Patients' tumors localizations in Group 1 were more likely to be central quadrant of the breast (p=0.039) (12 patients vs 3 patients). Most of tumor sizes (>20mm) of patients in Group 2 were bigger than in Group 1 (p=0,015).

Tumoral angiolymphatic invasion in Group 2 was determined more than in Group 1 (p=0,000). Frequency of comedonecrosis within the presence of ductal carcinoma insitu in Group 2 was found higher than in Group 1 (p=0,001).

All patients' tumors were positive for estrogen receptors. Most of the patients were positive for progesterone receptors (90% in Group 1 and 100% in Group 2) (p=0,142). Most of the patients' tumors were likely to be negative for C-erbB2 (93% in Group 1 and 80% in Group 2)(p=0,143)

Level of Ki67 value (>15 %) in Group 2 patients were found higher than in Group 1 patients (p=0,018).

Mean survival time in group 1 and group 2 was found as 71.5 and 51.5 month, respectively. There was no significant difference in terms of mean survival time between two groups (p=0.55) (Figure 1).

There was no local recurrence but three patients in group 1 and one patient in group2 developed systemic metastasis. Disease free survival was found as 9.6 months in group 1 and 22 months in Group 2. There was no significant difference in terms of disease free survival between two groups (p=0.18)(Figure 2).

Conclusion: The patients in true neuroendocrine group were older than other patients. True neuroendocrine tumors tend to be localized centrally. Tumors with less neuroendocrine markers staining tend to be larger than 20mm, have more angiolymphatic invasion and comedonecrosis. True neuroendocrine tumors' proliferation index is lower than others. There is no significant difference between patients with true neuroendocrine tumor and other patients in terms of disease free and overall survival.

PLASTIC SURGERY

S-015 Abstract: 118 S-016 Abstract: 120

PREPECTORAL BREAST RECONSTRUCTION USING ACELLULAR BOVINE PERICARDIUM: PRELIMINARY RESULTS

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Purpose: The concept of prepectoral breast reconstruction has recently been revisited with excellent outcomes. (1). Nevertheless, ideal patient selection and operative technique continues to evolve. We have performed prepectoral DTI reconstructions using bovine pericardial graft and present our selection criteria, reconstructive algorhythm and early results.

Patients and Methods: Prepectoral reconstruction using (Tutopatch®) was performed in 32 patients (54 breasts). 6 patients (%19) underwent ALND and PMRT. Cosmetic outcomes in terms of volume and NAC symmetry was evaluated using the 3D Vectra system.

Results: Median (range) postoperative follow-up was 6 months (6 weeks- 22 months). There were 2 cases (6%) of early implant loss (mastectomy flap necrosis and infection). Seroma developed in 2 cases requiring percutaneous aspirations. A good contralateral match with natural breast ptosis was achieved in unilateral reconstructions. No animation deformity or capsular contracture was observed. NAC malposition and implant displacement was minimal following radiotherapy enabling a superior cosmetic outcome when compared to the conventional subpectoral technique.

Conclusion: Prepectoral reconstruction yields more natural and cosmetically superior results in selected cases. The use of soft tissue material for the creation of optimum implant pocket is an important novelty complementing its sucess. Bovine pericardium is a good alternative to human ADMs due to its lower cost, nonantigenic and noninfectious properties and can ideally be utilized in prepectoral reconstruction which usually requires bigger pieces of soft tissue Wrap.

FACTORS ASSOCIATED WITH COMPLICATIONS IN IMMEDIATE BREAST RECONSTRUCTION IN ONE-STAGE WITH SUBMUSCULAR IMPLANTS

PLASTIC SURGERY

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Background: Immediate breast reconstruction (IBR) in one-stage using permanent implants is gaining popularity and can be performed with or without the use of acellular dermal matrices (ADM). This study aimed to investigate the results of breast implants placed submuscularly without ADM and assess the factors affecting surgical complications.

Methods: From November 2009 to March 2018, 138 patients underwent IBR with permanent submuscular implants after concomitant skin-sparing or nipple-sparing mastectomies in a single institution. All implants were covered with sufficient soft tissue under a submuscular pocket.

Results: One hundred thirty-eight patients were enrolled, and a total of 196 breasts were operated. The average age and body mass index (BMI) of the patients were 44.9 \pm 8.8 years and 23.7 \pm 3.6 kg/m2, respectively. The majority of the mastectomies were therapeutic (81%). The average volume of implants was 389 \pm 89 ccs and the mean follow-up was 33 months. The overall complication rate was 17% (n=23) with skin necrosis being the most common complication followed by infections. Having a BMI equal to or greater than 25 kg/m2 was found to be a statistically significant predictor for overall complications (p = 0.002), whereas smoking history, age and implant volume were not statistically significant.

Conclusion: IBR in one-stage using permanent implants can be performed with acceptable complication rates and cosmetic outcomes. Our study demonstrated that high BMI is a risk factor for overall complications. With proper patient selection and the surgical technique, implants could completely be covered under a submuscular pocket.

PLASTIC SURGERY

S-017 Abstract: 159 S-018 Abstract: 161

SYNCHRONOUS AUTOLOGOUS BREAST RECONSTRUCTION AND VASCULARIZED LYMPH NODE TRANSFER

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Objective: Breast cancer patients are at risk for developing postmastectomy lymphedema syndrome of the ipsilateral upper extremity following treatment for breast cancer in the setting of an axillary dissection, postoperative radiation, and chemotherapy. For patients suffering from lymphedema who are also seeking breast reconstruction, combining an autologous abdominal free flap or pedicled latissimus dorsi flap with a vascularized inguinal lymph node transfer provides patients the opportunity to have an aesthetic breast reconstruction as well as the potential to improve their lymphedema in a single operation.

Materials Method: Postmastectomy patients with stage 1 or 2 lympedema were operated simultaneously for breast reconstruction and vascularized lymph node transfer. A total of 12 patients were operated. In 8 of these patients free tram or DİEP flap microsurgical reconstruction was preferred.

Results: In 4 patients pedicled latissimus dorsi with axillary vascularized lymph nodes were transferred. Among the cohort of patients, reduced heaviness, decreased dependence on compression sleeves and a significant decrease on episodes of cellulitis was observed. On average, patients had a 10% reduction in volumetric measurements 12 months following the operation.

Conclusion: Autologous tissue breast reconstruction can be performed safely and reliably with high success rates at most institutions, and coupling the inguinal lymph nodes with the abdominal flap affords many patients the best option for achieving an aesthetic, natural breast reconstruction as well as addressing their lymphedema in a single operation

LATISSIMUS DORSI MUSCLE ONLAY PATCH FOR RECONSTRUCTING PERIAREOLAR DETACHMENTS IN IMPLANT BASED RECONSTRUCTION PATIENTS

PLASTIC SURGERY

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Objective: Periareolar defects after implant based breast reconstruction are frequently experienced on patients who are exposed to radiation therapy or who have late presenting seroma due to adjuvant or neoadjuvant chemotherapy. Areola reconstruction is critical for optimizing the final aesthetic coverage of the implant. We present a novel technique of raising a pedicled descending branch latissimus dorsi (LD) mini-flap as an onlay patch flap for reconstruction of periareoalar defects via an axillary incision.

Materials and Method: 15 patients underwent salvage breast reconstruction surgery using this technique between October 2016 and June 2018. The descending branches of thoracodorsal vessels and nerve are carefully identified and isolated. The transverse branches are protected to maintain muscle innervation and function.

Results: Seroma of the donor site occurred in 2 cases (2 of 15), which might be due to the removal of the drains too early, and healed satisfactorily by secondary intention. No nipple-areolar complex necrosis or other major complications have been observed.

Conclusion: This technique is a convenient method for salvage of implant based breast reconstruction. It reduces implant loss while providing acceptable recipient and donor site scars.

S-021 S-001 Abstract: 30 Abstract: 98

OVERTREATMENT IN BREAST CANCER SURGERY

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Introduction: Breast cancer (BC) is the most common cancer in women. Due to the mammographic screening, increased amount of early stage BC. Unfortunately, according the recent years data, the percent mastectomy (MRM) and contralateral prophylactic mastectomy (CPM) is rapidly increasing. Between 2005 and 2013, the overall, combined rate of MRM and CPM in US increased 21%. The proportion of mastectomy in patients with early BC in US increased to 37.8%. According to US Accreditation Program for Breast Centers breast conserving surgery (BCS) must be performed for at least in 50% of patients with early BC. European breast centers established criteria expecting 70-80% for BCS. The purpose of this article is to identify the main areas of overtreatment in BC surgery and to give modern recommendations for improvement BC surgery management.

Methods and materials: We identified 5 main areas of overtreatment in BC surgery: Clinical data. Routine mastectomy after neoadjuvant treatment for locally advanced BC. Radiologic data. Routine mastectomy in cases of multifocality of BC. Histologic type of BC. Routine mastectomy in cases of invasive lobular cancer. Pathologic data. Routine mastectomy in complicated margins issues. Genetic data. Routine CPM without confirmed BRCA genes mutaion.

Results: We present the recommendations for BCS in each 5 main areas of overtreatment in BC surgery.

Conclusions: Our data can help decrease overtreatment in BC surgery, provide opportunity for evidence based strategy for minimizing harms and maximizing benefits of BC care.

COMPARISON THE EFFECTS OF COLD APPLICATION AND EXERCISE ON THE **DEVELOPMENT OF PERIPHERAL NEUROPATHY IN BREAST CANCER**

BREAST CARE NURSING

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Purpose: This randomized controlled study was conducted to compare the effect of cold application and exercise on peripheral neuropathy development in patients with breast cancer received Taxane

Materials and Methods: The research was conducted in an outpatient chemotherapy unit of a training and research and a university hospital in Ankara between July 1, 2017 and January 20, 2018 after obtaining the necessary permissions. The study was applied on a total of 90 patients, who were randomized by closed envelopes into groups of 30 cold, 30 exercise and 30 control, which met the inclusion criteria. In addition, the aim of the study was explained to the patients by the researcher and their approval for the participation was obtained. The data were collected via the Patient Identification Form and the Chemotherapy-Induced Peripheral Neuropathy Assessment Tool. The tool was applied to the patients who met the inclusion criteria and who were detected peripheral neuropathy during the first interview. The tool was re-applied to the control and cold groups in the last week of the chemotherapy cure, and to the exercise group after the 12 weeks of exercise program. Demographic data by number and percentage ratios and the study groups by Kruskal Wallis and Wilcoxon were evaluated.

Results: There was a difference between the groups for the Chemotherapy-related Peripheral Neuropathy scores of the patients (p<0.05). The mean of pre- and post- test results in the cold applied group revealed a significant development increase in hand numbness, weakness, and distress (p<0.05). However, no significant difference existed between the means of the pre- and the post- tests in the exercise group. The mean of all the symptoms in the control group except the equilibrium state increased significantly (p<0.05).

Conclusion: The study showed that the cold application and the exercise were effective in the management of developed symptoms because of peripheral neuropathy. Exercise was, though, more effective than cold application.

POSTER PRESENTATIONS

P-001 Abstract: 176 P-003 Abstract: 13

CLINICAL FACTORS AFFECTING THE EFFICACY OF EVENING PRIMROSE OIL ON MASTALGIA

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Background: It is proposed that saturated fatty acid esters may cause mastalgia via hypersensitivity of the breast epithelium to circulating hormones. Evening primrose oil (EPO)(= Gamma-linolenic acid) or metabolites are believed to restore the saturated/unsaturated fatty acid balance and decrease sensitivity to steroidal hormones or prolactine. On the contrary, conflicted results exist regarding the success of EPO on mastalgia. The purpose of the study was to understand whether EPO (1300mg) is effective and which factors are associated with the efficacy of EPO on the treatment of mastalgia.

Methods: The study recruited 1327 patients with mastalgia among 13.680 patients with any complaint who admitted to Acibadem Atakent Breast Clinic between January 2015 and March 2018. Those patients with mastalgia were categorized into two groups as group I, treated with EPO (1300mg, twice a day) and group II, treated with Paracetamol (500mg, twice a day). The visual analog scale (VAS) was used to assess the therapeutic efficacy of EPO in comparison to Paracetamol upon admittance and 6 weeks later. Clinical factors affecting the efficacy of EPO were analyzed. Patients with palpable lump or cancer diagnosis, received chemo-radiotherapy, and pregnancy were excluded.

Results: A total of 1126 patients among 1327 patients were recruited. Lost to follow up or rejection was occurred in 111 cases. Comparison analyses were done among 1015 patients (n=581, group I; n=434, group II). The mean age was 42.9 ± 11.2 (14-82). EPO was found to be effective than paracetamol on the treatment of mastalgia (p=0.042). Factors significantly affecting on EPO treatment was Hormone Replacement Therapy (HRT), RIA with levonorgestrel, Iron deficiency, Hypothyroidism, Hashimoto thyroiditis (p=0.034, p=0.045, p=0.026, p=0.015, and p=0.021; respectively). Replacement of Iron or Thyroid hormone was efficiently treated mastalgia in patients who had failure with EPO. Side-effects (allergy, anxiety, blurred vision, constipation, and nausea) were very rare but higher in group I but not statistically significant (p=0.67)

Conclusion: Evening primrose oil (1300mg, twice a day) can be used for the treatment of mastalgia without significant side effect. Hormone Replacement Therapy, RIA with hormones, iron deficiency, hypothyroidism, and Hashimoto thyroiditis are factors significantly affecting the efficacy of EPO on mastalgia.

NODULAR FASCIITIS OF THE BREAST CAN MIMIC CANCER

BREAST SURGERY

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Nodular fasciitis of the breast is a benign pathological entity that can mimic breast cancer. We present the case of a 42-year-old female who was referred to our institution with right breast pain for 3 years. Radiology demonstrated a highly suspicious lesion. Initially, the needle biopsy showed a spindle cell proliferation, but after wide local excision, the final pathology result was nodular fasciitis. Nodular fasciitis of the breast is a rare lesion where local excision is the preferred treatment approach, in the proper clinical context.

P-006 Abstract: 21 P-009 Abstract: 26

EFFECTS OF REMINDER AIDED EDUCATION WOMEN'S BREAST CANCER SCREENING BEHAVIOR AND HEALTH BELIEFS

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Breast cancer; is the first cancer in women and second in cancer deaths after lung cancer. As with all cancers, it is known that there are many risk factors that cause breast cancer. The fact that these risk factors are not known by women causes early detection of cancer and increases cancer-related deaths. The aim of the study is to determine the effects of education and reminders on the behavior of women applying early diagnosis methods. The study was carried out with 153 women who were dependent on family physicians in three different provinces. First of all, the trainers who will continue their training are given training on early diagnosis methods and adult education. After the training, all the women were trained by group trainings and early diagnosis methods by the trainers and brochures were given. Later, the women in the study were divided into three groups. During the six months, the first group was called every month and the second group was called every two months to remind them to use early diagnosis methods. The women in the third group were not reminded during this period. The data were collected by face-to-face interview technique each month before training and within six months. A year after the reminders were completed, the use of early diagnosis methods was identified. As a data collection tool; diagnostic features, early diagnosis methods knowledge and attitude determination questionnaire, Champion Health Belief Model Scale and early diagnosis methods use form. Data were analyzed using Mann-Whitney U, t test and Chi square tests. The pre-training knowledge of women was 68.6% and 58.8% of those who knew the application rates. For mammography, the awareness rate was 60.1% and the application rate was 40.5%. For KMM, the rate of knowledge is 38.6% but the rate of application is 22.2%. education, and reminders, all 67.3% of KKMM, 45.1% of KMM and 44.4% of mammography application rate were detected. In the study, it was determined that those who do not have mammography perceive the obstacles of mammography as being higher than those who have done it. It was determined that the difference between the mean scores of self-efficacy / trust, health motivation, benefit, sensitivity and weighting perceptions subscale of the Health Belief Model Scale before and after the training was significant (p <0.001). When the scale of health belief model scores were examined according to the status of women's performance of KKMM, it was seen that there was a significant difference between KKMM and mammography benefits, obstacles and self efficacy perception. The BMI and the mammography benefit perception are lower in the group that can not be reminded at all, compared to the group that makes monthly reminders. The data obtained suggest that reminding by telephone is effective in increasing the knowledge and practice levels of early diagnosis methods of breast cancer by giving behavior change to the people in the society.

A MODEL INCREASING THE EARLY DIAGNOSIS

BREAST CARE NURSING

A MODEL INCREASING THE EARLY DIAGNOSIS METHODS OF BREAST CANCER: WEB BASED TRAINING

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Breast cancer is a type of cancer that is highly likely to be treated when diagnosed early. However, in our country, the applications of early diagnosis methods of women are not at the desired level. For this reason, there is a need for awareness of women about early diagnosis methods and methods that will increase their use. The aim of the study is to determine the effect of early diagnosis methods of web based breast cancer education on knowledge and practice situations of women. The research was completed with 455 participants, including university students and mothers from three different provinces of the Eastern Black Sea Region. For the purpose stated above, the students of the three universities in the study were able to fill in the forms of the first stage by using the communication network they created among themselves. As a means of collecting data at this stage; descriptive features, early diagnosis methods knowledge and attitude determination questionnaires and Champion Health Belief Model Scale were used. A website designed by participant researchers was sent to complete this phase. The website was edited to include early detection of breast cancer, frequency of use, signs of breast cancer, and videos of practices. Monthly reminders were made to each participant for three months to increase their use of early diagnosis methods. After the reminders, the questionnaire on knowledge and attitude determination of breast cancer early diagnosis methods and Champion Health Belief Model scale were re-applied. In evaluating the data; Mann Whitney U, one-way analysis of variance, correlation and significance test of difference between two means in independent groups were used. Participants were found to have an average age of 26.2 (± 9.2) years and a family of 11.9% breast cancer stories. It was found that 58% of the individuals had information about the early diagnostic method, 93.9% had a breast self examination, 28.4% had a clinical breast examination and 17.4% had mammography. It was determined that the information about the early diagnosis methods of the researchers was obtained from the health care member (29.2%). Participants with breast cancer stories in their family were found to have information about early diagnosis methods. It was found that the women who did not apply to the early diagnosis methods were more than the ones who did. There was a statistically significant difference (p <0.05) between the scale scores of the women in the research group regarding early diagnosis of breast cancer before and after web based education. CBMM self-efficacy perceptions were significantly higher and CBMM barriers were lower (p <0.05) than participants with knowledge of breast cancer. This study shows that education of web-based breast cancer early diagnosis methods affects health beliefs, self-breast examination knowledge and practice positively.

BREAST CARE NURSING

P-010

Abstract: 41

PREVENTION, ASSESSMENT AND MANAGEMENT OF LYMPHEDEMA AT HOME AFTER MASTECTOMY:AN ALGORITHM STUDY BASED ON MODEL OF LIVING

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Purpose: Lymphedema is a common problem in patients who have surgery due to breast cancer. Axillary lymph node dissection, radiotherapy and obesity increase the risk of developing lymphedema in patients. Patients suffering from lymphedema may experience limitations such as limb-shoulder movements, pain, wound healing problems, infection. These problems may cause psychosocial problems such as deterioration of body image, decrease of self-esteem and quality of life, social isolation, role loss, anxiety, depression. For this reason, patients with mastectomy should be informed by health personnel about prevention, assessment and management of lymphedema complication before discharge.

Materials and methods: In this study, it is aimed to present an algorithm based on Roper, Logan and Tierney's Model of Living for the prevention, assessment and management of the lymphedema problem that patients with mastectomy can encounter at home after discharge. Algorithm has been prepared according to current literature and evidence-based researches.

Results: Algorithms are used as facilitators, guidance and useful guides with its visual content in the preventive complications of the patients and early visualization.

Conclusions: Algorithms that includes prevention, evaluation and management of lymphedema development in home after mastectomy will help to make the education understandable, decrease the frequency of encountering lymphedema, increase awareness of lymphedema and increase the quality of life.

P-011 Abstract: 104

IMPACT ON QUALITY OF LIFE AND SUPPORT NEEDS OF L.E.A.R.N.S. MODELS IN WOMEN WITH BREAST CANCER

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Purpose: This Quasi-Experimental Study Was Conducted To Explore The Support Needs Of L.e.a.r.n.s. Model And Its Impact On Women With Breast Cancer.

Material and Methods: The universe of the study was patients with breast cancer who were hospitalized to undergo an operation at one university Hospital between January 3 and November 15, 2017. Study sample consisted of 73 women (37 in experimental, 36 in control group) identified with simple random sampling according to defined criteria. Patients participating in the study were observed for a three-month period. Research data were obtained via personal information form, Self-Support Needs Questionnaire for Women with Breast Cancer and Quality of Life Questionnaire face to face interviews. Data were analyzed by using Pearson chi-square test, Fisher's Exact, t—test, Mann-Whitney U test, Friedman test and Wilcoxon signed ranks test analysis. Written permits were obtained from the Ethics Committee and Medical Faculty Hospital.

Results: Statistically significant differences were found between the experimental and control group means in Quality of Life Questionnaire (QLQ-BR23) sub scales such as body image, sexual functioning, future perspective, systemic therapy side effects, breast symptoms and arm symptoms (p<0.05).

A statistically significant difference was found in support needs questionnaire total mean scores for the experimental and control group (p <0.05).

Conclusion: According to the findings of the present study, it was found that L.E.A.R.N.S. model based education program had positive impact in meeting the quality of life and support needs of women with breast cancer.

P-012 Abstract: 107

COMPLEMENTARY AND ALTERNATIVE MEDICINES USED TO PREVENT BREAST CANCER RELATED LYMPHEDEMA: A LITERATURE REVIEW

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Purpose: Lymphedema is one of the most common complication which is seen breast cancer treatment. The patients with lymphedema with lymphedema have to cope with problems (pain, edema, limitation of movement, decrease manual dexterity of the upper limb etc.), are related to lymphedema as well as difficult experiences such as cancer diagnosis and surgery. For this reason, it is known that some complementary and alternative medicines (CAM) are applied to reduce or prevent lymphedema. The literature review aims to identify and evaluate complementary and alternative medicines used to prevent breast cancer related lymphedema.

Materials and methods: Study population consisted of 153 published studies which were reached as a result of the review of the data bases, "CINAHL", "MEDLINE" and "Google Scholar" using the keywords "breast cancer related lymphedema" and "complementary and alternative medicine" on 25-30 June 2018. In this review, studies which were published in English and had their full texts research articles were chosen for research. A total of 10 studies that met the research criteria were included in the sample of the study.

Results: This literature review shown that CAM which using in studies as follows; yoga (four studies), acupuncture (three studies), kinesiology (two studies) and relaxation techniques (one study). All the CAMs used were found to be effective in reducing lymphedema.

Conclusions: CAMs used to prevent breast cancer related lymphedema appear to be largely manual and behavioral methods rather than cognitive and herbal methods.

P-013 Abstract: 114 P-014 Abstract: 116

EXAMINATION OF AWARENESS AND INFORMATION LEVELS ABOUT BREAST CANCER OF UNIVERSITY STUDENTS

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This study is a descriptive, cross-sectional study aimed at measuring the level of knowledge and awareness of breast cancer among university students. The universe of the research was composed of students (26.317) who were studying in university during the 2016-2017 academic year. The sample of the research was composed of 243 female students who agreed to participate in the research between December 15, 2016 and May 15, 2017. In the study, socio-demographic information form and a comprehensive Comprehensive Breast Cancer Information Test (GKMKBT) were used by the researchers to collect data. In the evaluation of the data, number and percentage distribution were made by using SPSS package program.

The average age of the students who participated in the research was 21.21 ± 1.71 , It is determined that 81.5% was equivalent to the core family structure and 75.7% of the income, 28.4% of the students were third grade students, 34.6% were in health, 16.9% engineering, 40.3% of the students are studying in other departments.

It has been determined that 95.5% of the students do not have a breast complaint. 80.7% of the students had knowledge about breast cancer and 43.2% of them had heard of the cancer from the media for the first time. It was determined that 67.5% of the students knew the breast self examination (KKMM) and 32.5% did not know the breast self examination.

It may be suggested that university youths are more aware of the importance of breast cancer prevention and that their awareness is increased.

USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE BY BREAST CANCER PATIENTS: A LITERATURE REVIEW

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BREAST CARE NURSING

Purpose: Complementary and alternative medicine (CAM) is widely used among the breast cancer patients. The aim of this literature review is to determine the studies investigating the use of CAM by breast cancer patients.

Materials and methods: The sample of the study comprised of 796 articles that are accessed through browsing databases of "CINAHL Plus" and "PubMed" in 15-30 June 2018. During the scanning, the articles that were published in last five years (January 2013-June 2018), in English and in full text were chosen of the descriptive studies by using the keywords of "breast cancer", "breast neoplasms", "complementary and alternative therapy" and "alternative methods". Of these articles, 15 articles that were compliant with the criteria of the research constituted the samples of the review.

Results: Total number of breast cancer patient was 6533. Datas were collected through face-to-face interview, medical records and telephone interview by using questionnaires. Frequency of CAM use was between 33.3% and 70.7%. CAM use was generally categorized as mind-body practices, natural products and traditional medicine. The most common mind-body practice was prayer. Vitamin and mineral supplements were one of the widely used natural products. This literature review shown that traditional medicine methods were traditional healer and traditional Chinese herbal medicine

Conclusions: The prevalence of CAM use among the breast cancer patients was high.

P-015 Abstract: 117 P-016 Abstract: 122

KNOWLEDGE, ATTITUDE AND BELIEFS ABOUT SELF-BREAST EXAMANITION OF NURSING FACULTY STUDENTS

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This study was conducted as a descriptive study to examine the knowledge, beliefs and practices of the nursing undergraduate students on the self-examination. The study's universe constituted nursing students (N = 1419) who attended education in the 2016-2017 school year. The research sample was composed of 338 students who participated in the research in the Faculty of Nursing between 1 April and 30 May 2017. As a data collection tool; socio-demographic question form and health belief model scale (SIM) were used. Percentage, averages, t-test, variance analysis were used in data evaluation.

89.9% of the students who participated in the survey were female, 33.1% of 3rd grade, 26% of fourth grade, 21.1% of first grade, 19.8% of second grade, 97.6% are single, 99.7% are Anatolian graduates and the average age is 21.53 ± 1.45 . It was determined that 6.8% of the students who participated in the survey used cigarettes, 12.4% used alcohol, and 14.8% took hormone treatment. A statistically significant difference was found between the gender of the students participating in the study and the subscale of the health belief model scale: sensitivity, importance / seriousness, health motivation, self-breast examination (KKMM) benefits, BKMM hurdles, BKMM self-efficacy and mammography benefits (p <0.05).

According to the results of the research, it was determined that the students had good knowledge of breast cancer and KKMM but they could not apply KKMM regularly. It may be advisable to organize social responsibility projects to raise awareness that cancer is a treatable disease.

THE EFFECTIVENESS OF THE TELEPHONE FOLLOW-UP AFTER MASTECTOMY BASED ON THE MODEL OF LIVING: CASE STUDY

BREAST CARE NURSING

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Purpose:To present the case in which it was given education and counselling based on the Model of Living by the breast nurse to the patients who had a mastectomy operation during post-operative period.

Results(Case):E.Ç is a 67 years-old woman. She doesn't have any previous operation experience, chronic disease and permanently used drugs. The patient has been diagnosed as Invasive Breast Carcinoma and after applying 16 cures of neoadjuvant chemotherapy, she had Right Modified Radical Mastectomy+Axillary Dissection(Level 1-2) operation with general anesthesia on the date of 22.05.2018. E.Ç. was discharged on post-operative 3rd day with two hemovack drains.

She has been followed-up and has been received education and counselling for a month by the breast nurse beginning from her hospitalization. The breast nurse has given education and counselling when she went on the clinic before the operation and her first check-up face to face, and in the post-operative 3rd and 4th weeks by telephone. The pillar of her support, her daughter has participated in all interviews. It has given education and counselling to the patient and his family about especially the post-operative care in home, the points to consider in daily life and arm exercises in first two interviews. The problems experienced by the patient in home during the telephone follow-up process has been evaluated through the form developed by researchers by using Roper,Logan and Tierney's Model of Living.In the follow-ups, it was identified that E.Ç. didn't have difficulties in ADL during post-operative period but she was affected rather psychosocially. She and her daughter have been supported in this process especially in terms of the problems of anxiety, the fear of not healing/death, verbal communication disorders and disturbed body image. They have expressed during the follow-ups that they were pleased with this practice.

Conclusions:Telephone follow-ups of the patients with mastectomy based on the Model during the post-operative period is important for hindering and solving the problems which can be experienced by them.

P-017 Abstract: 18 P-018 Abstract: 19

A NEW ERA OF PREOPERATIVE BREAST LESION LOCALIZATION

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This study evaluates the new FDA-cleared non-wire localization technology "Faxitron LOCalizer" for the detection of non-palpable breast lesions. This device could replace the traditional wire localization (WL) and eliminate its disadvantages. This study aims to draw a comparison between the available non-wire technologies and evaluate the potential benefits of Faxitron LO-Calizer. Cost appears to be a potential limitation of the non-wire devices compared to WL. Although they are substantially more expensive than WL on simple cost level, reducing the wire localization-related OR delays may provide the financial compensation.

The patients have the Faxitron reflector placed up to 7 days before surgery and placement is confirmed by mammography or ultrasonography. The presence of the implanted reflectors is confirmed by radiography on the day of the surgery and the reflectors are detected, excised and sent for routine pathology. The OR delays are recorded for patients and the final costs for both Faxitron and WL are calculated using a multifactorial economic analysis.

So far in the study, the reflectors of Faxitron device are successfully placed. All the lesions and reflectors are successfully removed during surgery and reported with clear margins. The average OR delays for WL was reported to be 60 minutes with an associated cost of \$30 per minute delay and using Faxitron resulted in no or negligible OR delays.

Non-wire localization technology provides a reliable and effective alternative for the surgical removal of nonpalpable breast lesions. They allow placement before the day of the surgery resulting in improved workflow and zero OR delays.

SYNCHRONOUS MALE BREAST AND COLON CANCER PRESENTING WITH BOWEL OBSTRUCTION

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BREAST SURGERY

Cancer developing from more than one origin is called multiple primary cancer (MPC) and is a rare situation. In this article, we report a case presenting to the Emergency Clinic with symptoms of ileus who was diagnosed with synchronous colon and breast cancer.

A 57year old male patient presented to the Emergency Clinic with abdominal pain, vomiting, constipation and lack of flatulence. The patient was taken to the operating room for emergency surgery with the diagnosis of intestinal obstruction. While still hospitalized, breast ultrasound was performed, revealing a mass lesion in the right breast measuring 2cm. The core biopsy result was suggestive of invasive ductal adenocarcinoma. Right modified radical mastectomy with removal of the level 2 axillary lymph nodes was performed. The result of the histopathological investigation of the right hemicolectomy specimen was reported as moderately differentiated adenocarcinoma, while that of the mastectomy material was invasive ductal adenocarcinoma.

Synchronous colorectal cancer is recognized as an important clinical entity, its clinical and pathological properties as well as prognosis are still undetermined. A family history of cancer might be a significant factor in synchronous cancers. Many of the theories about the etiology of multiple primary malignant neoplasia suggest the role of genetic, hormonal, environmental and immunological factors as well as iatrogenic causes.

Especially for patients whose treatment begins in the emergency settings, meticulous systemic physical examination is recommended to initiate treatment of a possible synchronous tumor at an earlier stage.

P-021 Abstract: 37 P-020 Abstract: 36

A CASE OF BREAST POST-RADIATION ANGIOSARCOMA AND 4 DIFFERENT CANCERS

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A 63-year-old woman was diagnosed, by skin biopsy, with a post irradiation angiosarcoma of the breast. The angiosarcoma was presented as an extended induration and hyper vascular nodules of the right breast, 8 years after breast conserving surgery, sentinel node biopsy and irradiation. She had also been treated in the past for tibial melanoma, cancer of the left breast, and lymphoma. There was no evidence of metastatic disease and lymph node infiltration. We performed a simple mastectomy and the patient received adjuvant chemotherapy and radiotherapy. Post radiation angiosarcomas are more frequent than the sporadic ones and adjuvant treatment has not been proved to result in longer DFS and OS. They are expected to appear more frequently, due to the extended use of radiotherapy for breast cancer. In this poster, we state our experience with a rare case of secondary angiosarcoma of the breast in a patient with a history of 4 previous treated malignancies. The rarity and aggressiveness of the disease, the variety of clinical presentation and the uncertainty of adjuvant treatment value demonstrates the importance of vigilance regarding skin breast lesions in the setting of prior local radiation.

BREAST SURGERY

SPARING AXILLA FROM LYMPH NODE DISSECTION AFTER NEOADJUVANT CHEMOTHERAPY

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Purpose: In axillary metastatic breast cancer patients, axillary lymph node dissection(ALND) has important short and long term morbidities, such as lymphedema, shoulder mobility limitation, paresthesia and weakness, which decrease the life quality(1). In about 70% of axillary metastatic patients, it has been shown that neoadjuvant chemotherapy(NAC) could provide complete pathologic response(cPR)(2). The aim of this study is to determine the rate of our axillary metastatic breast cancer patients who had cPR after NAC and were saved from ALND.

Methods: Data of 75 female axillary metastatic breast cancer patients(August 2011-February 2018) were investigated retrospectively through BizMed database system. Patients were evaluated for age, mammography, ultrasonography and magnetic resonance imaging of the breast and positron emission tomography(before and after NAC), tumor type, chemotheraphy regimen, receptor status(estrogen, progesterone and HER2), TNM staging, operation (Sentinel lymph node biopsy/ALND), tumor diameter and metastatic lymph node number after ALND.

Results: Among 73 patients, 21 patients (28.7%)(mean age:51) who did not have any clinical regression in axillary metastasis after NAC underwent ALND, 27 patients (36.9%)(mean age:51) who had regression but positive SLNB on frozen section were converted to ALND, and 25 patients (34.2%)(mean age:46) who had complete clinical regression and had negative SLNB on frozen section were spared from ALND.

Conclusion: Our axillary preservation rate after NAC is lower than the rates reported in the literature. This may be related to the histopathological subtypes of the tumors or the limited number of patients. Even so, 34.2% is a reasonable percentage when we think of ALND morbidities.

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P-022

BREAST SURGERY

Abstract: 38 P-025 Abstract: 74

INVASIVE CARCINOMA FOCI IN DUCTAL CARCINOMA IN SITU AREAS

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Purpose: Ductal carcinoma in situ (DCIS) is a precursor of invasive breast carcinoma(1). Approximately 8% of core biopsies are initially diagnosed as DCIS, and this diagnosis is confirmed in 74% after excision(2). High grade tumor, palpable lump, and biopsy method were recognized as independent predictors of axillary evaluations(3). Herein, we aimed to investigate the incidence of invasive focus in final pathology reports of patients operated for DCIS and risk factors of the patients with invasive focus.

Patients and Methods: Data of 430 female patients (August 2012-July 2017) were investigated retrospectively through BizMed database system. 26 patients who had DCIS after biopsy were included in the study. Patients were evaluated for age, family history, microcalcification extent, estrogen (ER), progesterone and HER2 (Cerb B2) receptor status, Ki67 proliferation, TNM staging and histologic grade.

Results: Among 26 patients, 17(65.3%) had invasive focus and 9(34.6%) had DCIS in the final pathology. The number of patients with invasive disease and DCIS was 9(53%) and 5(55.5%) in 45 to 55 years and 8(47%) and 4(44.4%), over 55. Microcalcification extent in mammography was larger than 3 cm in 6 patients (35%) who had invasive focus in final pathology. Of the 14 patients who underwent SNLB for high grade DCIS, 4(25%) were SLNB(+)(T1, N1 M0)

Conclusion: If the microcalcification width is larger than 3 cm, it may be the evidence of an invasive focus and the SLNB positivity is more in high grade DCIS. So, the management of DCIS should be individualized according to the patient.

MAGNETIC RESONANCE IMAGING OF IDIOPATHIC GRANULOMATOUS MASTITIS: CAN IT BE AN INDIRECT SIGN OF TREATMENT SUCCESS OR FAIL

BREAST SURGERY

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Purpose: Idiopathic granulomatous mastitis (IGM) is a rare, benign inflammatory disease of the breast which is characterized with non-necrotizing granuloma formation and sterile microabscesses. Yet the etyopathogenesis still not fully understand and proper treatment algorithm is not well-established. We aimed to reveal the relationship between magnetic resonance imaging findings(MRI) of IGM and the success of treatment.

Material and Methods: 62 IGM patients who underwent medical or surgical treatment and follow-up at least 1 year were included in the study. MRI findings of these patients was re-evaluated in the light of breast imaging reporting and data system. Treatment methods were categorized as medical(corticosteroid or nonsteroidal antiinflammatory) and surgical (drainage or segmental mastectomy). The relationship between treatment success and MRI findings, fistula formation and the treatment method was investigated.

Results: In patients with retroareolar regional involvement, treatment success was statistically lower than the other quadrants(p=0,018). There was no statistically significant association between treatment success and other MRI findings, fistula formation and treatment methods.

Conclusion: IGM is benign inflammatory condition of breast demonstrating varying findings on MRI. To predict whether treatment will be more likely to success or fail is not possible based on the present MRI findings of IGM.

P-026 Abstract: 77

CONTRALATERAL AXILLARY LYMPH NODE METASTASIS IN BREAST CANCER: REPORT OF TWO CASES

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Introduction: Contralateral axillary lymph node metastasis (CAM) in breast cancer (BC) is a rare but puzzling entity since there is a lack of consensus on whether it is due to a distant metastasis or a locoregional spread. Moreover, CAM can occasionally originate from an occult breast cancer (OBC) or an extramammarian neoplasm (EN). The aim of this article is to present two cases of CAM in BC, and to review the related literature.

Case 1: A 51-year-old female presented with a swelling in her left axilla. She had a history of total mastectomy plus reconstructive surgery for the right BC 24 years ago but no pathology report was available. Mammogram, breast US and breast MRI showed enlarged lymph nodes with malignant features in the left axilla. PET/CT did not find any primary in the body. The patient underwent an ALND followed by adjuvant chemotherapy (CT) and radiotherapy (RT). Pathology revealed 6/23 lymph node metastases with ER (-), PR (-), c-erbB2 (-), CK7+, CK20-, GCDFP15 (-), mammaglobin (-), TTF-1, and PAX8 (-). The origin of CAM was considered locoregional extension of primary tumor. At a 35-month follow-up, she had no locoregional or distant breast disease.

Case 2: A 52-year-old female patient complained of masses in the right breast and in the left axilla. She had a history of quadrantectomy plus ALND for the right BC 18 years ago. Mammogram, breast US, breast MRI and PET/CT showed a mass suspicious for malignancy in the right breast and possible metastatic lymph nodes in the left axilla. Core needle biopsy of right breast mass was invasive BC and FNAB of left axillary lymph node was malignant cytology. The patient underwent bilateral skin-sparing mastectomy (left prophylactic) and implant-based breast reconstruction, and left ALND. On pathologic examination, breast and axilla lesions showed the same morphology. So, CT was commenced with a diagnosis of locoregional spread.

Conclusion: CAM in BC is a rare entity with an incidence of 1.9 to 6%. No consensus exists on diagnosis and treatment of CAM. Mostly, a primary (ipsilateral) BC as well as OBC, and EN can be the source of CAM. In addition to basic imaging modalities such as mammogram and ultrasonography, MRI of the contralateral breast can be useful in detecting an OBC. A PET/CT can be used to screen contralateral breast for an OBC and whole body for an EN. Histopathologic similarity between lymph nodes in contralateral axilla and primary BC suggests ipsilateal tumor as the source. In more complex situations, IHC studies such as ER,

PR, c-erbB2, cytokeratins, mammaglobin, GCDFP-15, and GATA3 should be added into the work-up. A CAM originating from BC usually shows a CK7+/CK20- phenotype. In case of ipsilateral BC, it is necessary to distinguish between a distant metastasis (stage IV) and a locoregional spread because a curative therapy could be intented in the latter one. If a systemic metastasis is not detected, CAM is considered a regional disease which was spread lymphatically, not hematogenously. Since the cases are mostly metachronous, it is considered that altered lymphatic routes after primary tumor surgery can make it possible for the cancer to spread locoregionally. CAM is treated according to its origin. CAM consistent with distant metastasis of ipsilateral BC is treated as a stage IV disease (systemic therapy), while various treatment ways such as ALND,

P-028 Abstract: 84 P-029 Abstract: 85

GYNECOMASTIA IS RESPONSIBLE FOR MALE BREAST PAIN IN ADULTS

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Objective: Pain is the most common symptom of the breast and accounts for 47% of breast related visits. Although hormonal, pathologic, nutritional, and psychiatric aspects of breast pain in females extensively researched, to the best of our knowledge breast pain in males has not been studied. Our aim in this study is to investigate clinical features of male breast pain.

Materials and Methods: Patients who admitted to our department's breast clinic due to breast pain between October 2014 and September 2017 included into the study. Clinical features of the male breast pain were collected and compared with female breast pain patients.

Results: There were 8 male and 40 female patients. Mean age was 55 ± 23 and 43.4 ± 13 years (p<0.05); the mean pain intensity score was 4.2 ± 2.2 and 5.2 ± 2.1 for the male and female patients respectively. Sonography revealed 12 (30 %) simple cyst, 2 (5 %), 12 (30 %), 2 (5 %), and 12 (30 %) normal findings in the female patients, and 7 (87.5 %) gynecomastia and 1 pseudo-gynecomastia (12.5%) in the male patients.

Conclusion: To the best of our knowledge, this article is the first article in the literature investigating male breast pain and comparing them with female breast pain. We found that majority of males who present with breast pain have underlying gynecomastia. Physicians should consider gynecomastia in the differential diagnosis and perform a breast examination in addition to a detailed patient history to assess gynecomastia.

SOCIAL FACTORS AND CAUSES ASSOCIATED WITH DELAYED BREAST CANCER PRESENTATION.

BREAST SURGERY

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Objectives: Our aim was to identify the psychosocial issues of women who reported at breast clinic with locally advanced disease and reasons for delayed presentation.

Methods & Results: We started to register all patients reporting to breast clinic of our institute for workup and treatment.

We included all newly diagnosed breast cancer patients and especially those who presented at locally advanced state. The Performa was to be filled by a medical officer and resident. Consent was taken from patients.

A total of 490 patients newly diagnosed were registered in Breast Clinic from January 2,9, 2016 till December 31, 2016. Age range was (18 – 85) years with a median age of 39 years. Only 4 patients were males, remaining were all female patients. Amongst them, 80 % had presented with a locally advanced disease. Since a majority of our patients were candidates of mastectomy therefore moderate to sever degrees of depression was observed in 60 % of our patients. Detailed results are illustrated in table 1&2

Conclusion: Newly diagnosed younger women are at high risk for social isolation, family isolation, depression. When identified the patient should be timely referred to a psychologist. In our social setup the majority of the patients presented in the locally advanced stage considering the social stigma associated with the disease, also there is a need to create awareness for early diagnosis of disease.

P-030 Abstract: 86 P-031 Abstract: 87

CLINICAL EXPERIENCE WITH BREAST ABSCESSES BASED ON INCIDENCE, CAUSATIVE ORGANISM, AND DIFFERENT TREATMENT OPTIONS.

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Objective: The aim of this study was to describe the incidence of acute breast infections, associative organisms with special attention to the effect of different treatment modalities in a consecutive patient population.

Methodology: This prospective descriptive study was conducted at breast surgery department of our institute. All females reported to us from January 2016 to March 2018 with acute breast abscess were enrolled. Patients presenting with painful lump associated with acute inflammatory changes were included in this study. Those who were diagnosed with inflammatory granulomatous mastitis or tuberculosis mastitis on histopathology were excluded. A Performa was designed to record the patient details and findings which was initially filled at the time of presentation and then on subsequent follow-ups.

Results: Total 40 patients were reported in this duration with painful lump breast with acute signs of inflammation. The age range was from 19 -36 years (mean 27.23 years) there were.26(65%) lactational and 16(35%) non-lactational abscesses. Pus for CS was sent of 34 patients. Out of which 22(55%) were MRSA positive. Patients who were managed conservatively by antibiotics were 14(35%) while 20(50%) were treated with needle aspiration and antibiotics and only 6(15%) patients required incision and drainage. There were 37(92.5%) patients who had complete resolution of disease and 3(7.5%) presented with recurrent disease.

Conclusion: Mixed flora is common in non-locational breast abscess when compared with a locational breast abscess. Staphylococcus Aureus is the most common isolate in both groups. The majority of breast abscesses can be managed non-operatively with a combination of antibiotics and percutaneous aspiration however only a few need an invasive approach like incision and drainage.

CLINICAL CHARACTERISTICS AND MANAGEMENT OF CHRONIC BREAST INFECTIONS

BREAST SURGERY

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Objective: We aimed to share our experience of anti-tuber-culosis treatment in chronic breast infections like severe chronic inflammation & idiopathic chronic granulomatous mastitis.

Methods: We included consecutive patients diagnosed to have chronic infections report at our breast surgery department. Parameters studied were age, clinical presentation, histopathology, tissue culture, treatment and clinical response to treatment.

Results: A total of 40 patients were enrolled in the study during February 2016 till February 2018. All patient were females, age range was 21 -75 years. Most common clinical presentation was breast lump with abscess formation (n=15). 4 cases also had nipple retraction. Diagnosis was made on core biopsy in 21 cases whereas, on incision and drainage in remaining cases.

Conclusions: Our experience showed that ATT is an effective and safe treatment option for resistant acute on chronic mastitis and idiopathic granulomatous mastitis.

P-032 Abstract: 88 P-033 Abstract: 91

PREVALENCE AND MANAGEMENT OF MASTALGIA IN BREAST CLINIC PATIENTS

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Objective: Our objective was to evaluate the prevalence of mastalgia and role of diet changes, analgesia and evening primrose oil in management.

Materials and methods: This prospective descriptive study was conducted at breast surgery department of our institute. All female patients were enrolled from January 2017 to June 2017. Performa was designed for the purpose by the Medical Officer. All patients presenting with breast pain, heaviness, burning sensation and tenderness were included in the study. Patients were initially interviewed at the time of presentation and then after six months of treatment.

Results: Total registered patients were 94, two male patients had also presented with bilateral mastalgia. About 80 patients had shown good response to treatment. Out of total female patients (n=92) who presented with mastalgia, 05 patients had BIRADS 4 lesions on their mammography and were diagnosed with breast cancer on final pathology.

Conclusion: Careful and thorough evaluation of mastalgia is necessary to rule out any underlying pathology. In most of patients with mastalgia without any other pathology reassurance, dietary modifications, analgesia (local/oral) and EPO are beneficial to relieve their symptoms with least side effects. Further research regarding psychosocial and other associated factors is needed for persistent cases.

PRIMARY NECROTIZING FASCIITIS OF THE BREAST RESULTING IN MORTALITY AT A YOUNG AGE: THE FIRST CASE IN LITERATÜRE

BREAST SURGERY

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Introduction:Primary necrotizing fasciitis of the breast (PNFB) is seen extremely rare. In literature, there are reports of 2 cases that resulted in mortality after surgery, so therefore the patient reported here is the first case of PNFB that resulted in mortality without any previous intervention (1).

Case Report: A 35-year old female presented 1 week previously at the Emergency Department (ED) with complaints of pain and redness in the left breast. The patient did not smoke or drink alcohol, and was known to be socially introverted with poor personal care and behavioural disorders, although no psychiatric treatment had been applied. No breast intervention had been made in the non-lactational period and there was no history of trauma. In the first evaluation made in ED, septic shock table was seen. On the left breast, there was widespread erythema, dark colour changes, oedema, and necrotic areas consistent with wet gangrene together with crepitation. The necrotic areas and crepitation extended from the left axilla and left arm anteromedial surface as far as the left elbow(Fig1.). The operation that was to be performed to excise the necrotic areas in the skin of the left breast was started with an elliptical incision extending from the sternum to the left axilla(Fig2.). A radical mastectomy and partial latissimus dorsi resection was made and intraoperative orthopedic consultation was requested for the lesions in the left arm. The necrotic tissues in the arm were debrided with an anteromedial incision extending from the left shoulder to the elbow(Fig3.). Under follow-up in ICU, cardiovascular, respiratory and renal failure continued and on postoperative hour 8, cardiac arrest developed due to septic shock and multiple organ dysfunction. The patient did not respond to resuscitation and was exitus.

Conclusion: Although PNFB has been very rarely reported in literature, it is a disease with a very rapid and aggressive course,

which can be fatal. For several reasons the current case was delayed and is the first advanced stage PNFB case in literature that unfortunately resulted in mortality. Therefore, it is known that irrespective of age, careful and detailed evaluation of all cases, especially those with risk factors and comorbidities, could be life-saving in respect of early diagnosis and timely treatment. Nevertheless, it must not be forgotten that this disease could result in death because of the rapid and aggressive course.

BREAST SURGERY

P-034 Abstract: 94

THE CONTRALATERAL BREAST FLAP FOR SALVAGE SURGERY IN AN AUTOLOGOUS BREAST RECONSTRUCTED CANCER PATIENT

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Autologous breast reconstruction (ABR) is one of the most preferred methods in oncoplastic breast surgery. Contralateral breast as a donor site for an ABR is an old technique described by Duformentel in 1939 (1). Most patients candidate for contralateral breast flap option had previously mastectomy and had a large breast, which requires breast reduction surgery for contralateral breast without previously cancer surgery.

55 years old women admitted with breast cancer and had a skin sparing mastectomy and immediate transvers rectus abdominis breast reconstruction (TRAM Flap) 3 years ago. Adjuvant chemotherapy and hormone therapy were applied and in this period she had an uneventful interval for 18 months. A painless mass has palpated with a hard, stick skin mimicking recurrence of tumor with dermal invasion. The patient was referred for radiological examination. Magnetic Resonans Mammography findings demonstrated a radiolucent round mass with dystrophic calcifications (Fig 1). Ultrasonography examination revealed a mass with ill-defined margins, distorted breast parenchyma and solid hypoechoic mass with posterior acoustic shadowing. The clinical and radiological findings figure out a fat necrosis with skin involvement after TRAM flap reconstruction. The patient was discussed in multidisciplinary breast cancer meeting and due to clinic and cosmetic findings excision of fat necrosis was offered. The preoperative examination for oncoplastic planning of the patient noticed a D Cup severe ptotic left sided breast (Fig 2). Operative procedure was prepared for right breast with fat necrosis excision, contralateral breast flap reconstruction for volume replacement and left reduction surgery. The operative drawings were performed for breast reduction surgery and contralateral breast flap reconstruction (Fig 3). On the right side the lesion of fat necrosis was excised with overlying skin. The contralateral left breast full thickness flap is prepared in half vertical fashion and the flap consists of medial portion of the left breast parenchyma was rotated 90° counter clockwise to fill the defect in right breast. The blood supply of the breast flap was obtained from the perforators of branches of the internal mammary artery. The left breast reduction was performed (Fig 4). Post operative 14th day minor skin necrosis was observed on lateral side of the reconstructed breast flap. Necrosis excision was performed and the flap was left for seconder wound healing.

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Fat necrosis after ABR is a challenging clinical issue, which may mimic tumor recurrences and on the other side a potential cosmetic problem effecting patient's satisfaction. Khansa et. al. (2) reviewed literature for fat necrosis and ABR and the authors declared the rate for fat necrosis for 11.3%. Pedicled flaps, obesity, smoking and adjuvant radiotherapy are accepted as risk factors for developing fat necrosis after ABR. After excluding malignancy with biopsy or radiology examination, fat necrosis in reconstructed breast may be followed up due to size, clinical symptoms and patient's desire. Local excision and primary closure, intraglandular flap rotations, latissimus dorsi flap reconstruction may be operative options for salvage of excised lesion in order to fill the defect. Contralateral breast flap reconstruction is a rare but potentially good alternative for volume replacement in patients with inner quadrant lesions and huge contralateral breast.

BREAST SURGERY

P-035 Abstract: 96

CLINICOPATHOLOGIC FEATURES OF YOUNG BREAST CANCER PATIENTS.

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Purpose: Breast cancer is the leading cause of cancer-related deaths in women age 40 and younger in developing countries. Although generally improving, survival rates for young women with breast cancer remain lower than for older women. Recently the researchers' interest has been attracted by breast cancer arising in young women because of unquestionably the leading cause of cancer-related deaths. Our objective was to describe clinicopathological and prognostic features of breast cancer in young women who received treatment in our clinics during 2015-2018.

Methods: We conducted a retrospective multi center study including Okmeydani Training and Research Hospital and Istanbul Bilim University Breast Surgery Unit. Patients with breast cancer aged under 40 years was selected for the study. In total 113 cases were included between 2015 and 2018. Pathologic features; histologic subtypes, grade, lymphovascular invasion, axillary involvement, and stage were recorded for each.

Results: The average age of the patients was 37 years (range 27-40). The mean tumor diameter was 2,5 cm (range 1 mm-9,5 cm). Family history of breast cancer was evident in 21 (%18,5) patient. The patient with pregnancy history was 22 (%19,4). 4(%3,2) patients had distant metastasis. Triple negative tumor in patients was 26 (%23). 43 (%38) patient had neoadjuvant chemotherapy. Breast conserving surgery was performed to 62 (%54,8) patient. The patient with sentinel node positive was 54(%47), with axillary involvement was 71(%62).

Conclusion: In our experience presented with high percentage of axillary involvement, triple negative tumor and pregnancy history in young women with breast cancer and more aggressive disease.

P-036 Abstract: 101 P-037 Abstract: 102

CLINICAL AND HISTOPATHOLOGICAL EVALUATION OF MALE BREAST CANCERS IN A SERIES OF 45 PATIENTS

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Introduction: Male breast cancer is a rare disease which accounts for less than 1% of all breast cancers

In this study, we aimed to investigate clinical features, pathological stages, recurrence and survival data of the male patients with breast cancer

Methods: This retrospective study was performed between June 2005 and December 2017 in our clinic.

The records of consequent 45 male patients with breast cancer were examined. Patient age, tumor localization, tumor stage, applied surgical techniques, histopathological features of tumors, oncologic treatments and recurrence and survival data were analyzed.

Results: During the study period, 45 of the total 4920 (0.91%) breast cancer cases were male. The mean age was 61 ± 8.2 years (ranged 41-81). The tumor were right sided in 24 (53.3%) patients. Any patient has not bilateral tumor. The most frequent clinical findings of the patients was a palpable mass (n=43, 93.3%). Pathological stages were as follow; stage I in 15.5% of cases (n: 7), stage IIa in 24.4% of cases (n: 11), stage IIb in 20% of cases (n=9), stage IIIa in 20% of cases (n=8) and stage IV in 2.2% of cases (n: 1). Most of the patients (78.1%) underwent radical mastectomy as surgical procedure.

Histopathological diagnosis of 87.5% (n: 28) of cases was invasive ductal carcinoma. Adjuvant treatment were given in 42 patients (93.3), while 2 (4.4%) patients received neoadjuvant treatment.

Mortality was developed in 5 (11.1%) patients during follow-up. The disease-free survival (DFS) was median 56 (0-120) months and the 5-year DFS rate was 83.3%, respectively.

Conclusion: Male breast cancers are clinically, histopathologically and prognostically similar to female breast cancers and should be treated with the same principle. The results of our study are consistent with the literature.

RETROSPECTIVE ANALYSIS OF DETECTING SENTINEL LYMPH NODE METHOD

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BREAST SURGERY

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Introduction: The status of the axillary lymph nodes is an important prognostic factor in breast cancer. It has been used to guide local-regional and systemic treatment decisions and surgical removal of the axillary nodes facilitates staging and provides regional control in those with axillary metastases.

Patient and Method: Between 2013 and 2018 data were collected on 89 patients with early breast cancer. Sentinel lymphadenectomy was performed with both procedures (lymphatic mapping with patent blue V dye and radioguided surgery) In the whole group, the sentinel lymph node (sN)was identified in 80 of 89 patients (89%), and 16 of 80 patients (20 %) had positive axillary lymph nodes (pN+). In 1 of 16 pN+ patients, the definitive histologic examination of the sN did not show metastases. Both radioguided surgery (RGS) and patent blue V injection was performed 33 of patients. Only patent blue V injection was performed 56 of patients. Nine of these patients sN couldnt be detected.

Conclusion: Sentinel lymphadenectomy can better be accomplished when both procedures (lymphatic mapping with patent blue V dye and RGS) are used, because of the significantly higher sN detection rate, although the prediction of axillary lymph node status remains remarkably similar whichever method is used.

P-038 Abstract: 105 P-039 Abstract: 106

IS THE SURGICL APPROACH VERY IMPORTANT TO TREATMENT FOR PHYLLODES TUMORS?

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Introduction: We tried to evaluate treatment modalities and recurrence status of patients diagnosed with phyllodes tumor, in the light of a literature search.

Material and method: All female paients received treatment for phyllodes tumor between January 2015 and January 2017 were included in our study. All data was collected through retrospective analysis. Histopathological results, type of surgery, application of chemoradiotherapy, tumor size, recurrence rate and demographic data were analyzed.

Results: 25 cases were evaluated. 8 of them was diagnosed as malign. The others were 3 borderline, 14 benign and fibroadenomatous. 3 of 8 malignancies were treated with mastectomy and the other 5 were treated with wide local excision. In two cases recurrence occurred; one of them received chemotherapy, remaining had chemoradiotherapy. All remaining patients (17) underwent wide local excision. Single case treated with mastectomy due to the size of tumor.

Conclusion: There is still a debate going on for treatment of phyllodes tumors. Negative margins for malign cases play major role for successfull treatment. There is no consensus for application of chemo and radiotherapy.

IMPACTS OF SURGICAL APPROACH TO QUALITY OF LIFE IN BREAST CANCER PATIENTS

BREAST SURGERY

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Introduction: Breast cancer remains the most frequent malignancy in female patients, and effects sexuality, physicosocial status and quality of life. In this present study we aimed to compare postoperative physicosocial, sexual and general quality of life between cases received breast conserving surgery (BCS) or modified radical mastectomy (MRM).

Material and Method: Patients underwent surgical procedures for breast cancer between January 2012 and January 2014 were included in our study. Cases unable to complete survey due to intelligency or educational status were excluded. Remaining exclusion criteria is as follows; neoadjuvant therapy, requirement of radiotherapy following MRM and ASA 3 and ASA 4 cases. Quality of life were assessed via EORTC QLQ C30 and BR 23 in sixth months after completion of therapy.

Results: 112 cases were operated for breast cancer. 16 of them were excluded, therefore 96 patients were evaluated. All patients were female and mean age was 50.5 (SD 11.4). According to EORTC QLQ 30 survey, with six main functional criteria (physical function, role function, cognitive function, physicic and social status, general well being status), cases received MRM had higher statistically significant scores. According to symptom measurement; nausea, vomiting, constipation and diarrhea had no difference between two groups, whereas dyspnea, appetite loss, sleep instability, pain and fatigue had significant higher scores in MRM group. There was no difference between groups according to sexual satisfaction, measured via EORTC QLQ BR 23 survey. General appearance, sexual life and future expectations were lower in MRM group. Alopeasia was similar in both groups, whereas breast symptoms, arm complaints and other side effects were higher in MRM group.

Conclusion: Breast conserving surgery should be primary choice in planning of surgical procedures, due to positive effects to quality of life. Patient satisfaction remains major advantage for BCS.

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OPTIMAL TREATMENT MODALITY OF PSEUDOANGIOMATOUS STROMAL HYPERPLASIA OF THE BREAST

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Background and objectives: Pseudoangiomatous stromal hyperplasia (PASH) is a benign mesenchymal proliferative lesion of the breast. The pathogenesis, clinical manifestation and optimal treatment remains unclear, because of rare entity. This study aimed to indicate the appropriate management for individual patients with PASH.

Methods: We reviewed the records of 66 patients with PASH confirmed by core needle biopsy or surgical excision between 2000 and 2016, at the Severance Hospital. Clinicopathologic data including baseline patient characteristics, radiologic finding, diagnosis, management strategies were analyzed.

Result: Median age was 40 years (range, 14 – 61). The image finding of PASH on ultrasonogram or mammogram were nonspecific. Core needle biopsy (CNB) was performed in 61 of 66 patients, which confirmed a diagnosis of PASH in 39 subjects. (59.1%) The diagnosis of atypical proliferative lesion arose directly from PASH were seen in 3 patients, which diagnosis others on CNB. The progression rate were 16.6% after initial treatment. The lesion size on ultrasonogram, palpable mass enlargement, diagnosis other than PASH on CNB showed association with the progression.

Conclusion: The CNB were not adequate modality to diagnose the PASH. But there were no malignant or premalignant lesion that diagnosed PASH on CNB after surgical excision. PASH does not require surgery to determine the diagnosis of occult malignancy. Surgical excision were necessary in patients with large (≥ 3cm) or growing PASH.

ASSOCIATION BETWEEN NUMBER OF EXCISED SENTINEL LYMPH NODE AND INCIDENCE OF LYMPHEDEMA IN NODE-NEGATIVE BREAST CANCER

BREAST SURGERY

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Purpose: Sentinel lymph node biopsy (SLNB) lowers morbidity of lymphedema then axillary lymph node dissection (ALND). However, there has been concern about incidence of lymphedema after SLNB especially when the number of harvested nodes during sentinel node biopsy procedure is more than a few. In this study, we assessed lymphedema incidence and its risk factors including the number excised lymph nodes in patients who underwent SLNB.

Methods: Between January, 2011 and April, 2012, the records of 910 consecutive patients who underwent breast surgery with axillary staging (SLNB/ALND) for breast cancer at Seoul National University Hospital were reviewed. Lymphedema was assessed by circumferential upper extremity measurements. The lymphedema was defined as > 1cm for either the upper arm or the forearm. Patients with clinical records of the treatment for lymphedema in the rehabilitation clinic were regarded as having lymphedema. Univariate and multivariate analyses were performed to identify potential risk factors associated with lymphedema. Association of number of excised lymph nodes with lymphedema was analyzed by Spearman rank correlation coefficient.

Results: At median follow-up of 69.8 months, 231 patients (25.4%) presented with lymphedema. In univariate analysis, body mass index (BMI) (P<0.001), T stage (P<0.001), N stage (P<0.001), type of surgery (P<0.001), ALND (P<0.001), neoadjuvant chemotherapy (P<0.001) and adjuvant chemotherapy (P=0.027) were significantly associated with lymphedema. In multivariate analysis BMI (P<0.001), ALND (P<0.001), neoadjuvant chemotherapy (P=0.044), and radiation therapy (P=0.046) were significantly associated with lymphedema. In patients treated with SLNB only (n=595), the incidence of lymphedema was 16.3% (n=97). In SLNB only subgroup, BMI was only significant risk factor of lymphedema. There was no correlation between number of excised lymph nodes during sentinel lymph node biopsy procedure with incidence of lymphedema.

Conclusion: The risk of lymphedema is multifactorial in breast cancer surgery and adjuvant treatments. In SLNB alone patients, higher BMI was only significant factor correlated with lymphedema. Excised number of lymph nodes during sentinel biopsy procedure was not associated with lymphedema in

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A RARE BREAST TUMOR: MALIGN ADENOMYOEPITHELIOMA

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Purpose:Breast cancer is the first cancer among women. Breast malign adenomyoepithelioma is a rare tumor characterized by differentiation into luminal and myoepithelial cells. The first information was described by Hamperl in 1970 (1). A small number of cases are encountered in the literature. We aimed to present the patient who was diagnosed as malign adenomyoepithelioma of the breast.

Results: A 58-year-old woman presented to the General Surgery, Clinic of Education and Research Hospital in 2015. She was no family history of breast cancer. She had an approximately 15x10 mm palpable, mobile, hard mass in the upper quadrant of the right breast at 12 o'clock direction. She had BIRADS 0 mammogram and ultrasonographical examination was BIRADS IV. On core needle biopsy pathology was low grade epithelial hyperplasia and adenosis. Six months later, mass size was 27x20x-15mm on ultrasonography. We repeated core biopsy but it was also benign. When the patient came to control one year later, the mass had grown appearently(67x57mm). We suggested that the mass removed by excisional biopsy. But the patient did not accept. The patient came to the control one year later and the mass was 82x72 mm on ultrasonography. Abnormal signs (intracystic papillary carcinoma?) was seen in the magnetic resonance examination. The mass was totally removed (fig 1,2). Pathology report was malignant adenomyoepitheloma. We performed modified radical mastectomy due to the close proximity of the surgical margin. No residual tumour or axillary involvement was not seen new pathology report. Based on the features of strong invasiveness and tendency to recurrence and metastasis was consulted by medical and radiation oncology. No problem was detected in the patient who came to the control after 6 months

Conclusions: Adenomyoepithelioma is a rare tumor characterized by proliferation of two different cell populations. For this reason it may show different behavior patterns. there is no consensus about the treatment to be done because of both the rare tumor and different behavioral patterns (local excision vs radical resection \pm chemotheraphy \pm radiotheraphy)(2). We think that as the number of cases increases, there will be more clear decisions about treatment

CAN 18F-FDG PET/CT MODIFY MANAGEMENT OF BREAST METASTASIS FROM UTERINE LEIOMYOSARCOMA?

BREAST SURGERY

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Purpose: Uterine leiomyosarcoma has a poor prognosis with a high risk of recurrence. Approximately 70% of patients will develop a recurrence within an average of 8 to 16 months following surgery. Although there isn't evidence supporting the use of PET/CT in the work-up and management of patients with uterine leiomyosarcoma it started to gain popularity. Only a few cases of breast metastasis from uterine leimyosarcoma were reported in the literature. Here we reported a case detected by 18F-FDG PET/CT and managed based on 18F-FDG PET/CT results.

Case: A 58-year-old woman with a history of surgery for uterine leimyosarcoma two years before had received adjuvant chemoradiotherapy. She had been followed up by conventional abdominal and thoracic CT and 18F-FDG PET/CT. 18F-FDG PET/ CT had shown increased radioactivity of the thyroid gland [0.9 cm (SUV max:12.6)], bilateral pulmonary nodules [right 1.9 cm (SUV max:9.4); 1.1cm (SUV max:1.8) - left 1.7 cm (SUV max: 7)] and left breast [3.1 cm (SUV max:11.9)] at third month following surgery. Tru-cut biopsy for breast had showed uterine leiomyosarcoma metastasis. In the follow-up of woman metastatic evaluation using conventional CT and 18F-FDG PET/CT of the whole body had been negative except left breast. Two months after the local excision of the mass, which had been performed at another hospital at postoperative 21st month, simple mastectomy was performed due to recurrence depending also on patient preference. She was uneventful for 4 months.

Conclusion: There isn't effective targeted therapy for uterine leiomyosarcoma. Moreover breast metastasis from uterine leiomyosarcoma is extremely rare. Can we hope to redesign management according to the 18F-FDG PET/CT results and should we choose surgery accompanied by adjuvant therapy? More clinical trials are necessary.

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DETECTION OF SENTINEL NODE IN BREAST SURGERY USING INDOCYANINE GREEN

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Purpose: Sentinel lymph node biopsy (SLNB) is the standard technique for axillary staging in clinically node-negative (cN0) breast cancer patients. The most common technique for SLNB is the use of tracers radiolabelled with Tecnezio-99m (99mTc). Another injectable tracer is indocyanine green (ICG), a fluorescent contrast that can spread into the lymphatic system and mark the sentinel lymph node (SLN). The purpose of this study is to evaluate the appropriateness of this new method and its effectiveness.

Materials and methods: With this technique SLNs are identified by fluorescence emitted from dye that accumulate in the SLNs. SPY Fluorescence Imaging utilizes laser generated, near infrared, light and ICG as the imaging agent. This fluorescence can be seen in real-time on a monitor even through the skin, providing a map for SLNs detection. We used Novadaq Technologies by Stryker. We enrolled patients by administering both the 99mTc and the ICG. We diluted 10 cc of saline solution in 25 mg of ICG. We injected 2 cc of periareolar intradermal ICG solution with an 8 mm needle. We waited about 10-15 minutes for the SLN to appear. We searched for the lymph node with the neoprobe probe and the two identifications coincided.

Conclusion: The fluorescent optical intraoperative image-guided SLNB has a new promettent technique. It is an effective technique as much as 99mTc. It could involve both organizational and economic benefits in the breast center.

CAN BREAST DENSITY BE PREDICTED BY PHYSICAL EXAMINTAION?

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Purpose: As is well documented, breast density is an important factor in breast cancer development and management. (1) The knowledge of breast density can guide in the choice of radiologic imaging method to use on a given patient and and in the decision of frequency of patient follow-up. Routine out-patient physical examination is as important as radiologic imaging in predicting breast density. There is lack of substantive literature content to standardize and guide use of physical examination-based breast density as a tool for guiding patient care. While radiologic imaging is guided by defined parameters in deciding the density of a breast physical examination is subjective and has not standardized parameters to guide the examining physician in decision making.

In this study we intend to arrive at a uniform, objective physical examination-based breast density prediction method that incorporates terminologies well-defined by American College of Surgeons (ACS) with the aim of guiding the use of appropriate imaging technique and in deciding the frequency of patient follow-up.

Results: Three-hundred and Forty (340) patients were examined by a single surgeon, the patient breast density was assigned values based on parameters in use as per ACS guidelines and the results were compared to the ultrasonic/mammographic density evaluations done at the same Breast Center.

The results of physical and radiologic imaging especially on the breast density values, the age of the patient and history of breast feeding were compared.

Conclusion: Physical examination is an important tool in predicting breast density and guide patient care and follow-up.

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LATISSIMUS DORSI FLAP RECONSTRUCTION: WHO MAY BENEFIT FROM IT?

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Introduction: Latissimus dorsi flap reconstruction (LDFR) is used for immediate or late reconstruction mostly combined with a tissue expander or implant to make more natural appearence as compared to implant alone. But occasionally, for thin patients with low breast volume, LDFR may be used alone as a primary reconstruction. The another field of LDFR usage is the closure of the mastectomy defect for the local advanced breast carcinoma. Our aim is presentation of our patients who may benefit from LDFR including cosmetic results of 6 patients that we performed.

Cases: First patient was a 43 years old woman with right breast cancer with modified radical mastectomy and adjuvant chemoradiotherapy. LDFR and expander (550cc) which was exchanged with an permanent implant was done (245cc) (figure-1). Second patient was 48 years old woman with a total mastectomy operation due to left breast cancer. LDFR with tissue expander (550 cc) has been changed with 315 cc implant as a late reconstruction. Third patient was 51 years old woman with right modified radical mastectomy previously. LDFR with tissue expander(450 cc) changed with permanent implant (280cc) was performed sooner. Fourth patient had right breast cancer, LDFR with an expander (550cc) followed by permanent implant (280cc) was done as a reconstruction method also. In summary, for these four patients, LDFR with implant reconstruction and mastopexy for other breast to equalize breast sizes were performed following permanent implant exchange. Fifth patient was 26 years old woman applied breast conserving surgery and axillar dissection previously. Due to detection of a recurrent cancer in follow-up, skin-sparing mastectomy and LDFR combined with an permanent implant (280cc) was done (figure-2). We also performed LDFR in order to close wound defect in cheast wall for locally advanced breast carcinoma patients. She was 46 years old with an inflamatory breast cancer virtually filling all right breast. We applied neoadjuvant chemoterapy following modified radical mastectomy. The mastectomy defect has closed with LDFR (figure-3).

Conclusion: The LDFR may be used as immediate reconstruction with an implant, or delayed reconstruction in combination with tissue expander and permanent implant as a two staged reconstruction. It can also be applicable as a salvage reconstruction for many breast cancer surgery defects. LDFR is favourable reconstruction for patients with medium-large size breast volume, and patients who had prior radiation therapy for he breast carcinoma. Satisfactory cosmetic results can be achievable for selected patients with LDFR.

COMPARISON OF INFILTRATION ANESTHESIA AND PECTORAL NERVE BLOCK IN PAIN MANAGEMENT AFTER MASTECTOMY

BREAST SURGERY

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Purpose: We aimed to compare infiltration anaesthesia and pectoral nerve block methods to prevent pain after oncologic breast surgery and to ensure that patients were compiled earlier.

Method: Sixty patients the ages of 18 and 80 who had undergone mastectomy were included in the study. The patients who were applied pectoral nerve block were numbered Group I and applied infiltration anaesthesia were numbered Group II. Post-operative pain of the patients was assessed with Visual Analog Scala (VAS) at 1, 6 and 24th hours. Patients who VAS level more than 3 received tramadol 1 mg / kg. Total analgesic doses consumed in the first 24 hours and duration of intensive care stay was recorded. The results were evaluated statistically.

Results: The two groups were similar for their demographic characteristics. The mean value of VAS for Group I/ Group II at 1st hour was 1.2 /5.8, at 6th hour was 2.6/ 5.1 and at 24th hour was 2.3/ 4.3 (p>0.05). The amount of analgesic (tramadol) consumed at 24 hours was 0.13 /1.5 mg / kg for Group I / II. (p <0.05). The duration of intensive care stay was 62 / 167 min for Group I / II (p <0.05).

Discussion: Peripheral nerve blocks become important for prevention of the patient's pain and early compilation (1). Analgesics used for postoperative pain may cause undesirable side effects (2). The infiltration anesthesia may require additional analgesics. There is high success rate of pectoral nerve blocks applied by ultrasound guidance (3) in treatment of pain.

Conclusion: Pectoral nerve block is more effective in the treatment of pain and early compilation after breast surgery operations.

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NEUROENDOCRINE CARCINOMA OF THE BREAST (REPORT OF A CASE)

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Purpose: Primary neuroendocrine carcinoma of breast (NECB) forms 2-5% of all breast cancers and most are aggressive. Here is a well differentiated primary NECB with good prognostic features, observed rarely.

Case Report: A 71-year-old woman with comorbidities but no history for cancer had a periareolar hard mass in her left breast. Mammography revealed a nodular opacity and ultrasonography a 9.5mm-sized heterogeneous and hypoechoic solid mass with regular borders. Fine needle biopsy revealed malignancy. 18Ffluorodeoxyglucose PET CT showed no metastasis. Left simple mastectomy and sentinel lymph node biopsy revealed a 1.2cmtumor which was stained by CD-56 and synaptolysin. It was a well differentiated neuroendocrine tumor with 2 mitoses in 10 high-power field. In situ component formed 1% of the lesion and was nuclear grade I and of solid and cribriform pattern with no necrosis. Three sentinel nodes were negative. No lymphovascular or perinodal invasion was detected. Estrogen and progesterone receptors (ER/PR) were strong-positive in both in situ carcinoma and 80-90% of the main tumor. HER-2 was negative and Ki67 was 1-2%. She was given adjuvant tamoxifen and now at postoperative 12th month with no disease recurrence.

Conclusion: NECB is a tumor expressing neuroendocrine markers in more than 50% of neoplastic cells and categorized as primary when metastatic disease is excluded and ductal "in situ component" was observed. Well differentiated tumors are rare with good prognosis. Early stage, absence of lymphatic metastasis and ER/PR positivity are also the good prognostic features. Tamoxifen can be an alternative therapy in operated cases.

PREDICTIVE FACTORS FOR BREAST CANCER IN LESIONS ACCOMPANYING FLAT EPITHELIAL ATYPIA

BREAST SURGERY

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Purpose: FEA (Flat Epithelial Atypia) is defined as a neoplastic proliferation of the terminal ductal-lobular units by a few layers of cells with low-grade atypia [1]. The reported upgrade rate of malignancy after surgical excision of FEA lesions ranges between 13-67% [2]. The aim of this study was to compare preoperative clinical features in patients with breast cancer or Ductal Carcinoma in Situ (DCIS) and benign diseases on final pathology accompanied by FEA.

Materials and Methods: The records of patients who have breast lesions accompanying FEA on final pathology were reviewed as retrospectively from our computerized archives during the period of January 2010-March 2018. A total of 140 patients divided into two groups as breast cancer (BC) or DCIS (n=82, 58.6%) and the others (n=58, 41.4%). Data included preoperative clinical features that may be potential predictors with respect to breast cancer.

Results: All patients were female and the mean age was 49.4 \pm 10.4. There was no statistically significant difference between the groups in terms of presenting symptoms, tumor size on imaging studies, breast density, microcalcifications, BI-RADS 3 and 4a. Age \geq 50 and multifocal lesions on preoperative breast image were statistically significantly higher in patients with BC or DCIS (p=0.02, p=0.002, respectively)(Table 1).

Conclusion: These results show that age \geq 50 and multifocal lesions could be considered malignancy in patients who had breast lesions accompanying flat epithelial atypia. Larger and prospectively designed studies will be needed to confirm these data.

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STEREOTACTIC BREAST SURGERY, SURGE FOR THE BULLS-EYE

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Introduction: Screening mammography detects early and often nonpalpable breast cancer and has reduced breast cancer mortality over the past 3 decades. In women with suspicious breast lesions identified on screening mammography stereotactic breast biopsy is one of the methods for obtaining the tissue necessary for histopathologic diagnosis. Radiographic studies with BI- RADS category 4 (suspicious) or category 5 (highly suggestive of malignancy) assignment require biopsy of the lesion in question. the patient and the lesion must be evaluated to determine whether the stereotactic biopsy is clinically feasible as well as technically possible.

Patients and method: One hundered thirty nine consecutive women underwent stereotactic breast surgery for histological clarification of breast lesions that were classified as BI-RADS 4 or 5 according to the Breast Imaging Reporting and Data System. Non-palpabl masses such as diagnosed breast malinancy previously also underwent the same procedure.

Results: Stereotactic breast surgery was performed in 139 women. Afterwent the surgery specimen was confirmed as excised truly by the same radiologist. In 35/139 (25%) cases biopsy revealed a malignant result, including 4 ductal carcinomas *in situ* (DCIS), 4 lobuler carcinoma insutu and 19 invasive ductal breast cancers. The remaining 104/139 (74%) lesions included benign histologies like fibrocystic disease in 18 women. The other benign histologies revealed fibroadenomas in 43 cases, sclerosing adenosis in 13 cases. Histology revealed atypical ductal hyperplasia (ADH) in 4 women. These histologies were classified as B3 lesions (uncertain malignant potential). (Table 1)

Conclusion: Minimally-invasive procedures are usually performed in full consciousness of the patient. So it is not only important that the medical procedure is performed adequately regarding its technical aspects, but also the quality of life of the patient during and after such procedures is an essential issue. For either benign or malign disorders sterotactic breast surgery can be performed succsessfully.

GRANULAR CELL TUMOUR: A RARE CASE LOCATED IN THE AXILLARY ACCESSORY BREAST TISSUE

BREAST SURGERY

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Granular cell tumour (GCT) of the breast is a rare, usually benign neoplastic tumour that accounts for 5-6 % of all GCT's. The breast lesions are most commonly seen in women of reproductive age and they can perfectly mimic scirrhous carcinoma (fibrocarcinoma) of the breast. The lesions are painless, but may cause dimpling of the overlying skin and nipple retraction. They are usually firm to hard in concistency, and may be fixed to the underlying normal breast tissue. Since excluding malignancy in GCTs of breast is difficult by clinically and radiologically, they pose a diagnostic challenge for the clinician and the recommended treatment is wide local excision.1-2 %of the cases show malignant degeneration and these are suggested to be high grade sarcomatous neoplasias; they metastatize early and widely and their prognosis is poor. The definitive diagnosis of GCT is only possible histopathologically. To our knowledge, we report a case GCT of breast revealed in axillary accessory breast tissue during routine breast examination and treated with wide local excision. Surgeons should always be aware that GCT of the breast can mimic breast carcinomas in order to avoid performing unnecessary radical surgery in this group of patients.

P-052 Abstract: 165

PREDICTION OF NON-SENTINEL NEGATIVITY ACCORDING TO TUMOR FEATURES

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Introduction: It is known that axillary lymph node dissection in breast cancer surgery has no effect on survival and is applied for staging of the disease. Patients with metastasis after sentinel lymph node biopsy (SLNB) are indicated for axillary lymph node dissection (ALND). However, if metastasis is not detected in the non-sentinel lymph nodes, the patient is over-treated and axillary dissection morbidity is added. The aim of the study was to determine the effect of tumor characteristics in predicting negative non-sentinel lymph nodes without axillary dissection.

Methods: Between January 2011 and January 2017,115 patients diagnosed with breast cancer and whose sentinel lymph node biopsy were positive and had axillary lymph node dissection were included in the study. Two groups were formed in the study. Study group; patients whom SLNBs were involved with tumor and non-sentinel lymph nodes were negative of tumor after axillary lymph node dissection. Control group; patients whose both the SLNB and non-sentinel lymph nodes were involved with tumor. Non-sentinel lymph nodes negativity was predicted according to demographic, clinical and tumor characteristics of patients.

Results: Seventy (60,9%) of the 115 patients were included in the study group and 45 (39,1%) were in the control group. The median age of the patients was 54 (23-88) years. Median ages of study and control group were 54 and 51 years, respectively. When the study group and control group were compared with clinical and tumor findings; the study group was found to have significantly lower angiolymphatic invasion (ALI) and perineural invasion (PNI) (p=0,010 and p=0,000), more presence of papillary component with ductal carcinoma insitu (DCIS) (p=0,058), higher estrogen receptor (ER) positivity and less than 2 mm SLNB metastasis size (p=0,019 and p=0,017).

Conclusion: In the case of today's breast cancer surgery where the axilla surgery is trying to be more minimized; in the absence of angiolymphatic invasion, in the absence of perinodal invasion, in the case of ER (+) group tumors and of small metastasis in SLNB; even if SLNB is positive, non-sentinel lymph node metastasis may be ignored to exclude axillary surgery morbidity, and axillary dissection may not be performed.

P-054 Abstract: 171 P-055 Abstract: 177

MANAGEMENT OF RECURRENT PHYLLODES TUMORS: FIVE CASE REPORTS

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Introduction: Phyllodes tumors are rare fibroepithelial tumors of the mammary gland and constitute 0.3-0.9% of all breast tumors. Tumors have local recurrence feature. Although the factors playing role in local recurrence were not clear; histopathologic type and surgical margin positivity were accepted as recurrence factors by many authors. Treatment is surgical. Malignant phyllodes can spread hematogenously and metastasize to lung, bone, abdominal organs and axillary lymph nodes.

Methods:Between May 1996 and May 2015, fifteen patients with phyllodes tumors were treated surgically. After 255 months of follow-up, five of these 15 patients (33.3%) developed local recurrence. We present the histopathological and clinical features of these five patients.

Results: The initial surgical treatment of 15 patients was as follows; mastectomy (46,6%) in 7 patients, tumor extirpation (46,6%) in 7 patients, and subcutaneous mastectomy (6,6%) in 1 patient. Histopathologically, 7 (46,6%) of these 15 patients were diagnosed as benign, 3 (20%) were borderline, and 5 (33,3%) were malignant phyllodes tumors. The median age of the five patients with recurrence was 34 (range 14-50) years. The median tumor diameter was 11 (range 7-16) cm according to the data obtained from the initial pathology reports. Of the 5 patients with recurrence, 3 patients had benign, one patient had borderline and one patient had malignant tumor. Five patients who have locally recurred had surgically positive margins (% 38,4). A patient with malignant phyllodes tumor developed lung and liver metastasis after third local recurrence and died within 33 months (Table 1).

Conclusion: Phyllodes tumors have potential to locally recur. Factors affecting local recurrence are not clear. Although the treatment is mostly surgical, the extent of excision margin required in surgery is still controversial. Simultaneous breast reconstruction after mastectomy is not contraindicated. Adjuvant chemo-radiotherapy is not routinely used and can often be effective as a preventive approach for tumors with high risk factors (tumors greater than > 50 mm, which have stromal hypertrophy, mitosis more than 10 at large magnifications, or infiltrative borders) or palliative treatment for patients with unresectable relapses, and metastatic disease.

LOCO-REGIONAL RECURRENCE IN BREAST CANCER AND RISK FACTORS

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BREAST SURGERY

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Background: In the follow up of cases diagnosed and treated with breast cancer, loco regional recurrence (LRR) is seen in our everyday work in the hospital. LRR are clinically detectable by physical examination, imaging methods, throw cut biopsy or fine needle aspiration, etc. It may occur in the site of surgery, skin, chest wall and lymph node region (axilla, supra and infra clavicular, internal mammary chain).

Aim: To know LRR rates and to explore prognostic factors for loco regional failures (LRF) in cases diagnosed and treated for invasive breast cancer. All cases had different type of breast surgery and adjuvant treatment (chemotherapy and radiotherapy).

Patients and Methods: There were analyzed cases treated in our centers for a period of 5 years, 839 patients (all cases women) 74% were underwent to modified radical mastectomy and 19 % with oncoplastic surgery. 34 % of patients resulted with node-negative disease and 65.5% of patients with node-positive disease. Median follow-up is 3 years.

Results: LRR was detected in 5% of patients, the most common area was the chest wall with 66.6% of cases, followed by the supra/ infra clavicular region with 26.3% and the axilla 7.1%. Tumor relapse at the internal mammary region was not reported. In women with node-negative disease, factors associated with increased risk of LRR were vascular invasion (VI) and tumor size greater than 2 cm for premenopausal and VI for postmenopausal patients (p<0.04). The number of recurrences, the size of the largest recurrence, and the time interval between surgery and recurrence (disease-free interval) had definite prognostic significance. LRR varied by molecular subtype as approximated using ER, PR, and HER-2 status. Local recurrence was particularly low for HER-2 positive and high for Luminal B (p<0.004). RT to the chest wall and supraclavicular fossa was performed in patients with ≥4 positive nodes. With 1-3 positive nodes, chest wall RT was considered in patients aged <40 years with vascular invasion. In all LRR cases: 57.1% patients didn't receive RT and 42.9% received RT. Most of the patients was assisted for psychological support by social worker.

Conclusion: Causes that induce loco regional recidive in breast cancer patients include tumor-related factors, such as vascular invasion and larger size, situation of metastases in axilla, etc. It is important to have a multidisciplinary team consultation before any treatment of such patients to have reduced number of LRR.

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MEDICAL ONCOLOGY

P-056 Abstract: 10 P-058 Abstract: 66

THE EXPRESSION OF TOPOISOMERASE IIA IN YOUNG BREAST CANCER PATIENTS (<35 YEARS) AND ITS RELATIONSHIP WITH PROGNOSIS.

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Objective: There was no consensus on the the relationship between topoisomerase $II\alpha$ Topo $II\alpha$ and the prognosis of young breast cancer patients. Our study aimed to assess the long-term prognostic and predictive value of Topo $II\alpha$ expression in young patients (<35 years) with breast cancer.

Methods: A total of 131 young breast cancer patients from 2001 to 2006 were retrospectively analyzed at our institute. We finally enrolled 50 patients for Topo IIα expression detection by immunohistochemistry technology. The association of Topo IIα expression and clinicopathological features were studied by Chisquare test. The 10-year disease free survival (DFS) and overall survival (OS) of these 50 patients were calculated by Kaplan-Meier analysis. The Cox regression model was employed for multivariate analysis.

Results: There were 42 patients (84%) with Topo IIa positive in the patients we analyzed. There was no correlation between Topo IIa protein expression and age, tumor size, lymph node metastasis, TMN stage, molecular typing, estrogen receptor (ER), progesterone receptor (PR), human epidermal growth factor receptor-2(HER-2) (P> 0.05). The expression of Topo II α was only positively correlated to Ki67 ($r = 0.533 \cdot P = 0.002$) as displayed by Spearman's correlation test. The 1-, 3-, 5-, 10-year DFS in Topo Ilα positive vs. negative group were 95.2% vs. 87.5%, 76.2% vs. 37.5%, 66.7% vs. 12.5% and 64.3% vs. 12.5%. The difference between two groups was statistically significant ($c^2 = 5.056$, P =0.025). There were 16 (32%) death in our follow-up, the median OS (mOS) of Topo IIa positive and negative group were 144 months and 105 months ($c^2 = 1.652$, P = 0.199). In the multivariate Cox regression model, Topo IIa expression [RR = 0.341,95% Cl:0.126-0.919, P = 0.033] was an independent prognostic factor for DFS in young patients with breast cancer. Also, TNM staging [RR = 5.920,95%Cl:1.775-19.738, P=0.004] and lymph node metastasis [RR=5.411,95%CI:1.116-26.222, P=0.036] were both independent predictors for OS.

Conclusions: Topo II α was more likely to have high expression in young breast cancer patients, and positively correlated to ki67 expression. Patients with high expression of Topo II α presented a favorable DFS.

BURDEN OF GENE MUTATIONS IN CARIBBEAN WOMEN WITH BREAST CANCER

MEDICAL ONCOLOGY

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Purpose of Study: Identifying mutations in breast cancer genes (BRCA1/2, PABL2) has important clinical implications on a woman's lifetime susceptibility for breast cancer development. Nearly 10% of immigrants to the United States come from the Caribbean and few studies exist that examine breast cancer gene mutations in African-Caribbean women with existing breast cancer. The purpose is to review breast cancer epidemiology statistics and prevalence of breast cancer genetic mutations in this cohort.

Summary of Results: Although breast cancer cumulative incidence risk of Caribbean women (5-9%) appear to be less than that of the US women (10%), the cumulative mortality risk in the Caribbean cohort (up to 2.7%) appears greater than that of the US (1.6%). Through a PUBMED literature search, we have also identified five cross-sectional cohort studies on breast cancer patients of Caribbean women who have undergone genetic mutation testing for BRCA1/2 and PALB2 with 27% cases in Bahamas (N=214 women); 2.8% cases in Jamaica (N=179 women); 10.4% cases in Trinidad/Tobago (N=268 women); none in Barbados (N=118 women); 2.6% in Cuba (N=307 women). No study accounted for ascertainment bias.

Conclusions: This study summarizes the estimate of breast cancer incidence and mortality in Caribbean women and known prevalence of BRCA1/2 and PALB2 breast cancer gene mutations in this cohort. This is critical as part of a formal genetic risk assessment and counseling of patients with breast cancer. Further research and understanding the contributions of inherited gene mutations will guide the optimal health policy in breast cancer screening and risk management.

P-059

MEDICAL ONCOLOGY

Abstract: 126 P-060 Abstract: 130

EVALUATION OF PSYCHOLOGICAL DISTRESS OF EARLY BREAST CANCER(BC) PATIENTS IN THE ALEXANDER MONRO HOSPITAL(AMH)

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Objective: To examine the prevalence of the psychosocial problems in women with early BC in AMH.

Method: In the period 2013 to 2016 patients (n=750) received before start and after treatment Psychosocial Distress Questionnaire(PDQ) – Breast Cancer (PDQ-BC). The depressive symptoms (DE) and anxiety symptoms examined (AN). The anxiety was divided in momentane anxiety (AS) and dispositionel anxiety (AT). Only Ninety-six patiënts filled the PDQ-BC before and after treatment.

Results: 26% of the patients are <50 years (I), 59% of the patiënts are 51-65 years (II), 13% of patients are 66-75 years (III).

In (I)80% had symptoms of depression before and after treatment resp. in (II) 79% before treatment and 75% after treatment, resp in (III) 67% before and after treatment.

Anxiety (AS) in (I) before and after treatment 24% resp. in (II) (AS) 39% before treatment and after treatment 19% resp in (III) AS in (III) 41% before treatment and 8% after treatment.

Anxiety (AT) in (I) 35% before and 32% after treatment resp.in (II) AT 40% before and after treatment and in (III) AT 21% before treatment and 25% after treatment.

In 33 % of patiënts indicated to refer a psychologist, 56% followed the advice.

Conclusion: Especially patients under 65 years experienced many psychosocial issues. After completion of treatment is the spiritual state of mind of patients improved. Early screening and counseling is important.

CEREBELLAR ATAXIA AND BREAST CANCER: PARANEOPLASTIC SYNDROME OR SIDE EFFECT?: ABOUT A CASE

MEDICAL ONCOLOGY

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Paraneoplastic cerebellar degeneration is part of a rare spectrum of neurological syndromes whereby gynecological, lung or breast cancers present primarily with neurological manifestations. Also, cerebellar disorder can be a rare side effect observed with trastuzumab. The presence of onconeural antibodies and PET scanning help in the challenging diagnosis of these conditions but despite the treatment of the primary cancer, the prognosis for the neurological symptoms is poor. We report the case of a young woman aged 39, asthmatic, with no family disease history. The patient is treated since August 2017 for an invasive ductal carcinoma of the right breast, initially classified T2N1M0. She was treated with radical mastectomy and axillary lymph node dissection. Her pathological evaluation revealed an invasive ductal carcinoma, grade two, that was estrogen/progesterone receptor negative, human epidermal growth factor receptor 2 (Her 2) positive, KI67 50%(via immunehistochemistry). Adjuvant treatment included 5-fluorouracil, epirubicin, cyclophosphamide, docetaxel (FEC-D)chemotherapy with 03 cycles of trastuzumab (biosimilar) then trastuzumab alone (for 15 cycles) and adjuvant radiotherapy (RT). At the end of the 9th cure, she presentedprogressively worsening vertiginous giddinessand unsteadiness. Neurological examination found gaze-evoked rotatory nystagmus, bilateral dysmetria and dysdiadochokinesia, dysarthria and gait ataxia. To diagnose the cerebellar disorder, biochemical, cerebrospinal fluid(serum anti-neuronal antibodies anti-Yo particularly) and radiological tests were performed.

Conclusion: the need for early suspicion, diagnosis and appropriate intervention in cerebellar ataxia should be emphasized, while more investigation into theetiology and treatment of severe disability-inducing paraneoplastic disorders is warranted.

MEDICAL ONCOLOGY

P-061 Abstract: 132 P-062 Abstract: 139

CHOROIDAL METASTASIS OF MAMMARY CANCER: A CASE REPORT

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Introduction: Intraocular metastasis is the most common form of intraocular malignancy. It is estimated to occur in 5% to 30% of patients with systemic malignancy; whose sources are most often, breast cancer and lung cancer.

Observation: We report the case of a 57-years-old woman, single with no particular pathological antecedents, treated since November 2016 for aninvasive ductal carcinomapoorly differentiated of the left breast RH (+), HER 2 (+++), Kl67 20%; initially classified T3 N1M1 with multiple pulmonary, hepatic metastases, peritoneal carcinomatosis and diffuse bone metastases. The patient has been motionless (excruciating pain) in a wheelchair; Our course was to start a typical palliative chemotherapy (docetaxel + doxorubicin + cyclophosphamide) 03 cures plus denosumab, then continue treatment with 03 cures docetaxel + trastuzumab then trastuzumab, and depending on the response add chemotherapy while continuing the denosumab. After the 6th treatment, the patient presented a visual blur. Orbito-cerebral MRI revealed a left choroidal metastasis of 11 mm in diameter with cerebellar punctuate metastases.

Discussion: Breast cancer is the malignancy that produces the most metastases to the uvea; it accounts for up to 50% of all intraocular metastatic tumors. The median survival time also varies according to the type of primitive condition diagnosed (22 months in breast cancer cases).

Conclusion: Timely assessment, accurate diagnosis, and early treatment can help improve the quality of life for these patients.

MANAGEMENT OF PABC: PREGNANCY ASSOCIATED BREAST CANCER, A CASE REPORT AND A LITERATURE REVIEW.

MEDICAL ONCOLOGY

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The incidence of PABC is 1 in every 3000 pregnancies, It is often associated with more biologically aggressive disease, though the underlying reasons for this are unclear.

Women are younger, having more locally advanced disease, and less likely to have hormone receptor expression, with a trend toward HER2-positive and higher grade disease.

The diagnosis of breast cancer in pregnancy is based on clinical examination, histology, mammography and breast ultrasound.

It presents a challenging clinical situation, the decision of treatments must balance the need for treatment with the impact of treatment, Although pregnancy termination may be considered during treatment planning.

We report a case of a young 20 weeks pregnant 27 old women with locally advanced breast cancer to describe treatment, fetal surveillance, delivery management, and cancer surveillance.

P-064 Abstract: 33 P-065 Abstract: 39

THIOL-DISULFIDE HOMEOSTASIS IN BREAST CANCER PATIENTS

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Objective: The aim of our study is to assess thiol-disulfide homeostasis (TDH), which is a biomarker of systemic oxidative stress, in breast cancer patients.

Materials and Methods: 37 breast cancer patients and 31 age-matched healthy volunteers were enrolled in this study. Serum native thiol, disulphide, and total thiol levels and disulfide/native thiol, disulfide/total thiol, and native thiol/total thiol ratios were analyzed using a novel colorimetric method.

Results: Serum native thiol level was statistically significantly lower in breast cancer patients (350.39 ± 7.15) than in healthy controls (380.60 ± 7.35) (p=0.008). Serum disulphide level was statistically significantly higher in breast cancer patients (24.96 ± 0.85) than in healthy controls (19.25 ± 1.34) (p=0.002).

Conclusion: To our knowledge, this study is the first study in the literature that investigated thiol-disulphide homeostasis in breast cancer patients. We have concluded that an alteration in thiol-disulphide homeostasis due to oxidative stress is likely to have a role in the pathogenesis of breast cancer.

ASSESSMENT OF THE READABILITY OF PATIENT EDUCATION MATERIALS OVER INTERNET ON BREAST CANCER

OTHERS

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Introduction: The Google search engine is a widely used resource for accessing health-related patient education texts. Therefore accessible information in the texts should be accurate, up-to-date and appropriate to the general public health literacy level. In this research, we aimed to analyze the readability of patient education texts prepared for breast cancer presented on internet and to evaluate the content of texts.

Materials-Methods: A total of 200 web sites at Google search engine were evaluated using the terms "breast cancer, breast mass". Patient education texts with less information than ten sentences and chat sites, forum sites and commercial blog sites were excluded from the study. Web sites were separated in to 2 group regarding the field of expertise who prepared the texts such as as general surgeons and non-general surgeon. The text in these sites was transferred to the Microsoft Word program. Average word count, average syllable number and words with an average syllable number of 4 and above were calculated. The average readability level was analyzed using Ateşman and Bezirci-Yilmaz readability formulas. The texts were also evaluated in terms of the risk factors identified in the development of breast cancer, the presence of examination and screening methods that could be used in early diagnosis.

Results: A total 64 web sites that are in compliance with the research criteria were evaluated. The overall mean reading level of the texts was found moderate using the Ateşman formula and college level according to Bezirci. There were no significant difference between the two groups regarding the readability levels. In the content evaluation, the two groups are similar; only 18 Web sites had both the risk factors identified in the development of breast cancer and the methods of screenings.

Conclusion: Readability of breast cancer information on the Internet is at a college level. Only a fourth of the texts were found to be sufficient in terms of content. Recreating patient education texts in accordance with the level of public health literacy may contribute more effective breast cancer screening and therefore early cancer diagnosis.

S-067 Abstract: 48 P-068 Abstract: 49

THE EFFECT OF SAMPLING METHOD ON DETECTED INTRATUMOR HETEROGENEITY IN NEXT GENERATION SEQUENCING

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Tumor heterogeneity is a consequence of clonal evolution, resulting in a fractal-like architecture with spatially separated main clones, sub-clones and single-cells. As sequencing an entire tumor is not feasible, we ask the guestion whether there is an optimal clinical sampling strategy that can handle heterogeneity and hypermutations? Here, we tested the effect of sample size, pooling strategy as well as sequencing depth using next-generation sequencing of fifteen tumor samples. Our results show that sequencing from spatially neighboring regions show similar genetic compositions, with few private mutations. Pooling samples from multiple distinct regions of the primary tumor did not increase the overall number of identified mutations but may increase the robustness of detecting clonal mutations. Hypermutating tumors are a special case, since increasing sample size can easily dilute sub-clonal private mutations below detection thresholds. We found that merging samples from primary and metastatic samples allows high precision, simultaneous identification of primary and subsequent mutations. Increasing sequencing depth over 100x only fuels sub-clonal mutation detection. In brief, more sophisticated sampling schemes did not increase, at least in our hands, the information content. In view of the limitations of present tools and technologies, currently favored sampling practices combined with high coverage (100-300x) sequencing will produce optimal results in the clinical setting.

OTHERS

PROMPTER METHYLATION CORRELATES WITH DOWNREGULATION OF E-CADHERIN GENE WITH BREAST CANCER PATIENTS IN NORTH WESTERN

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IRAN

Breast cancer is the most common cancer in women around the world. E-cadherin is a well-known tumor suppressor gene, and it's down regulation expression in tumor cells, in association with the epithelial–mesenchymal transition (EMT). Loss of E-cadherin gene (CDH1) function by genetic or epigenetic alteration leads to tumorigenesis. The aim of this research is study of promoter methylation pattern of the CDH1 gene and its possible correlation with the expression of E-cadherin in breast cancer in Azeri population of Iran.

In this study, 100 tumoral and non-tumoral breast tissue samples were collected from individuals who underwent at north western of Iran hospitals. Promoter methylation pattern of E-cadherin was studied by methylation-sensitive high resolution melting (MS-HRM) analysis of bisulfite-modified DNA. Real-time PCR was performed for expiration of E-cadherin gene.

Our result was showed that E-cadherin gene prompter hypermethylation correlates with down regulation of E-cadherin gene in patients with breast cancer.

The degree of methylation was measured using MS-HRM can have potential as epigenetic marker.

P-069 Abstract: 55 P-070 Abstract: 56

MIR-135A EXPRESSION ANALYSIS IN BREAST CANCER IN NORTH WESTERN OF IRAN

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Breast cancer is the most common malignant disease amongst women. miRNAs regulate gene expression and can play an important role during cancer development. The role of miR-135a in breast cancer is unknown. For this reason, this study investigated the expression of miR-135a in breast cancer.

Seventy breast tumoral and non-tumoral tissues were collected. RNA was extracted and expression of mir135a was performed by Real-time PCR.

Results show down expression significantly of miR-135 in breast tumoral cell in comparison to normal tissue.

Our study demonstrates that miR-135a regulates cell proliferation and suggests that miR-135a potentially can act as a tumor suppressor.

MIR-183 EXPRESSION ANALYSIS IN BREAST CANCER IN NORTH WESTERN OF IRAN

OTHERS

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Breast cancer is the most common malignant disease amongst women. miRNAs regulate gene expression and can play an important role during cancer development. The role of miR-183 in breast cancer is unknown. For this reason, this study investigated the expression of miR-183 in breast cancer.

Seventy breast tumoral and non-tumoral tissues were collected. RNA was extracted and expression of mir183 was performed by Real-time PCR.

Results show down expression significantly of miR-183 in breast tumoral cell in comparison to normal tissue.

Our study demonstrates that miR-183 regulates cell proliferation and suggests that miR-183 potentially can act as a tumor suppressor.

P-071 Abstract: 59 P-072 Abstract: 64

CLINICAL CHARACTERISTICS AND TREATMENT APPROACH OF IDIOPATHIC GRANULOMATOUS MASTITIS

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Objective: The purpose of this study was to evaluate the clinical characteristics, treatment approaches, and outcome of the patients with idiopathic granulomatous mastitis (IGM).

Methods: The patients with IGM were reviewed retrospectively from 2011 to 2017. Event free follow up rate was estimated by using Kaplan-Meier analysis, and follow up differences for prognostic factors were compared by using the log-rank test. Multivariate analysis was performed by using Cox-regression method.

Results: There were 69 patients with histologically proven IGM with median age 34 years (range, 21-68 years) at diagnosis. The majority of the symptoms and signs were breast lump, pain, erythema and axillary lymphadenopathy. The most common extramammary finding was eritema nodosum. The most common treatment approaches were only antibiotic or antibiotic plus drainage. The estimated event free follow up rate was 74.7%. It varied according to parity distribution, erythema, extramammary manifestation, and treatment modalities. Cox regression analysis showed that parity distribution, extramammary manifestation and treatment.

Conclusion: This is one of the largest series in a single center. Factors affecting event free follow up rates were parity, erythema, extrammamary manifestations and treatment modalities.

PERIDUCTAL MASTITIS AND DUCT ECTASIA IN TURKISH WOMEN

OTHERS

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Purpose: Periductal mastitis and duct ectasia, affecting the major breast ducts, are benign diseases of the breast. The aim of this study was to evaluate the clinical characteristics, treatment approaches, outcomes and factors affecting outcomes of the patients diagnosed as periductal mastitis and duct ectasia.

Material and Methods: Between 2011 and 2017, patients with histologically proven periductal mastitis and duct ectasia were evaluated retrospectively. The patients' epidemiologic and clinic characteristics, microbiologic studies, treatment modalities, complications and follow-up data were recorded.

Results: Twenty two patients with histologically proven periductal mastitis (n: 6) or duct ectasia (n: 16) were enrolled in this study.

There were 16 patients with duct ectasia with median age 45.5 years (range, 33-67 years) at diagnosis. The majority of the symptoms in patients with duct ectasia were mass (n: 8, 50%) and pain (n: 5, 31.3%). The most common finding was periaerolar mass. Localisation of the lesions were central (n: 11, 68.8%).

There were 6 patients with periductal mastitis with median age 46 years (range, 31-62 years). The major symptoms were mass (n: 4, 66.7%) and pain (n: 3, 50%). The most common sign was swelling (n: 3, 50%). Localisation of the lesions were peripheral (n: 4, 66.7%).

Conclusion: In this study we could not find any difference in patients between periductal mastitis and duct ectasia in terms of demographic and clinical features.

P-073 Abstract: 73 P-074 Abstract: 82

FREQUENCY OF HLA ANTIGENS IN PATIENTS WITH IDIOPATHIC GRANULOMATOUS MASTITIS

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Purpose: Idiopathic granulomatous mastitis (IGM) is a rare benign inflammation of the mammary gland. Significant proportion of IGM related publications in English literature is made up of countries such as Turkey, China, South Korea, and Saudi Arabia. The present study aimed to determine the distribution of human leukocyte antigens class I and class II in patients with idiopathic granulomatous mastitis in order to explain this geographical distribution.

Methods: The study included 31 patients diagnosed with idiopathic granulomatous mastitis and 35 controls of healthy donor candidates. The HLA class I and class II antigens were studied in the isolated DNA samples using the polymerase chain reaction sequence-specific oligonucleotide probes.

Results: The frequencies of HLA-A*10, HLA-B*18 and HLA-DR*17 antigens were significantly higher in the patient group than in the control group (12.9% vs 0%, p=0.04, 12.9% vs 0%; p=0.04; and 12.9% vs 0%; p=0.04, respectively).

Also, the frequencies of HLA-A*23, HLA-B*35, HLA-B*51 and HLA-B*61 in the patients without recurrence or those who respond to the treatment are higher than control group (30% vs 5.7%, p=0.02; 5% vs 28.6%, p=0.04; 5% vs 34.3%, p=0.01; 15% and 0%, p=0.04, respectively).

The patients' with arthropathy or erythema nodosum HLA-A*23 frequencies were higher than control groups (37.5% vs 5.7%, p=0.037).

Conclusion: It was determined that HLA-A*10, HLA-B*18 and HLA-DR*17 can play a critical role in IGM. HLA studies may help to explain the etiopathogenesis of IGM especially in this geographical distribution but more studies are needed.

CHARACTERISTICS OF BREAST CANCER PATIENTS WITH SYNCHRONOUS OR METACHRONOUS TUMORS

OTHERS

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Purpose: Breast cancer is one of the most common malignancies among women worldwide. The prognosis is poor in patients with second primary cancers. Herein we report six breast cancer patients with synchronous or metachronous tumors in order to discuss diagnostic, treatment and follow-up challenges.

Material and methods: Between 2014 and 2017, clinical features, treatment details, and outcomes of operated breast patients with synchronous or metachronous second primary cancers were evaluated retrospectively.

Results: Among 368 breast cancer patients operated in this period, six patients (1.6%) had synchronous or metachronous second primary tumors. The age at diagnosis ranged from 34 to 69 years (median, 53 y).

In four patients, synchronous second primary tumor developed. The breast cancer was histopathologically invasive ductal carcinoma (n: 2) and lobular breast carcinoma (n: 1). One patient had bilateral breast cancer with invasive ductal carcinoma in one breast and lobular breast carcinoma in the other breast. The types of the synchronous second primary tumors were renal clear cell carcinoma (n: 2), thyroid papillary carcinoma (n: 1) and metaplastic breast cancer with osseous and chondroid differentiation (n: 1).

In two patients, operated for invasive ductal carcinoma, metachronous second primary tumor developed. The intervals from diagnosis of breast cancer to the second primary tumor were 3 and 4 years. The metachronous tumors were thyroid papillary carcinoma.

Conclusion: Multiple primary cancers are an issue of concern when considering treatment planning and follow-up which should be discussed and resolved by multidisciplinary team.

P-075 Abstract: 95 P-076 Abstract: 109

A PROSPECTIVE STUDY ABOUT CHANGE OF SLEEP, ANXIETY, DEPRESSION, AND QOL IN EACH STEP OF BREAST CANCER PATIENTS

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Background: Quality of sleep (QoS), anxiety, depression and quality of life (QoL) are common issues among breast cancer patients. Prospective longitudinal studies of QoS, anxiety, depression and QoL in breast cancer patients are lacking. The aim of this study is to determine whether there is a proper treatment point associated with QoS, anxiety, depression and QoL during early treatment of breast cancer patients.

Methods: We used four self-report questionnaires about QoS, anxiety, depression and QoL. QoS was measured using Pittsburgh Sleep Quality Index, anxiety was measured with Beck Anxiety Inventory, depression was measured with Beck Depression Inventory, and QoL was measured with Quality of Life Enjoyment and Satisfaction Questionnaire - Short Form, respectively. Patients were assessed at the time of surgery, at the beginning of chemotherapy and the end of chemotherapy. Clinicopathologic information was collected for analysis.

Result: 52 patients were enrolled in this study, and 29 completed 3 times of self-report questionnaires. QoS, anxiety and depression showed no difference through the early treatment period. However, QoL changed during the same period (P = 0.004). Type of breast surgery (total mastectomy vs. breast conserving surgery) showed relationship with QoS through all the treatment period and with anxiety only at the time of surgery (P = 0.002). total mastectomy group showed better result.

Conclusion: Breast cancer patients experience sleep disturbance, anxiety, depression and loss of QoL. During the period of treatment, these do not change significantly. but, these symptoms are often overlooked. Providing sufficient explanation for the treatment, prognosis and mental support of the breast cancer prior to the treatment of breast cancer will help to improve patient's QoS, anxiety, depression and QoL.

IS COMPRESSION THERAPY RISKY FOR CARPAL TUNNEL SYNDROME IN PATIENTS WITH BREAST CANCER RELATED LYMPHEDEMA?

OTHERS

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Purpose: Multi-layer bandaging used in complex decongestive therapy (CDT) may increase tissue pressure resulting nerve entrapments. The aim of this study was to show possible median nerve damage at the level of carpal tunnel because of CDT in patients with breast cancer-related lymphedema (BCRL). Eightytwo arms of 41 patients with BCRL were included. Mean age was 56.05 (8.16) years and all stages of lymphedema were equally included. Fifteen sessions of CDT was applied to all patients. The calculated volume of extremities, the quality of life (cancer adaptation of Ferrans-Powell), neuropathic pain (DN-4), and disability (Q-DASH: quick-disability of arm, shoulder, hand) tests were recorded before and after therapy. Bilateral skin and subcutaneous tissue thicknesses of volar and dorsal sides (Fig1a and 1b) and median nerve cross-sectional area (CSA) at the level of carpal tunnel (Fig 2) were measured using GE Logic 5 ultrasonography (US), before and after therapy

Results: Carpal tunnel syndrome (41.37%) and polyneuropathy(10.34%) were common findings confirmed by electromyography. Neuropathic pain profile was also found 34.14% of patients. The arm volume of affected side, quality of life, and skin and subcutaneous tissue thicknesses were improved after therapy (p<0.05). However, median nerve CSA, the neuropathic pain and Q-DASH scores were not changed after therapy.

Conclusions: Although lymphedema is painless condition, neuropathic pain and carpal tunnel syndrome should not be ignored in patients with BCRL. US is an alternative, precise and high-technologic method for evaluating treatment response. CDT is effective and safe treatment in according to volumetric calculations, US measurements of tissue thicknesses and median nerve size.

P-077 Abstract: 113 P-078 Abstract: 119

NEUROPATHIC PAIN AND RADIAL NERVE EDEMA AT THE LEVEL OF ELBOW IN BREAST CANCER RELATED LYMPHEDEMA

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Purpose: While compressive treatments are the mainstay in the management of breast cancer related lymphedema (BCRL), their possible impact on the upper limb peripheral nerves has not been studied before. Therefore, we aimed to ultrasonographically assess the upper limb nerves in patients who had BCRL and were currently under compressive treatment.

Ninety-four arms of 47 female patients (aged 54.12±7.92 years) with BCRL were evaluated. Calculated volume of extremities, visual analogue scale-pain, quality of life index (QLI), neuropathic pain (DN-4) and disability (Q-DASH: quick-disability of arm, shoulder, and hand) scores were recorded. The ultrasonographic cross-sectional area (CSA) measurements of radial, median and ulnar nerves were performed at the elbow level, bilaterally.

Results: The mean percentage of volume difference was 28.29% in the upper extremities. Radial and median nerve CSA measurements in the affected elbow were slightly larger (17.9% and %13.7) than the normal side (p=0.019, and p=0.034, respectively). Totally, 16 patients (34.04%) had neuropathic pain correlated with the arm disability (r= 0.64, p=0.0001), the percentage of radial nerve enlargement (r=0.41, p=0.004), and psychologic item of QLI (r=-0.345, p=0.022). Radial and median nerves could be minimally affected due to compressive treatments in BCRL.

Conclusions: One of three patients with BCRL had neuropathic pain related with disability and radial nerve enlargement in affected side. Further prospective studies with larger sample size are awaited.

UNMET NEEDS AND RELATED FACTORS OF KOREAN BREAST CANCER SURVIVORS: A MULTICENTER, CROSS-SECTIONAL STUDY

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OTHERS

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Purpose: Identification of specific needs in patients with cancer is very important to provide patient-centered medical service. The aim of this study was to investigate the unmet needs and related factors of Korean breast cancer survivors. A multicenter, cross-sectional, interview survey was performed to 333 Korean breast cancer survivors. The Comprehensive Needs Assessment Tool for Cancer Patients was administered to survivors who gave written informed consent to participate. Data were analyzed using t-test, ANOVA and multiple regression analysis.

Results: The highest domain of unmet need was 'information and education' (mean \pm SD ; 1.70 \pm 1.14) and item was 'Needed help in coping with fear of recurrence'(2.04 \pm 1.09). Unmet needs were correlated with age, duration from diagnosis, stage, multiplicity, marital status, job, operation method, stress and problems with EQ5-D. In multiple regression analysis, the 50s group showed a higher level of recognition for physical symptom need and no job group expressed greater need for information and education. Survivors with multiplicity were associated with greater healthcare staff and physical symptom needs. Stress group showed a higher level of recognition for all needs excluding religious support need.

Conclusion: Most prevalent unmet need in Korean breast cancer survivors was the 'information and education' domain. Our findings revealed more vulnerable breast cancer survivors with unmet needs and precision-made approach to satisfying unmet needs to these survivors should be recommended.

P-079 Abstract: 133 P-080 Abstract: 135

PROVIDED SERVICES FOR BREAST CANCER PATIENTS IN ONCOLOGICAL REHABILITATION

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Purpose: Aim of this study was to analyze the previous treatments, lymphedema frequency and provided services for the breast cancer (BCa) patients at Gazi University, Faculty of Health Sciences, Oncological Rehabilitation Unit.

Method: The BCa patients applied between 2009-2018 to get oncological physiotherapy and rehabilitation services were analyzed, retrospectively. The data including type of the operation, history of chemotherapy or radiotherapy, presence and severity of lymphedema were reported. Severity of lymphedema was assessed by circumference measurements classified as none (<1cm), mild (≥1cm,<3cm), moderate (≥3cm,≤5cm), and severe (>5cm) according to differences of both limbs at least in 3 different points.

Results: A total of 180 patients between 53.29±10.22 years of age was diagnosed as unilateral (n:164; 91.1%) or bilateral (n:16; 8,9%) BCa. The patients underwent mastectomy (n:136; 75.5%) or breast-conserving surgery (n=44; 24.5%); chemotherapy (n:151; 83.9%) and radiotherapy (n:120; 66.7%) as previous cancer treatments. There was lymphedema in 149 patients (82,7%). The severity of lymphedema was classified as 8.3% none (n:15), 36.1% mild (n:65), 18.3% moderate (n:33) and 28.3% severe (n:51). The patients who has bilateral lymphedema could not be assessed. Different oncological rehabilitation modalities as well as Complex Decongestive Physiotherapy were applied to 33 (18.3%) outpatients. 147 (81.7%) patients achieved home-based physiotherapy program and recommendations.

Conclusions: This study emphasizes the various needs of different groups of BCa patients for oncologic physiotherapy and rehabilitation services for secondary problems. Both active treatment approaches and home based rehabilitation programs demanded by BCa patients. This kind of specialized units are needed to be accumulated.

DEVELOPMENT OF THE PSYCHOSOCIAL DISTRESS QUESTIONNAIRE – BENIGNE BREAST DISEASE (PDQ-BBD)

OTHERS

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Background: This study is designed to develop the Psychosocial Distress Questionnaire – Benign Breast Disease (PDQ-BBD), a screening instrument for patients with nonmalignant breast disease.

In literature, considerable attention is paid to depression and anxiety in breast cancer patients, but this information is absent for benign breast disease. However, we suggest that the psychological burden of having benign breast disease, with or without an elevated risk of developing breast cancer, can become disabling for some women. Information about the burden is deficient, however no instruments to measure psychosocial distress in this patient group are available.

Material and Methods: Patients receive the PDQ-BBD. After the questionnaire is returned the patients participate in a focus group interview to investigate if they experience the questionnaire as complete.

The study was done with female patients who underwent a mastectomy of one or both breast(s) without the presence of breast cancer at the moment of treatment.

Results: Twenty-two completed PDQ-BBDs were returned: 3 patients with mastalgia, 3 patients with recurrent inflammation/benign breast disease, 5 patients with germline mutation from which one also had a history of breast cancer, and 12 patients with a history of breast cancer. From this population 7 patients participated in the first focus group interview. This focus group mainly existed of patients with a history of breast cancer (71,4%). In this interview the opinions of the group with a history of malign breast disease differed very much from the group with benign breast disease, especially concerning anxiety and background information. As the group with a history of breast cancer addressed anxiety as very important, the group with benign breast disease addressed the background of the disease (how long they had complaints before visiting a doctor) as very important.

Conclusions: During the first interview there was a clear difference between the group with a history of breast cancer and the group with benign breast disease. The initial data suggests that the two groups are not comparable, and the PDQ-BBD may need adjustment.

P-081 Abstract: 163 P-082 Abstract: 167

THE INVESTIGATION OF POLYMORPHISMS INVOLVED IN TURKISH BREAST CANCER PATIENTS

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Purpose: The studies about breast cancer genetics showed that biomarkers are predictive for understanding disease progression, recurrence or severity. We investigate 13 single nucleotide polymorphisms (SNPs) as; *ZMIZ1* (rs704010 C/T); *MAP3K1* (rs889312 A/C); *FGFR2*(rs2981579 G/A); *CCDC170* (rs3757318 A/G); *TOX3* (rs3803662 G/A); *SLC4A7* (rs4973768 C/T); *MKL1* (rs6001930 T/C); *TERT* (rs10069690 C/T); *PTHLH* (rs10771399 A/G); *ZNF365* (rs10995190 G/A); *BRCA2* (rs11571833 A/T), *FTO* (rs17817449 T/G) in Turkish cohort group, which were associated with breast cancer in previous studies.

Materials and Methods: A total of 250 peripheral blood samples (150 patient; 100 control) were genotyped using Roche 480 Real-Time PCR. Immunohistochemical stainings and ER, PR, Cerb-B2, E-Kadherin, Ki67 labeling of the pathology specimens were performed by the same pathology centre. Statistical analysis of acquired genotypes and allele frequencies were compared by using Fisher's exact test and p-values of p < 0.05 were considered significant.

Results: The obtained data showed that rs4973768, rs10771399, rs17817449 SNPs were positively corelated with breast cancer. Although rs8170, rs6001930, rs10995190 SNPs were mentioned as strongly linked to breast cancer risk in a several studies, they are found to be significant in both patient and control groups in our study.

Conclusions: Previous studies revealing the relationship between some SNPs and disease have contributed to literature in better understanding of breast cancer. In this research, we exhibited the relationship between some SNPs and breast cancer to shed light on carcinogenesis. These breast cancer risk-associated variants need to be repeated in large study groups.

EVALUATION OF SATISFACTION AND QUALITY OF LIFE IN EXTERNAL BREAST PROSTHESIS IN MASTECTOMY PATIENTS: SYSTEMATIC REVIEW

OTHERS

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Purpose: It was conducted in order to review the researches on the satisfaction and quality of life of women using external breast prosthesis and to shed light on future researches.

Materials and methods: In the descriptive study, 'external breast prosthesis', 'satisfaction' and 'quality of life' keywords were used on Pubmed, MEDLINE, Science Direct and Web of Science databases 19 articles published between 2008-2018 were discussed.

Results: Satisfaction with the use of external mammary prostheses was found to be high, with an increase in body image and self-esteem. They feel that they feel incomplete and they use external breast prosthesis because of their shame. Mastectomy showed an increase in satisfaction rate after 5 years. There have been some reports of dissatisfaction about weight and comfort. It has been reported that the satisfaction of using external breast prosthesis does not affect the sexuality of the mastectomy women. Education, age and urban condition are mentioned as powerful factors affecting the use of prosthesis.

Conclusions: Although the rate of satisfaction with the use of external breast prosthesis was high as a result of 19 studies, it was seen that there were also women who expressed dissatisfaction. For this reason, further studies are recommended including satisfaction with external mammary prosthesis use and quality of life.

PLASTIC SURGERY

P-083 Abstract: 20 P-085 Abstract: 29

RECONSTRUCTION OF MAJOR TOILET MASTECTOMY DEFECTS WITH REVERSE ABDOMINOPLASTY

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Purpose: Although breast cancer can be diagnosed at early stages due to an increase in awareness of the patients and screening, breast surgeons still face locally advanced diseases. In such cases, extensive toilet mastectomy increases both the survival of the patients and their quality of life. In this study, reconstruction of extensive defects with reverse abdominoplasty and the oncologic and functional outcomes are presented.

Materials and Methods: Between March 2017 and April 2018, five female patients were operated with extensive toilet mastectomy for locally advanced disease. The mean age of the patients was 56 years (Range of 52 and 60 years). Three patients had left sided invasive breast cancer whereas two were right sided. The mean dimensions of the postmastectomy tissue defects was 18 x 30 centimeters. Reverse abdominoplasty flaps were performed with prefacial and infraumbilical dissections, based on the deep inferior epigastric system.

Results: All defects were reconstructed and there was a marginal defect necrosis in one patient (1/5). The same patient was lost at the first postoperative month due to pulmonary metastases. The mean follow up of the patients was 6 months (Range of 2 and 12 months). Four patients were referred for regional radiotherapy and systemic chemotherapy, and they were free of any local or systemic recurrence and wound dehisence at the time of the study.

Conclusions: Although there are various methods of extensive posmastectomy defect reconstruction, reverse abdominoplasty flaps present a versatile, durable and regional option with robust blood supply. The oncologic safety and functionality make this technique the first choice of reconstruction in this oncologic scenario.

THE EFFICACY OF ELONGATED AXILLARY INCISION ON EXTENDED LATISSIMUS DORSI FLAP FOR IMMEDIATE BREAST RECONSTRUCTION

PLASTIC SURGERY

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Purpose: In performing extended latissimus dorsi flap (ELD) procedures, a skin paddle design on the bra line helps reduce visible scarring. This improves the patient's satisfaction with the outcome. However, such a design leads to a longer operation time and increased fatigue of the surgeon due to the narrow operative field. In this study, the authors propose a method that elongates the axillary incision line posteriorly by 1.5 cm from the lateral border of the latissimus dorsi muscle. We examined whether this method could shorten the operation time and compared the incidence of complications between patients who underwent this novel procedure and patients who underwent the traditional procedure.

Materials and Methods: In this study of patients who underwent ELD flap procedures for immediate breast reconstruction, 89 underwent surgery with the elongated axillary incision and 45 underwent surgery without the elongated incision. The total operation time and complications were retrospectively examined based on the patients' medical records, and we examined whether there was any statistically significant difference in the total operation time.

Results: In the experimental group with the elongated axillary incision, the operation time ranged from 125 minutes to 255 minutes (median, 175 minutes). In contrast, in the control group without the elongated axillary incision, the operation time ranged between 142 and 340 minutes (median, 205 minutes). The operation time was statistically significantly different between the 2 groups, and no significant complications were observed in the experimental group.

Conclusions: Elongation of the axillary incision alone may shorten the operation time of the ELD flap procedure without causing additional complications.

PLASTIC SURGERY

P-086 Abstract: 32 P-087 Abstract: 22

RE-VISITING Y-SHAPED CLOSURE TECHNIQUE TO PREVENT DOG EAR FORMATION IN WOMEN UNDERGOING MASTECTOMY

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Background: Amongst all complications of mastectomy, lateral skin-folds or 'dog-ears' is one of the most annoying problem. It causes significant discomfort to the patient. Cosmetically it is unsightly to look at. The lateral 'dog-ears' hangs over the top of the undergarments causing not only disfigurement but also acts as a hindrance to movements of the ipsilateral arm.

Methods: From lateral end of incision marking is done at equal distance on superior and inferior flap margins depending on redundant skin overlying the latissimus dorsi muscle. Triangular flap is advanced medially and three points as shown in picture are sutured together. Any lateral dog ears at end is excised. Final appearance after closure is in shape of Y. Cosmetic result was excellent without lateral dog ear deformity. Patients did not complain of any discomfort/pain in post operative period. Six month in post-operative period patient is very satisfied with cosmesis.

Discussion: Dog ear is due to redundant skin and fatty tissue along the lateral aspect of the mastectomy incision. Various surgical techniques have been described to prevent or treat lateral dog ear. These include fish-shaped incision, tear-drop incision, excision of dog ear and primary closure, oncoplastic technique, triangular advancement technique, the "L" technique and liposuction. In Y closure technique redundant axillary tissue is pulled forward and "Y" configuration is created at the lateral half of the transverse mastectomy incision(Stewart incision). The cosmetic outcome is superior to other techniques described. The merits of Y shaped closure is cosmetically superiority, no hindrance to movement of ipsilateral arm, avoids seroma formation and avoids lateral shift of scar thus reducing the volume to be irradiated.

Conclusion: The Y-shaped approach for modified radical mastectomy is a simple and safe technique. It improves cosmesis and prevents discomfort in obese women by eliminating lateral dog ear deformity.

THE MOLECULAR SUBTYPE DISTRIBUTION IN MALE BREAST CANCERS

RADIOLOGY

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Purpose: The purpose of this study is to reveal the distribution of male breast cancers according to molecular classification.

Materials-Methods: Between 2011 and 2016, male patients diagnosed with breast cancer who were referred to our center were retrospectively screened. Thirteen primary breast cancers and two metastatic cancers to the breast from colon were detected. Molecular subtypes were classified according to their hormone receptor-positive and negative status.

Results: It was seen that all of fifteen patients were evaluated with sonography and to a part of patients (6/15) were performed mammography. The mean age was 60, 86 \pm 5, 2 (39-86); the mean tumor size was 27, 06 \pm 1, 4 (15-45) mm. Eleven of the cases of primary breast cancer were invasive ductal carsinoma, one was invasive papillary carcinoma and the other was Paget. Metastatic masses were compatible with mucinous adenocarcinoma metastasis. Metastatic masses were triple negative (2/15), one case HER 2+ (1/15), and all other cases (12/15; 80%) were luminal cancers (50% luminal A, 50% luminal B).

Conclusion: This study showed that 92.3% (12/13) of primary male breast cancers are luminal cancers. In addition, triple negative formation of two metastatic tumors is striking. Breast cancer accounts for less than 1% of all cancers in men. The incidence of male breast cancer appears to be slowly rising (1–5). The male breast cancers are common hormonally sensitive (6–8). 92% of the male breast cancers were estrogen receptor ER-positive whereas in female breast cancers this rate is only 78% (6).

RADIOLOGY

P-088 Abstract: 23 P-090 Abstract: 97

MEASUREMENT OF PREOPERATIVE TUMOR SIZE WITH DIFFERENT IMAGING MODALITIES IN BREAST CANCER MOLECULAR SUBTYPES

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Purpose: The aim of this study is to show how accurate the preoperative tumor size is measured with mammography, ultrasonography and magnetic resonance imaging, for different molecular subtypes of breast cancers.

Methods: Ninety-one invasive breast cancer cases that were assessed by all three of the mammography, ultrasonography and magnetic resonance imaging, and operated at the same center, were retrospectively analysed. Estrogen and progesterone hormone receptors, HER 2 and Ki-67 antigen levels were determined by immunohistochemical analyzes and luminal A, luminal B, HER 2 positive and triple negative groups were constructed. In each case, the largest preoperative tumor size measured with each modality was compared to the pathological tumor size. Bland Altman test was used to evaluate the limits of agreement with pathological tumor size.

Results: The distribution of the subtypes were; 41.8% luminal A, 35.2% luminal B, 6.6% HER2 positive and 16.5% triple negative. Lineer regression results revealed that a significant proportional underestimation existed for luminal A. For magnetic resonance imaging, the least deviation was detected for luminal B and for ultrasonography this was detected for triple negative cancers. The modality showing most precise measurements with narrowest confidence intervals was magnetic resonance imaging and it measured all tumors with the lowest deviations from real tumor size, except for luminal A (which was not a statistically significant difference).

Conclusion: In luminal A breast cancers, preoperative tumor size, has been underestimated by all imaging modalities and this underestimation increases with tumor size.

DETERMINATION OF BODY PERCEPTIONS AND PREFERENCES FOR BREAST RECONSTRUCTION IN MASTECTOMY PATIENTS

PLASTIC SURGERY

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Purpose: This study has been performed as descriptive to determine the body perceptions and preferences for breast reconstruction in mastectomy patients.

Materials and Methods: The sample of the study consisted of 138 patients who were applied to the Breast Endocrine Surgery Polyclinic of Ankara Numune Training and Research Hospital; had a mastectomy, and had not undergone breast reconstruction or oncoplastic breast surgery. The questionnaire form developed by the researcher and Body-Cathexis Scale have been used for data collection. Descriptive statistics (percentage calculation, median, mean, standard deviation), Chi-square, Fisher Exact Test, Mann-Whitney U test and T test were used to evaluate the data.

Results: Some 47,9% of the patients who participated in the study had breast cancer in the second stage and 76,1% of the patients had underwent modified radical mastectomy and axillary dissection surgery. Some 44.9% of patients have used breast prosthesis, 65,2% had information about breast reconstruction, whereas 37,0% of the patients preferred not to undergo breast reconstruction. The mean score of the Body Cathexis Scale was 180,1±18,6 and indicating a high level in this respect. In the study, there was no statistically significant difference between Body-Cathexis Scale means scores and breast reconstruction preferences (p>0,05). The preference for breast reconstruction varied according to the living place, receiving information, body mass index and nutrition style (p<0,05). The study results show that the preference rate for breast reconstruction in patients in the sample group is very low, and that information on breast reconstruction is not at desired level.

Conclusion:According to the study results, it's suggested to provide education and counselling on breast reconstruction to patients with mastectomy and their relatives from the stage of breast cancer diagnosis and multidisciplinary educational activities should be planned to increase awareness of breast reconstruction in our society.

PLASTIC SURGERY

P-091 Abstract: 156 P-092 Abstract: 164

TREATMENT OF POST-LATISSIMUS DORSI FLAP BREAST RECONSTRUCTION PAIN WITH SINGLE INJECTION PARAVERTEBRAL NERVE BLOCKS

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Objectives: The use of perioperative single-injection thoracic paravertebral nerve block (tPVB) has demonstrated improved analgesia in breast surgery. It is known to significantly decrease the need for postoperative opioid dosage an deven attenuate perioperative immunosuppression and minimize metastases in breast cancer patients. However, its use following isolated post-mastectomyreconstruction using a latissimus dorsi flap (LDF) has not previously been examined.

Methods: We performed a retrospective review of patients who underwent salvage breast reconstruction with a unilateral LDF bya single surgeon. Preoperatively sedated patients are administered0.5%Bupivacaine 20 cc into the T4-5paravertebral space with the use of ultrasonography and then patient goes through orotracheal intubation with 1-2 mg propophol, 0.6mg/kg rocuronium and 1-2mcg/kg fentanyl, under control mode ventilated 8ml/kg and the maintenance anesthesia was achieved with 4lt/min sevoflurane-air mixture.

Results: A total of 20 patients were included in this study (10-tPVB and 10 control). Postoperative pain assessment was done with VAS scores (0-10). Patients with VAS scores 4 or higher were observed with iv paracetamol and iv tramadol. Pain among groups were significantly different (P = 0.05). The length of hospital stay and opioid use was statistically different between groups.

Conclusions: Salvage postmastectomy patients are a difficult group of patients to deal with for the plastic surgeon. They tend to have a lower resistance for postoperative pain. Patients receiving a tPVB after LDF reconstruction experienced less pain to those that didn't receive any blocks. A larger, randomized clinical trial is warranted to fully determine the benefits of using tPVB in addition to this procedure.

RELATIONSHIP BETWEEN TAMOXIFEN AND LATE-ONSET SEROMA IN IMMEDIATE BREAST RECONSTRUCTION

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PLASTIC SURGERY

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Objective: Tamoxifen therapy as an adjuvant chemotherapy is a cytotoxic drug and it is known to have a negative effect on neoangiogenesis. It is currently argued that there is a higher incidence of perioperative complications secondary to the neoadjuvant therapy before the intervention. This is also true in certain cases of delays in the implementation of coadjuvant therapy due to the presence of these postoperative complications. Locally, there would be a compromising of immunogenicity and the tissue healing capacity that may predispose to infection or dehiscence.

Materials and Method: A total of 215 breast cancer patients who have been operated between May 2014-June 2018 and among those 180 patients who are continuing tamoxifen therapy were analyzed. Postoperative early and late presenting seroma percentages and intervals were noted. The percentage of red breast syndrome like episodes were noted. Patients were observed 3 years on average.

Results: The rate of seroma accentuated by 10.9% among this cohort of patients. Late presenting seroma was the common result of chronic intake of tamoxifen and the seroma subsided when tamoxifen was eliminated from the treatment regimen for a certain time period.

Conclusion: Tamoxifen therapy receiving patients need to be warned in advance fort his common postoperative minör complicaon. The timining for the extraction of the drains need to be prolonged in these group of patients. Breast cancer treatment is a multidisciplinary treatment and in each step of the treatment morbidities need to be discussed with the patients.

RADIOLOGY

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CLINICAL, RADIOLOGICAL AND PATHOLOGICAL FINDINGS IN BREAST CANCER PATIENTS YOUNGER THAN 30

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Purpose:To evaluate the clinical, radiological and histopathological findings of breast cancer patients aged younger than 30, who were diagnosed and treated in two institutions.

Materials and Method:Ethical committee approval was obtained. The clinical, radiological and histopathological findings of 93 female breast cancer patients aged 30 or younger between 2010 and 2018 were retrospectively evaluated in two center. Clinical and imaging findings, and histopathological results were obtained from the digital hospital records and the digital image archives.

Results:There were a total of 94 breast cancer in 93 female patients. Mean age was 26.9 (19-30). Physical examination revealed a lump in the breast and/or axilla in 86 patients. The most common imaging finding was mass (89/94). MRI was detected additional lesions in 14 patients, and one additional cancer on contralateral breast. Mean lesion size was 34.4 mm (7-106 mm). The distribution according to the histopathological subtypes was as follows: 59 LumB, 12 LumA, 12 HER-2 positive, 10 triple negative. Ki-67 was above 20% in 92.5% of patients. Axillary metastatic lymph node was found in 45(48%) patients.

Discussion:In the young women with breast cancer, the tumor size is larger, and the rate of axillary lymph node metastasis and aggressive tumor subtypes are higher. If sonographic findings are not typically benign in younger patient, mammography and biopsy should be performed. In young patients diagnosed as breast cancer, MRI will be better able to define the multifocal and multicentric tumor distributions and the extent of disease, which will allow for a better treatment plan.

MUCINOUS BREAST CANCER: THREE CASES WITH

RADIOLOGY

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UNUSUAL FINDINGS

Introduction: Mucinous (colloid) breast carcinoma, is a well-differentiated type of adenocarcinoma that typically contains abundant extracellular mucin secreted by tumor cells. It is an uncommon histologic type that accounts for about 1-7% of all breast carcinomas. This cancer is generally considered to have a favorable prognosis. There are two types of mucinous breast carcinoma. In pure type, less than 10% of the tumor is composed of other histologic types of breast cancer, whereas in mixed type, more than 10% of the tumor is composed of other histologic subtypes, mainly invasive ductal carcinoma NOS. This distinction has important implications because pure mucinous cancers tend to be less aggressive and have a lower frequency of axillary metastases and a better overall survival rate than do mixed tumors. This neoplasm usually presents with benign clinical, mammographic, and sonographic features, possibly leading to a delayed diagnosis (1-4). Our aim was to present three different cases with pure mucinous cancer with unusual clinical and radiological findings.

Case 1: 56 years old woman presented with sudden bloody discharge of her left breast. Mammography was shown dense breast and no visible abnormality. Sonography was shown 5 mm diameter isoechoic lesion on deep retroareolar region. There was 5 mm diameter, round, hyperintense focus on T2W images and homogenous enhancement on post-contrast images.

Case 2: 43 years old premenopausal woman presented with severe focal pain on her left breast lower outer quadrant. On mammography there was no visible abnormality on dense breast. Sonography was shown 4 mm isoechoic non-mass lesion on painful region. MRI revealed a large segmental non-mass clustered-enhancing lesion on lower outer quadrant.

Case 3: 42 years old premenopausal woman was on follow up because of BIRADS 3 solid mass during 2 years at another center. On her last follow up examination, biopsy was recommended due to enlarging mass. MRI was shown multicentric distribution of additional lesions.

Discussion: The radiologic features of mucinous breast carcinoma show differences between the pure and mixed types of the tumor. Pure mucinous carcinoma with high percentages of mucin commonly manifests as a circumscribed round or oval mass that sometimes has microlobulated margins. The typical MRI findings of pure mucinous cancers include a lobulated shape, extremely high signal intensity on T2W images, and benign-appearing kinetics. As two of our presented cases, tumor sometimes can be detected as a non-mass lesion. MRI is a useful method for detecting extension of tumor, and additional mass

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and non-mass lesions, therefore it provides a safe treatment plan. Bloody nipple discharge and severe focused pain are not usual clinical symptoms for mucinous cancer. Breast disease specialists should aware of these unusual findings of mucinous cancer in their daily practice.

RADIOLOGY

P-095

CLINICAL AND RADIOLOGICAL DIFFERENCES BETWEEN FISTULAR AND NON-FISTULAR IDIOPATHIC GRANULOMATOUS MASTITIS

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Purpose: This study aimed to describe the clinical and radiological differences between fistular and non-fistular idiopathic granulomatous mastitis.

Materials and methods:The clinical and radiologic findings of 52 women with a histopathology diagnosis of idiopathic granulomatous mastitis were retrospectively evaluated. All the patients were assessed using ultrasonography and magnetic resonance imaging. Of the 52 patients, 20 underwent mammography. The findings in patients with fistular and non-fistular idiopathic granulomatous mastitis were compared.

Results: Significant differences in clinical and radiologic findings were found between both groups. Erythema, ulceration, and nipple changes were more common in patients with fistular idiopathic granulomatous mastitis. Collection areas with internal echoes, consistent with abscess, and multiple abscesses with peripheral enhancement were noted via ultrasonography and magnetic resonance imaging, respectively, and were more common in fistular idiopathic granulomatous mastitis.

Conclusion: There were significant differences in the clinical and radiologic findings of fistular and non-fistular idiopathic granulomatous mastitis. Imaging methods such as ultrasonography and magnetic resonance imaging could be useful in identifying patients with a high risk of developing fistulas.

RADIOLOGY

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CAN 3T DIFFUSION TENSOR IMAGING PARAMETERS BE PROGNOSTIC INDICATOR IN BREAST CANCER?

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Purpose: To investigate the relationship between diffusion tensor imaging (DTI) parameters such as fractional anisotropy (FA), mean diffusivity (MD), relative anisotropy (RA), and volume ratio (VR) values, and prognostic factors of invasive breast cancer.

Materials and Methods: This retrospective study examined 63 patients with pathologically confirmed invasive breast cancers. The patients underwent pre-operative diffusion-weighted magnetic resonance imaging (MRI) at 3.0 Tesla. The relationship between DTI parameters and tumor size, histologic and nuclear grade, axillary lymph node status, lymphovascular and perineural invasion status, estrogen receptor (ER), progesterone receptor (PR), CERB-B2, and Ki-67 were analyzed.

Results: Patients with lymph node metastasis (p=0.018; p < 0.05) and/or lymphovascular invasion (p=0.001; p < 0.01) and/or histologic grade 3 tumors (p < 0.05) had statistically significantly low MD values. There was a statistically significant relationship between ER and MD (r=0.452, p < 0.01), PR and MD (p=0.001, p < 0.01); CERB-B2 andRA(p=0.047,p < 0.05);Ki-67and RA(p=0.026; p < 0.05); Ki-67and VR (p=0.021; p < 0.05); and lymphovascular invasion and FA (p=0.045, p < 0.05) values.

Conclusion: DTI parameters of malignant masses in breast cancer patients correlate with tumor size, lymph node status, histologic grade, lymphovascular invasion, Ki-67, CERB B2, ER, and PR.

THE EFFICACY OF 18F-FDG PET/CT IN DETECTION OF THYROID CANCER IN PATIENTS WITH BREAST CANCER

RADIOLOGY

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Purpose: Since 1896 when Beatson used thyroid extract to treat breast cancer, many research has been conducted to examine the causal relation between thyroid disorders and breast cancer. Recent advances in imaging techniques have enhanced our understanding of breast cancer and improved surveillance of patients. Along with conventional imaging techniques frequent application of 18-F FDG PET/CT has led to increased detection of concomitant thyroid cancer and breast cancer. This study was conducted to determine the role of 18-F FDG PET/CT in diagnosis of thyroid cancer in patients with breast cancer.

Methods: The data of 320 women with invasive breast cancer who underwent ¹⁸F-FDG PET/CT examination prior to surgery between January 2013 and June 2018 were reviewed retrospectively. Histopathological examination of thyroid glands was used as a reference to assess the efficacy of ¹⁸F-FDG PET/CT in detecting thyroid cancer. Due to ethical obstacles histopathologic examination could not be performed on all patients, therefore, only 23 patients undergoing histopathological examination with a clinical and radiological suspicion of thyroid cancer were included.

Results: While 10 (3.125 %) patients had an increased radioactivity in thyroid gland on ¹⁸F-FDG PET/CT scans, thyroid cancer was detected in 6 (1.875 %) patients. The sensitivity, specificity, positive predictive value, negative predictive value, and overall accuracy of ¹⁸F-FDG PET/CT in detection of thyroid cancer were 100%, 76.4%, 60%, 100%, and 82.6%, respectively. The false negative and false positive rates were 0% and 23.5%.

Conclusion: There was an increased incidence of thyroid cancer in patients with breast cancer. Incidentally detected suspicious nodules on 18F-FDG PET/CT should be investigated thoroughly before deciding whether or not thyroidectomy is necessary.

RADIOLOGY

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AN UNUSUAL PRESENTATION OF ATYPICAL LYMPHOID HYPERPLASIA OF THE BREAST

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Atypical lymphoid hyperplasia which is neither a clinical nor a pathologic entity, is a diagnostic category comprising borderline cases if a definite histological differentiation cannot be made between the benign and the malignant nature of the tissue.

Herein, we present a case of a 36 years old woman who is consulted due to a few days history of noticing a lump in her right breast. She noticed the lump after trauma at sportive training that is spontaneously tender to touch.

Breast imaging findings by ultrasonography and magnetic resonance imaging, revealed.a heterogeneous area with a diameter of approximately 4 cm. and inflammatory changes in adjacent glandular tissue which has suspicious of malignancy in the upper outer quadrant of breast near axillary tail. A few ipsilateral axillary reactive lymphadenopathy within physiologic size was noted. Ultrasound-guided core needle biopsy was performed and cytological examination of the lesion suggested atypical accumulation of lymphoid cells, which was not easy to differentiate from primary breast lymphomas.

She had no other systemic diseases such as diabetes mellitus or autoimmune disorders. Ultrasound scans of total abdominal and neck were examined to rule out multicentric diseases and absence of enlarged lymph nodes. The patient underwent surgical resection of the mass and histological finding was revealed as benign lymphoid proliferation and atypical lymphocytes didn't show suggestion of malignant lymphoma. In our case, it was difficult to distinguish this entity from lymphocytic mastitis or lowgrade B-cell lymphoma without surgical biopsy.

On the follow-up period during two years no recurrence was observed.

BREAST MR IMAGING FOR PRE-OPERATIVE ASSESSMENT: A PICTORIAL REVIEW

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Breast magnetic resonance (MR) imaging is an increasingly used diagnostic tool to evaluate suspicious or indeterminate breast leasions because of its high sensitivity in detecting invasive breast cancers. Breast MR is used as a problem-solving tool for equivocal mammographic findings, or when finding remains uncertain or problematic at diagnostic mammography evaluation. It is also used as an adjunct tool in pre-operative planning and management. This poster will discuss the use of Breast MR in several cases, illustrating the MR findings in this pictorial review.

PATHOLOGY

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THE IMPORTANCE OF IRISIN IMMUNHISTOCHEMICAL STAINING IN PATIENTS WITH BREAST CANCER

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Purpose: The purpose of this study was to determine the importance of irisin immunhistochemical staining in patients with breast cancer.

Materials and Methods: 34 patients diagnosed and treated for breast cancer were enrolled in this study. The sections from each patients' tumor tissue, ductal carcinoma in situ (DCIS) areaif exists, and healthy breast tissue were obtained and immunohistochemically stained with irisin antibody. A scoring system was used to evaluate irisin intensity which varied from 0 (negative) to 4 (strongly positive). The scores were compared among groups including breast cancer, DCIS and healthy breast tissues with analysis of variance by using Kruskal-Wallis test, followed by Bonferroni-corrected Mann-Whitney U-test for pairwise comparisons.

Results: The median of irisin staining scores of the breast cancer, DCIS and healthy breast tissues were 2 (range, 0-4), 3 (range, 1-4) and 2 (range, 0-4), respectively. When the scores of the groups were compared by using Kruskal Wallis test, there was a statistically significant difference between the groups (p=0.03). When the groups' irisin staining scores were compared pairwise, the score of the DCIS group was statistically higher than that of healthy breast tissue (p=0.009).

Conclusions: Irisin is a peptide, expressed by many tissues in the body. Its main function is mediating thermogenesis and glucose homeostasis; it has also been reported as having anticarcinogenic properties. Irisin accumulation in breast cancer tissues is irrespective of histological subtypes. Also receptor status, grade and stage of tumors can affect irisin staining therefore studies evaluating the possible correlations are required.

CLINICAL IMPORTANCE OF FIBULIN-5 IMMUNHISTOCHEMICAL STAINING IN BREAST LESIONS

PATHOLOGY

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Purpose: To evaluate clinical importance of fibulin-5, which has been shown to display both tumor-promoting and tumor protective functions, in breast lesions.

Materials and Methods: Sixty-two breast cancer patients, 19 patients with fibroadenoma and 15 healthy breast tissues were enrolled. Thirty-two patients had invasive ductal carcinoma (IDC) (12 of them had also ductal carcinoma in situ-DCIS), 15 patients had invasive lobular carcinoma (ILC) and 15 patients had triple negative breast cancer (TNBC). The sections were immunohistochemically stained with fibulin-5 antibody. A scoring system was used to evaluate fibulin-5 intensity from 0 (negative) to 4 (strongly positive).

Results: The median of fibulin-5 staining scores of the breast cancer, fibroadenoma and healthy breast tissues were 2 (range, 0-4), 3 (range, 3-4) and 4 (range, 1-4), respectively. When the scores of the groups were compared, there was a statistically significant difference between the groups (p=0.0001).

In breast cancer patients with IDC, ILC, DCIS and TNBC median fibulin-5 scores were 2 (range, 0-4), 3 (range 0-4), 3.5 (range, 1-4) and 0 (0-2), respectively. When the scores of the groups were compared, there was a statistically significant difference between the groups (p=0.0001). The patients with TNBC had lower fibulin-5 score than IDC, ILC and DCIS (p=0.0006, p=0.0006 and p=0.0006, rescpectively).

Conclusions: Fibulin-5 immunhistochemical staining score was lower in breast cancer than fibroadenoma and healthy breast tissue specimens. Among patients with cancer, it was seen that TNBC patients had the lowest score. These data suggests that it can be related with differentiation and prognosis.

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REDUCE HEART AND LUNG DOSES USING THE FIELD-IN-FIELD IN BREAST CANCER RADIOTHERAPY

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Purpose: In this study, dosimetric outcome for whole breast radiotherapy of breast cancer patients was evaluated and compared in the tangential wedged beam (TWB) and field-in-field (FIF) plans.

Materials and Methods: Twenty-five patients with left-sided breast cancer were enrolled in this study. The FIF and TWB plans were generated for each patient to compare dosimetric parameters. The maximum dose (Dmax), homogeneity index (HI), and conformity index (CI), were defined and used for comparison of the dosimetric parameters of the planning target volume (PTV) in both FIF and TWB plans. The percentage of volumes receiving at least 5, 10, 20, 25, 30, and 40 Gy of the left lung and 5, 10, 20, 25, 30 and 40 Gy of the heart were used to compare the dosimetric results of the organs at risk.

Results: The FIF plan had significantly lower HI (P=0.000) than the TWB plan, indicating that the FIF plan was better than the TWB plan in PTV. The V40lung (9.68 ± 3.27 vs. 11.73 ± 3.21) and V30heart (3.47 ± 3.10 vs. 5.51 ± 3.19 ; P=0.000) were significantly lower in the FIF plan than in the TWB plan. In addition, the monitor unit (MU) was significantly lower in the FIF plan than in the TWB plan (222.86 vs. 287.67; P=0.000).

Conclusion: The FIF plan significantly reduced the dose volume of the left lung and heart in radiotherapy after breast-conserving surgery compared to the TWB plan. Therefore, the FIF plan is suggested for this purpose.

INVASIVE MICROPAPILLARY CARCINOMA OF THE BREAST: A CASE REPORT.

MEDICAL ONCOLOGY

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Invasive micropapillary carcinoma of the breast (IMPC) is a rare and distinct histological variant of breast carcinoma 1-6 % of all breast cancers.

Described in breast for the first time in 1980, the term of invasive micropapillary carcinoma was proposed in 1993, it is known to be an aggressive entity with a very high rate of lymph node metastasis (75-100%), higher frequencies of lymphovascular invasion, and poor prognosis.

Histologically, Invasive micropapillary carcinoma is characterized by clusters of cohesive tumor cells devoid of fibrovascular cores and surrounded by clear spaces. They display an inside-out arrangement, with the luminal aspect of the cell present on the outer surface of the cluster.

A pure invasive micropapillary breast tumor is rare. Usually it is mixed-in with IDC or NOS (not otherwises specified) and the micropapillary component is less than 25%, 70% of IMPC tend to be ER positive and 60% are positive for progesterone receptors, HER2 overexpression may be anticipated in approximately 40% of cases.

Also been identified: the expression of MUC1, p53 (70%), and bcl-2 in 70% of cases, Négativity of MUC2, and Ki67 expression is significantly higher > 20 % in 15 % of IMPC.

We report a case of invasive micropapillary carcinoma of the breast in a 34-year-old woman with inflammatory breast, axillary lymph nodes and liver metastasis.

PATHOLOGY

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EXPLORING THE MODULATORY EFFECTS OF CURCUMIN ON MDA-MB231 BREAST CANCER CELLS

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Purpose: Breast cancer is the leading cause of cancer death in women worldwide, including Algeria. Triple negative breast cancer in the most resistant cancer to conventional therapy.

Curcumin (Cur), a naturally occurring antioxidant polyphenol of turmeric was investigated for its potential as antioxidant, anti-proliferative, pro-apoptotic and anti-metastatic on Human breast cancer MDA- MB-231 cells.

In addition, we undertook a first incursion to evaluate the oxidative stress in some Algerian patients with breast cancer.

The effect curcumin (Cur) was evaluated on cancer MDA- MB-231 cells viability by MTT assay, on cell cycle by flow cytometry and on CXXC5, P53 and HDAC expression by western blotting. Cell migration and invasion, and oxidative stress were evaluated using appropriate methods.

Results: Our results showed that breast cancer is associated to chronic oxidative stress. Moreover, Cur inhibited dose dependently MDA- MB-231 cells viability. Its anti proliferative effect was evidenced at low dose through the modulation of p53 and HDAC expression, two key proteins that initiate the apoptotic process and the regulation of DNA expression, respectively. Cur induced cell-cycle arrest at G2/M phases and inhibited cell migration and invasion, two characteristic features of metastatic process. Cur modulated oxidative stress and CXXC finger protein 5 expression a potential Wnt signaling pathway inhibitor.

Conclusion: Taken together, our results presented an experimental evidence suggesting Cur as a substantial promise multitargets drug for the treatment of triple negative breast cancer cells and Human breast cancer.

CONSIDERING GENETIC TESTING IN CLINICAL VISIT; THE IMPORTANCE OF AGE AND FAMILY HISTORY

OTHERS

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Introduction: Most of the medical centers treating breast cancer have no genetic counselor available, especially in developing countries. Although guidelines have been created to guide physicians for genetic counseling, simply obtaining a detailed family history and considering patient age may help determine who needs genetic testing. Herein we evaluate the cases that had either young age breast cancer or a person who has a strong family history but did not receive genetic testing for hereditary breast cancer.

Materials & Method: We selected women who either had breast cancer diagnosed ≤50 years, or ≥1 close blood relative with breast cancer diagnosed ≤50 years or ≥2 close blood relatives with breast cancer diagnosed at any age. We collected blood samples and submitted to Invitae Breast and Gyn Cancers Guidelines-Based Panel (USA) test for breast cancer risk evaluation. Patient's medical records were evaluated for demographics and breast cancer care.

Results: Twenty patients met the above criteria included in this pilot study. Mean age was 43,3±10.9 years. Thirteen (65%) patients had breast cancer; 75% (n=15) patients had strong family history for cancer and most of them have a family history of breast cancer. Nine (45%) test results were reported either pathogenic or variant of unknown significance (VUS); we recommended further surgery for 3 (15%) patients who had a pathogenic genetic test result and had previously been operated on for BC. We recommended close follow-up with yearly breast MRI for 3 (15%) patients with VUS and had BC surgery previously and for 3(15%) patients who have a VUS in genetic panel testing but have no history of cancer.

Conclusion: Although guidelines recommend genetic counselling for woman who have a strong family history for breast cancer or who have had BC at a young age, unfortunately it is not applicable worldwide. This study shows that breast care physicians with a basic knowledge of genetic testing can change treatment and follow up recommendations in almost half of the cases. Additionally, this study demonstrates the importance of education of breast care physicians for genetic testing.

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EVALUATION TWO PLAN DEEP INSPIRATION BREATH-HOLD AND FREE BREATHING IN BREAST CANCER RADIOTHERAPY

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Purpose: To investigate cardio-pulmonary dose using both techniques, Deep Inspiration Breath-Hold (DIBH) and Free Breathing (FB) in breast cancer radiotherapy.

Methods: A literature search was performed using the scientific databases Medline and PubMed. We only included articles in English, available in full text, published about breast cancer and published from 2002 to 2016. Dose organ at risk such as heart and lung is compared using two techniques, DIBH and FB. In this study, the results of the research are evaluated.

Result: A total of 20 studies were retrieved that related to breast cancer radiotherapy. In all of studies, FB plan compared with DIBH plan and DVH of OARs are evaluated. Significant differences were seen between the DIHB and FB plans for irradiated heart volumes. Also lung dose lower in DIBH plan than FB plan.

Conclusion: DIBH shows a substantial reduction of cardio-pulmonary doses compared with FB technique. Using the DIBH technique, effectively reduce the cardiac complication and pulmonary.

AXILLARY STAGING IN PURE TUBULAR CARCINOMA: IS IT NECESSARY?

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BREAST SURGERY

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Purpose: Pure tubular carcinomas (PTC) are rare tumors of the breast with good prognosis and low incidence of axillary involvement. In this study, the necessity of axillary staging will be discussed.

Materials and Methods: The patients who underwent surgery for PTC between 2010-2017 were reviewed. Tumor size and sentinel lymph node biopsies (SLNB) were evaluated.

Results: Thirty-seven patients with PTC were retrospectively reviewed. Median age was 47(38-73) years. Median pathological tumor size was 8(3-18)mm. SLNB were performed on all patients and detection rate was 100%. SLN was positive in only two patients and both were micrometastases. Axillary dissection was performed to only one of them. There was no pathological lymph node except SLN in the axillary dissection. In one of these two patients, tumor size was 10 mm while the other 14 mm. When the tumor size was taken into consideration, of 13 patients (35%) tumor size were ≥10 mm diameter, whereas 24(65%) patients were found to be <1 cm diameter. While axillary involvement was not detected in the latter group, axillary involvement ratio was 15%(2 of 13) in the former group. Axillary staging did not affect the decision of chemotherapy or radiotherapy, however two patients received chemotherapy for contralateral invasive carcinoma. Median follow up was 44(9-93) months. There was no local recurrence and overall survival rate was 100%.

Conclusions: Axillary lymph node metastases are not common in PTC especially when tumor size <1 cm. Thus, axillary staging may be omitted in small PTC.

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ADENOID CYSTIC CARCINOMA: PRESENTATION OF FOUR CASES

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Introduction: Adenoid cystic carcinoma(ACC) is a type of triple negative breast tumor seen generally in elders however presented as low grade and good prognosis. ACC in breast rarely metastasis to lymph nodes or distant organs in contrast to analog in salivary gland. They rarely transform to poorly differentiated basaloid carcinoma that is the cell type seen in ACC other than luminal cells.

Cases: In this study, four cases with ACC is presented. Median age was 63.5 (58-75), all are female. Just case 4 (75 year-old) had no complaint where as others had painful palpable mass. All patients underwent to breast conserving surgery with sentinel lymph node biopsy(SLNB) followed by radiotherapy. None of the patients received chemotherapy. Case 1 (58 year-old) had multifocal T2 tumor (15 and 23 mm) and others had T1 (20, 7, 15 mm respectively). SLNB were negative in all, median number of resected SLN were 3.5 (range: 3-4). Case 1 and 2 (63 year-old) were triple negative, case 3 (64 year-old) was 50% and case 4 were 3% positive for estrogen receptor and both received additional hormonotherapy. Received median radiotherapy was 60Gy (range: 40-62 Gy). Median follow up period was 22 months(range: 6-108), longest follow-up period was belong to a triple negative patient (case 2), none of the patients showed metastasis or recurrence.

Conclusion: ACC of breast is generally triple negative cancer however shows good prognosis. Treatment with breast conserving surgery and SLNB followed by radiotherapy and hormonotherapy when suitable without chemotherapy should be choice of treatment.

PREDICTIVITY OF PREOPERATIVE PET-CT FOR AXILLARY LYMPH NODE STATUS IN PATIENTS WITH EARLY BREAST CANCER

BREAST SURGERY

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Background: Preoperative axillary lymph node status evaluation is important for prediction of breast cancer prognosis. In this study, predictivity of positron emission tomography (PET) for axillary lymph node metastasis is investigated.

Methods: Two hundred and six women with early breast cancer who were treated between 2014 and 2018 at Acibadem University Hospitals and had preoperative PET/CT were included. Axillary lymph node positivity in PET-CT and histopathologic results were compared retrospectively.

Results: Of those 206 patients, PET-CT revealed axillary lymph nodes as positive in 93, while negative in 113. In histopathological examination 78 patients were detected as involved by tumor cells in whom 57 detected positive and 21 negative in PET-CT. Histopathological examination detected 128 patients as free from tumor cells, of those, 92 were negative and 36 positive in PET-CT. Axillary status in PET-CT and pathological results did not show difference either in total and each subtypes (Luminal, Her-2 positive, triple negative) (p>0.05 each). Positive predictive value (PPV) and negative predictive value (NPV) of PET-CT for metastatic axillary lymph nodes were 61.3%, 81.4% respectively in all cases. In analyses by subtypes of breast cancer, PPV was better in Luminal group than Her-2 positive and triple-negative group (PPV: 65.6%, 58.8%, 41.7% and NPV: 77.9%, 92.9%, and 92.3%, respectively).

Conclusion: Even there is no statistical difference of axillary node detection in each group; PET-CT is better when the tumor is luminal rather than Her-2 positive or triple negative. However PPV of PET-CT for axillary metastasis is still low to solely depend on.

RADIATION ONCOLOGY

P-114 Abstract: 180 P-115 Abstract: 187

THE IMPACT OF SUPRA FIELD IRRADIATION ON THE QUALITY OF LIFE IN PATIENTS WITH BREAST CANCER

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Aim: Survival of breast cancer patients has increased with the development of oncologic treatments, and long-term side effects of treatments have become visible. The effects on the quality of life can be also examined here. The purpose of this study is the comparison of the quality of life between women who were supra field irradiated due to breast cancer and only women who were breast /chest wall.

Material and method: Four hundred and thirty patients with local regional disease who were follow-up at our clinic, who agreed to respond to the questionnaire, were included in the study. In order to assess the quality of life of the illness, EO-RTC-C30 Quality of life scale version 3-Turkish and EORTC-BR23 were translated into Turkish. Questionnaires were compared on repeated scales at 4 different time intervals [the start of RT (T1); the end of RT (T2); 1 month after completion of RT (T3); 6 months after completion of RT (T4)].

Results: Four hundred and three patients were included for this study. 256 (64%) patients received chest wall/breast and supra irradiation. 147 (36%) patients received only breast or chest wall. According to the EORTC-C30 scale, the global health score was significantly poorer in patients with irradiated supra field (p=0.034). According to EORTC-C30's functional scale, physical scores were poorer in patients who were supra irradiated and statistically significant at borderline (p=0.05). Role functioning (p=0.018), fatigue (p=0.007) and financial problem (p=0.049) scores were found to be higher in patients with supra field irradiation. The Statistical analysis of EORT-C30 are given in Table 1. According to EORTC-BR23 for symptom-scaled, arm symptoms (p=0.004) and systemic therapy (p=0.005) scores were significantly higher in patients who irradiated supra field. Statistical analysis of EORTC-BR23 is shown in Tables 2.

Conclusion: When the distribution of the scores from the quality of life, the patients who received the breast or chest wall, were better quality of life (general global health status, physical symptoms, role function, fatigue and arm symptoms) than the patients with irradiated supra field.

CLINICAL AND PATHOLOGIC CHARACTERISTICS OF PATIENTS WITH LYMPHEDEMA FOLLOWING BREAST CANCER (BC) SURGERY

MEDICAL ONCOLOGY

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Introduction: Breast cancer survivors have a lifetime risk of developing lymphedema (LE). LE has a great physical and psychological impact on the daily life of BC survivors. Several factors have been reported as risk factors for the development of secondary LE including body weight, infection, injury and type of surgery. We aimed to analyze the clinical and pathologic characteristics of patients who had breast cancer surgery and developed lymphedema thereafter.

Methods: We made a chart review of patients who developed lymphedema following their breast cancer surgery in our center. We noted clinical and pathologic factors and analyzed the frequency of potential risk factors.

Results: We identified 34 patients. Median age was 45 (22-77), 74% of patients were <50 years-old. Median time from the diagnosis to development of LE was 9 months (1-120). Seventy-nine percent of patients were premenopausal, 59 % patients had a BMI of >25. Five patients had no axillary dissection, had only SLNB. Thirty percent of patients had node negative disease, 24% had 4 or more LN involved and 65% patients had BCS. Median number of dissected axillary lymph node was 17 in patients who had axillary dissection. Twenty percent of patients had postoperative infection. Ninety-seven percent had adjuvant radiotherapy and 94% received adjuvant chemotherapy. Twenty-four patients had hormone receptor positive, Her-2 negative tumors, seven patients had Her-2 positive tumors and three patients had triple negative tumors. So far, 5 patients had recurrence.

Conclusion: Patients who developed LE were young, most had undergone axillary surgery, had hormone receptor positive tumors and almost all received adjuvant radiotherapy.

BREAST SURGERY

S-002 Abstract: 9 S-004 Abstract: 15

OUR EXPERIENCES WITH PATIENTS WITH IDIOPATHIC GRANULOMATOUS MASTITIS

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Objective: Idiopathic granulomatous mastitis (IGM) is a rare, chronic inflammatory disease of the breast of unknown etiology (1). The condition typically occurs in young women as a unilateral breast mass (2). Clinical and radiological characteristics may mimic breast cancer. Definite diagnosis is made based on histopathological findings. In this study we aimed at emphasizing that a careful analysis of clinical, radiological and pathological findings might yield a favorable outcome with medical treatment before considering surgery.

Materials-Methods: Seventeen cases of Idiopathic granulomatous mastitis assessed by ultrasound imaging and diagnosed by True Cut biopsy between January 2014 and January 2017 were retrospectively analyzed. The presenting symptom was pain in the breast in all seventeen patients while eleven patients had additional swelling and erythema. Breast biopsy PCR and blood Brucella tests (Rose Bengal test) were negative in all patients. The mean age of patients was 30.8 years. 5 patients had a history of breastfeeding in prior 6 months.

Results: All patients received amoxicillin-clavulanate 3 times daily for 10 days and subsequently all of them were started on methylprednisolone 0.8mg/kg daily. A cure was achieved in 14 patients 3 weeks later, based on follow up ultrasound findings, while the condition did not improve in two patients. Corticosteroid treatment was tapered in patients who achieved a cure and the two patients who did not respond to medical treatment underwent surgery. The disease recurred three months later in one patient who received medical treatment. Medical treatment was resumed but the patient did not respond to the treatment. This patient also underwent surgery. In our study fourteen out of seventeen patients with IGM responded to medical treatment and 3 patients underwent surgery.

Conclusion: Clinical symptoms and study results may mimic infectious mastitis and breast carcinoma in patients with IGM. Most of patients with IGM may be treated with medical treatment by carefully analyzing medical history, clinical symptoms, radiological and pathological findings in these patients. Therefore, we aimed at emphasizing that surgery may be considered only in patients who did respond medical treatment and surgical treatment should not be the first treatment option.

UNUSUAL CAUSE OF A BREAST MASS IN A THIRTEEN-YEAR-OLD FEMALE: A CASE REPORT

BREAST SURGERY

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Background: Foreign bodies in the breast are uncommon finding and may be detected incidentally during imaging or as a breast mass. Sometimes, they diagnostic dilemmas, as they mimics malignancies. To the best of our knowledge, this is the second case reported in the literature of an abscess caused by a retained migrating temporary epicardial wire.

Case presentation: A thirteen-year-old female of African ancestry was referred to the clinic with a left breast mass of two years duration. It had been gradually increasing in size for two years. It was tender, without associated skin changes, nipple discharge, or fever. She had a history of rheumatic heart disease and underwent mitral & tricuspid valve repair more than two years prior to presentation. Blood work and chemistries were within normal ranges. Ultrasound of the left breast showed a large, irregular, complex, heterogeneous mass measuring 4.3 x 2.7x 3.5 cm at 6 o'clock with central cystic changes but no significant intrinsic vascular flow. There was significant associated skin and subcutaneous edema. Given the echogenicity of the mass, an infectious cause was considered likely. Malignancy was less likely; however, it could not be excluded. Ultrasound guided biopsy was performed, revealing cores of breast tissue heavily infiltrated with mixed acute and chronic inflammatory cells consistent with a chronic abscess. The patient received a 10 day course of antibiotics. However, the patient remained symptomatic, and the mass did not decrease in size. Therefore, we proceeded to surgical excision. The breast mass was excised. It was fixed to the underlying rib, and a thin, long metallic wire that moved with heartbeats was observed to be protruding from a small opening above the rib. It was a retained migrated epicardial pacemaker wire from the previous valves repair surgery. The histopathology of the mass revealed mammary tissue with acute and chronic inflammatory cells.

Conclusion: Temporary epicardial wires should be removed completely by cardiothoracic surgeons after surgery to avoid a migration that might lead to unexpected complications.

BREAST CARE NURSING

S-005 Abstract: 16 S-007 Abstract: 24

MASTECTOMY-BASED LYMPHEDEMA INFORMATIONS AND PRACTICES OF LYMPHEDEMA MEASURES

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One of the problems that affect the quality of life of breast cancer after surgical treatment is lenfödem. The study was conducted to determine women's lymphoedema information and lymphedema measures after breast surgery. The sample of the researcher, who was carried out as a descriptor and relationship seeker, consisted of 103 breast surgeons. In the study, data were gathered with the questionnaire on the knowledge and practice of lymphedema measures developed by the researcher. Oneway analysis of variance, correlation, and Kolmogorov-Smirnov test test were used to assess the significance of the difference between the two means in assessing the data to determine the normal distribution fit of the data. From the time of surgery, most of the patients were found to have edema in the arm. It was determined that participants did not measure blood pressure to prevent lymphoedema, that the third person had to perform arm exercises, and that more than four quarters of the children should stay above the heart level while resting the arm and should not wear jewelry. It was determined that the knowledge point scores of the patients with lymphedema measures were significantly different between the educational status, occupation and edema variable groups (p<0,05). There was a positive positive correlation between the knowledge and practice scores of the participants on lymphedema measures (p<0,05). According to the findings of the study, the knowledge level of patients with lymphoma is a significant variable on the application cases. Sufficient equipment for lymphadenectomy before discharge from the hospital after surgical treatment may help to survive the problem in the post-treatment period.

BREAST CARE NURSING

BREAST CANCER EARLY DIAGNOSIS METHODS IN NURSING STUDENTS WITH WEB-SUPPORTED AND DIGITAL STORYTELLING EDUCATION

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The effective use of early diagnostic methods in breast cancer plays an important role in the early detection of cancer and the reduction of cancer-related deaths. The aim of the study is to compare the effect of web based education and digital history on the knowledge of nursing students about early diagnosis of breast cancer. The study was completed with a total of 134 second-class nursing students, 68 for web-based training and 66 for digital storytelling education. For web-based training, the QR code containing the site address was prepared and given to the students. The students in the other group were given a digital storytelling video with the same information as their content on the content website. The questionnaire was collected in two stages before and after the training with questionnaires. The collected data were evaluated using student-t test, ANOVA, chisquare and Kruskall Wallis Analysis of Variance Analysis. It was determined that 89.4% of students (46.3%) knew that they knew about breast cancer early diagnosis methods, 68.2% of them knew mammography and 37.9% of them knew KMM. Significant differences were found in participants' knowledge of breast cancer risk after education (p < 0.0001). This difference was found to be higher than web-based education compared to digital stories. Significant differences were found in the frequency of practicing the early diagnosis methods of the participants and their knowledge about the practice. This difference was also found to be higher in the web-based training group (p <0.0001) than the digital-trained training group. Research results; web-based training is a more effective means of increasing knowledge of early breast cancer diagnosis methods. We are in the era of technological development and it can be said that it is appropriate to use different methods especially in the education of young people these days.

BREAST CARE NURSING

S-008 Abstract: 25 S-014 Abstract: 148

BREAST SELF-EXAMINATION KNOWLEDGE AND PRACTICES AMONG TURKISH WOMEN: SYSTEMATIC REVIEW

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Over 16 500 women are diagnosed with breast cancer each year in the Turkey. Compared with other countries, women in Turkey have poor survival prospects for breast cancer. Women are encouraged to be breast aware from the age of 20 in world. However, the evidence suggests that women do not engage in breast awareness and are frightened and confused about their role in breast health promotion. This systematic review is reported in line with the PRISMA. A total of 286 abstracts were retrieved through a systematic search for articles published between January, 2010, to December, 2017, in the six databases of PubMed, Cochrane CENTRAL Register of Controlled Trials, Ovid MEDLINE, Science Direct, ULAKBIM Turkish Medical Database, and Google Scholar. Following the removal of duplicated studies, two reviewers independently screen 286 records. Three authors performed data extraction independently. Only original resdearch articles included, in having a sample of Turkish women, examining both the knowledge and practice of BSE. Thirty six articles were chosen based on the inclusion criteria by researcher. The results of this review related that demographic variables, breast cancer risk, bseast self examination (BSE) knowledge and practise. BSE impact on martial status, breast cancer risk, education of breast cancer, and age. In this review articles, reported that women had higher BSE information, while BSE practices were found to be lower. All articles states that women should increase their BSE practices and women should have a mammography. Numerous self-repetitive studies of breast cancer have been conducted in our country. In addition, it was determined that the level of evidence of the researches conducted was low and that individuals needed research supporting BSE applications.

DIFFUSION WEIGHTED IMAGING MAY BE AN ALTERNATIVE METHOD OF SIZE MEASUREMENT

RADIOLOGY

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IN BREAST CANCER?

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Objective: Dynamic contrast enhancement magnetic resonance imaging (DCE-MRI) and diffusion-weighted imaging (DWI) of the breast represents one of the most sensitive imaging modalities in breast cancer detection. The purpose of this study is to compare the size of the breast lesions in DCE-MRI and DWI.

Materials and methods: We retrospectively reviewed 23 patients examining breast MRI (DCE, DWI) who had undergone surgery for breast cancer. DWI was performed on a 1.5 T system with b values of 0 and 800 s/mm². The patients were assessed according to the BIRADS classification.

Results: Mean tumor size was detected 30 mm on DWI with b-500 value, 29.9 mm on DCE-MRI, and 28.9 mm on pathologic analyses. Among all groups, Pearson Correlation test showed high correlation. (p < 0.01). On DWI and DCE-MRI, tumor size was defined as 90.5% accuracy. No significant difference was found in the detection of tumor size between DWI and DCE-MRI according to student t test.

Conclusion: There is no measurement difference between DWI and DCE-MRI in detecting tumor size in breast cancer. We think that DWI can be used as an alternative to DCE-MRI in large series of studies.

BREAST SURGERY

S-019 Abstract: 34 S-023 Abstract: 45

PATIENT HISTORY INCLUDES EFFECTIVE FACTORS TO VISIT BREAST CLINICS FOR WOMEN WITH BREAST PAIN

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Purpose: Breast pain is one of the most common complaints including 45-69% of all women. Although there are many studies conducted on breast pain, only one study investigated effective factors regarding breast pain.

Material and methods: Women with breast pain and without pain consecutively included into the study between October 2014- February 2017. Patients' age, gender, pain characteristics, past medical, gynecologic, family, and social histories obtained with a detailed questionnaire.

Results: 215 (41.7%) had breast pain and 300 were (58.3%) controls. 9 (4.2%) vs 31 (10.3%) (p< 0.05) women had personal history of any benign or malignant breast disease; 23 (10.7%) vs 4 (1.3%) (p< 0.05) had personal history of any benign or malignant gynecologic disease; 31 (14.4%) vs 8 (2.7%) (p< 0.05) had family history of breast cancer; 66 (30.7%) vs 68 (22.7%) (p< 0.05) had family history of any malignant disease; 9 (4.2%) vs 37 (12.3%) (p< 0.05) had alcohol consumption history; 49 (22.8%) vs 112 (37.3%) had equal or higher than high school degree in their educational background respectively. Personal history of any benign or malignant breast disease (p<0.05) (OR: 3.72; Cl: 1.5-9), personal history of any benign or gynecologic disease (p<0.001) family history of breast cancer (p<0.001) were statistically significant in the multivariate logistic regression analysis.

Conclusion: Patient history includes effective factors influencing patient behavior to visit breast clinics. The concern of having breast cancer in women with breast pain seems to be the leading cause to visit breast clinics.

CASE REPORT OF PRIMARY SMALL CELL NEUROENDOCRINE CANCINOMA OF THE FEMALE BREAST

BREAST SURGERY

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Neuroendocrine tumors of the breast account for less than 1% of breast cancers. In 2012, the World Health Organization revised carcinomas with neuroendocrine features and subclassified into 3 groups: well-differentiated neuroendocrine tumor, poorly differentiated neuroendocrine carcinoma or small cell carcinoma, invasive breast carcinoma with neuroendocrine differentiation.

Case presentation: A 51-years old woman applied for routine breast follow-up. Her sister had breast cancer history. Physical examination revealed a 2 cm mass with irregular borders 2 cm peripheral from the areola at 5 o'clock on right breast. No axillary lymph nodes were palpated. No mass was detected on mammography. On ultrasonographic examination, a 22x20 mm hypoechogenic, multiloculated, solid-cystic mass with irregular borders was detected on palpation site. In addition, 9x7 mm intramammarian lymph node and 17 mm suspicious lymph node in the axilla were detected. The pathology result of tru-cut biopsy revealed a high-grade small cell neuroendocrine carcinoma with estrogen receptor and progesterone receptor-positivity and Her2/neu negativity. Chromogranin, CD56, and synaptophysin were all positive in more than 50% of tumor cells. Thorax CT and PET-CT were performed to differentiate primary breast carcinoma from lung carcinoma. The results were in accordance with primary breast carcinoma with suspicious axillary metastases. On breast MRI, another suspicious lesion (BIRADS 4) and possible metastases in axillary and intramammarian lymph nodes were detected. The patient underwent right total mastectomy, sentinel lymph node biopsy, and breast augmentation with implant. Four sentinel lymph nodes were retrieved using both the blue dye and the radioisotope methods. Pathology revealed that all of them had metastases and axillary dissection was performed. Final pathology report has not reported yet.

BREAST SURGERY

S-027 Abstract: 83 S-057 Abstract: 14

MOLECULAR SUBTYPES OF YOUNG VERSUS VERY YOUNG BREAST CARCINOMA ASSOCIATION WITH PROGNOSTIC FACTORS

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Purpose: Young breast cancer is a description of a patient group diagnosed with breast cancer, especially those under 40 years of age. When the survival rates of breast cancer are considered, it is seen that younger age is much lower than older age. And the prognosis of younger age group is very poor. In addition, when the breast cancer is diagnosed under the age of 35 it is called as the very young group and the prognosis is much worse than that of the young breast cancer group. In this study, molecular subgroups of young breast cancer patients and prognostic factors were assessed and compared with a very young breast cancer group.

Materials and Methods: In this study 624 patients who were diagnosed with breast cancer between October 2013 and February 2018 at Kocaeli University School of Medicine General Surgery Department Breast Surgery Unit were evaluated. Of these patients, demographic, pathologic, molecular and prognostic data of ones who were under 40 years of age were collected retrospectively.

Results: As a result, 95 patients who were under 40 years of age were included in the study. 36 patients were under 35 years of age. No statistically significant difference was found between the two groups in terms of demographic data, pathological data, molecular classification, and disease survival data. In the survival analysis, there was no statistically significant difference between very young breast cancer group and young breast cancer group.

Conclusions: Young breast cancer is worse in terms of both disease characteristics and survival. But especially in terms of molecular subgrouping and in terms of prognosis very young breast cancer group may not need to be treated as a separate group other than the young breast cancer group.

RELIABILITY AND VALIDITY OF THE TURKISH VERSION OF CIPNAT DURING TAXANE CHEMOTHERAPY IN BREAST CANCER PATIENTS

MEDICAL ONCOLOGY

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Objective: The aim was to evaluate the reliability and the validity of the Turkish version of Chemotherapy-Induced Peripheral Neuropathy Assessment Tool (CIPNAT).

Methods: This methodologic study was carried out to analyze the validity and the reliability of Chemotherapy-Induced Peripheral Neuropathy Assessment Tool (CIPNAT). The sample consisted of 430 Taxane chemotherapy applied breast cancer patients between April-December 2017. Data were collected by Chemotherapy-Induced Peripheral Neuropathy Assessment Tool (CIPNAT) and the demographic data form. After completing the translation of the scale into Turkish, its contentreliability was checked. Validity was, as well, tested after the translation. The Cronbach alpha value and test retest reliability was utilized for reliability analyses.

Results: The Cronbach alpha value was 0.87 in this study. The test retest reliability ranged between 0.90-0.96 for all items. No difference existed between test and retests mean scores of (CIPNAT). A statistically significantly positive and strong relationship happened between the item's test and the retest scores. There were statistically significantly positive relationshipsamong all levesl of CIPNAT. These results showed that the Turkish version of Chemotherapy-Induced Peripheral Neuropathy Assessment Tool is a valid and reliable scale in Turkish society.

Conclusion: This study showed that Chemotherapy-Induced Peripheral Neuropathy Assessment Tool in Turkey is a reliable and a valid tool to evaluate Taxane chemotherapy in breast cancer patients.

OTHERS

S-063 Abstract: 11 S-066 Abstract: 44

IN-UTERO AND EARLY LIFE EXPOSURE RELATED TO BREAST CANCER RISK

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Background: Breast cancer (BC) is the most prevalent cancer in Iranian women and the fifth most common cause of cancer-related death in Iran. Risk factors in the adult life may act during fetus life and after delivery. We conducted a case–control study to find out the relation of in utero and early life exposure and risk of BC.

Methods: A structured questionnaire that covered demographic criteria and BC risk factors in utero was completed for case (732 cases) and control (584 subjects) groups, matched in terms of demographic variants, reproductive issues and socioeconomic status. Odds ratio (OR) and 95% confidence intervals (CI) were computed as measures of association from the logistic models.

Results: Having been breast feed for more than 19-24 month (P<0.001, OR 0.03, CI 0.004-0.21) is protective and positive family history of mother (P-value= 0.009, OR 3.4) is a risk factor for BC in adult.

Conclusion: There is increasing recognition that condition in utero is important for later risks in breast. Emerging evidence suggests an association between intrauterine status and women prenatal condition and their subsequent risk of developing breast cancer. this is the first Iranian study assessing prenatal factors and breast cancer risk in the EMR and it should be followed by the larger group of cases and controls in the future.

EFFECTS OF ARM LYMPHOEDEMA TREATMENT ON LIFE QUALITY IN BREAST CANCER

OTHERS

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Purpose: The study was conducted to determine the effect of treatment for arm lymphoedema on the quality of life of patients treated for breast cancer.

Materials and methods: The study was conducted with 120 patients who received standard breast cancer treatments. The study, which was conducted as a descriptive and relationship seeker, randomized two groups according to their age and educational status and age, who received 60 lymphedema treatment.. The data were collected with the EORTC QLQ-C30 scale. One-way analysis of variance, correlation, and Kolmogorov-Smirnov test test were used to assess the significance of the difference between the two means in assessing the data to determine the normal distribution fit of the data.

Results: It was found that the patients with arm edema (60.0%) and the degree was below 3 cm (32.8%). The mean quality of life scores were 62.3 ± 12.7 . The mean scores of the patients with and without lymphedema treatment were 61.46 ± 10.05 and 63.16 ± 14.73 , respectively (p <0,05). There was a significant negative correlation between age and EORTC (p <0.05). The educational attainment was found to be a significant variable on edema (p = 0.04).

Conclusions: Precautions and prevention of arm edemas in breast cancer can be helpful in increasing the quality of life of the patients by telling the illness immediately after surgery and acquiring adequate facilities for the prevention of the patients

PLASTIC SURGERY

S-084 Abstract: 27 S-101 Abstract: 43

DELAYED BREAST RECONSTRUCTION WITH LATISSIMUS DORSI MYOCUTANEOUS FLAP AND IMPLANT

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Purpose: In this study, we aimed to investigate the aesthetic outcomes and complications of delayed breast reconstruction with latissimus dorsi myocutaneous flap + implant among patients undergoing total mastectomy operation.

Patients and Methods: This study included patients operated with latissimus dorsi myocutaneous flap+implant after total mastectomy operation.

Results: We performed delayed reconstruction with Latissimus Dorsi myocuteneous flap+implant for 24 patients and 25 total mastectomized breasts between 2014 and 2018. The study population had a mean age of 44.0 years. Twelve right and 13 left breasts were reconstructed. Operative time ranged between 135 and 220 minutes. None of the patients suffered partial or total flap necrosis, infection, implant protrusion or rupture, or keloid formation. Four patients developed seroma lasting for up to 1 month, which improved upon aspiration. One patient developed a cellulitis-like appearance on the breast tissue at the second month, which improved after a 1-week course of IV antibiotics. Only three patients had a bad scar formation at the donor site. No patient had bad scar formation in the mammary region. The median volume of round implants was 250 (175-300) ml. None of the patients suffered cancer recurrence.

Conclusion: Latissimus dorsi myocutaneous flap + implant procedure is an extremely safe and reliable option for delayed breast reconstruction. It is a simple technique with less complications than other reconstructive techniques, particularly for patients who fear postoperative complications and who wish to return to normal life as soon as possible.

CLINICOPATHOLOGICAL ANALYSIS OF 7 BREAST HAMARTOMAS AND REVIEW OF THE LITERATURE

PATHOLOGY

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Purpose: Breast hamartomas are uncommon benign lesions. They consist of mammary ducts, lobules, fat tissue and fibrous tissue and constitute 4.8% of benign breast tumors. Myoid hamartomas contain smooth muscle in their stroma. They are well-defined lesions and usually encapsulated. Breast hamartomas may present as clinically apparent mass or asymptomatic which detected radiologically.

Material and Method: Patients who had breast surgery between January 2013 and January 2018 in Konya Education and Research Hospital and diagnosed as breast hamartomas were included in the study.

Results: Seven breast hamartomas were identified. The mean age was 45 years. The mean tumor size is 3.9 cm. Five of the cases were admitted with complaints of painless palpable mass in the breast (71.4%). Three out of seven cases were myoid hamartomas. The most common lesion associated with hamartomas is cysts. Pseudoangiomatous stomal hyperplasia (PASH), columnar cell hyperplasia (CCH) and ductal epithelial hyperplasia (DEH) were also common accompanying lesions. DEH and CCH were observed in all myoid hamartomas. Ductal carcinoma in situ (DCSI) was detected in one case and it was also myoid hamartoma.

Conclusions: Breast hamartomas are accompanied by many lesions such as fibrocystic changes, adenosis, DEH, PASH. In addition to these lesions, we also detected CCH. Rarely DCIS, lobular carcinoma in situ or invasive ductal carcinoma are detected in mammary hamartomas. We detected DCIS in myoid hamartoma. Surgical excision is considered to be curative, prognosis is excellent.

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