

001-O**FREQUENCY OF PATHOLOGICAL COMPLETE RESPONSE IN PATIENTS WITH TRIPLE NEGATIVE BREAST CANCER. A SINGLE INSTITUTION STUDY.****SAMAD JEHANGIR, YASMIN RASHID.
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Background: The prevalence of triple-negative breast cancers is 12.5% as per a population based California cancer registry. The prevalence of triple negative cancers in Pakistan is around 18.6%. Pathological complete response of 19-30% has been found in large prospective studies, with a better response in aggressive subtypes such as triple negative breast cancers. Various pooled analysis and previous studies have established the prognostic value of pCR, showing a better overall survival,

Methods: Retrospective, descriptive study conducted at the department of Oncology, Aga Khan University Hospital, and Karachi, Pakistan. 38 patients with stage II or locally advanced breast cancer were included and their files were retrospectively reviewed after taking approval from respective ethical board. Patients meeting the inclusion criteria, subjected to neoadjuvant chemotherapy regimen comprising of Anthracyclin/ Cyclophosphamide for four cycles, followed by weekly or two weekly taxanes with or without carboplatin were included in the study. After having received neoadjuvant chemotherapy, these patients underwent wide local excision or modified radical mastectomy, and the pathological response was assessed.

Results: Most of the patient had locally advanced disease i.e. 15 (39.5%) had stage IIIA while 9 (23.7 %) had stage IIIB. All patients received neoadjuvant chemotherapy, most common regimen received was Doxorubicin 60mg/m² Cyclophosphamide 600mg/m² for four cycles every 14 days followed by paclitaxel weekly at a dose of 80mg/m² or two weekly at 175mg/m² i.e 23 (60.5%). Most patients underwent MRM. Majority of the patients had pCR i.e. 20 (52.5%), whereas 10 patients (26.3%) had pR and 6 patients (15.8%) had almost complete response. Amongst these 38 patients, 7 patients received AC followed by carboplatin/ taxol and out of those 7, 5 patients (71%) had pCR thereby showing a higher frequency of pathological complete response in this subgroup.

Conclusions: The frequency of pCR after neoadjuvant chemotherapy was found to be 52.5%, with a higher frequency in patients who received carboplatin along with the neoadjuvant regimen.

002-O

WALES INTERVENTIONS AND CANCER KNOWLEDGE ABOUT EARLY DIAGNOSIS (WICKED): FINDINGS FROM WORK PACKAGE 2 OF THE WICKED RESEARCH PROGRAMME

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Purpose/Background: Cancer outcomes in the UK are worse than many countries with similar health systems. General practitioners (GPs) play a pivotal role in improving cancer outcomes through earlier diagnosis.

Aim: To develop and evaluate a behavioural intervention to enable GPs to expedite cancer diagnosis through primary care and contribute to improved cancer outcomes.

Design & Setting: Non-experimental mixed-method study with GPs and primary care practice teams from Wales, UK.

Method: This ongoing programme is divided into four inter-related Work Packages (WPs). WP1 identified relevant interventions (systematic review of reviews) and determined why interventions do or do not work, for whom, and in what circumstances (realist review). WP2 comprises an on-line GP questionnaire, 20 GP telephone interviews, and four practice-team focus groups. The questionnaire examined GPs' perceptions and attitudes towards cancer diagnosis, and influences on cancer referral-related behaviour change. GPs' individual beliefs and behaviours were explored in interviews; practice systems and norms were investigated in focus groups. Quantitative data were analysed descriptively, with conventional content analysis for free-text responses, and Framework analysis was used for qualitative data-sets. The Behaviour Change Wheel is the overarching theoretical framework used to guide intervention development (WP3). Whereas, WP4 will test the feasibility and acceptability of the intervention, and determine methods for measuring costs and effects of earlier diagnosis in a randomised feasibility trial. Findings will inform the design of a future effectiveness trial, with concurrent economic evaluation.

Results: *Early findings:* 269/1993 (13.5%) GPs completed the survey. Most agreed that 'timelier diagnosis leads to better survival', perceived themselves to be knowledgeable, confident and capable in managing cancer symptoms, reported recent changes in their cancer-related diagnostic activity, and believed in their ability to influence timely diagnosis. However, many thought that, if given the opportunity and support, there was still room to improve early cancer diagnosis. Preliminary analysis of six interviews revealed five themes including; 'wanting referral behavior to fit', 'feeling untrusted by secondary care', 'practicing over-defensive medicine', 'support from colleagues, and 'difficulty referring patients with vague symptoms'.

Conclusion: These findings will inform the development (WP3), and evaluation (WP4) of a behavioural intervention to expedite referral and diagnosis.

003-O

FACTORS FAVORING LONG TERM SURVIVAL IN PATIENTS WITH STAGE IV EPITHELIAL OVARIAN CANCER: AN INSTITUTIONAL RESEARCH**HAFIZ ABUBAKAR SARWAR, SAMIA YASMEEN, FAREEHA SHEIKH, FATIMA ALI, UMM E KALSOOM AWAN, NEELAM SIDDIQUI. SKMCH&RC, Lahore, Pakistan**

Objective: To identify factors favoring long term survival in patients with stage IV epithelial ovarian cancer presenting at shaukat khanum memorial cancer hospital Lahore.

Methods: Patients demographics, clinical data and histopathology were abstracted from cancer registry department of shaukat khanum memorial cancer hospital and research center Lahore. Thirty patients were selected with diagnoses of stage IV epithelial ovarian cancer from 2006 to 2013. We used chi-square test to find the association between clinicopathological variables and long term survival in patients with stage IV epithelial ovarian cancer.

Results: We evaluated thirty patients, among them eleven patients survived greater than four years. The absence of co-morbidities, good performance status have shown good result for long term survival although it was not statistically significant. Higher CA-125 values (>1000), initial response to chemotherapy, interval staging resection and complete remission to induction therapy were significantly associated with long term survival ($P < 0.05$).

Conclusion: The factors for long term survival in patients with stage IV epithelial ovarian cancer were higher values of CA-125 at presentation, response to initial chemotherapy, interval surgical resection and complete remission to induction therapy.

004-O

PROGNOSTIC SIGNIFICANCE OF ABSOLUTE MONOCYTE COUNT AND LYMPHOCYTE MONOCYTE RATIO IN NEWLY DIAGNOSED PATIENTS WITH DLBCL.

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Background: Absolute monocyte count (AMC) at diagnosis has been studied for prognostic relevance in patients with diffuse large B cell lymphoma (DLBCL).

Aims: The present study was designed to investigate the prognostic significance AMC and to determine whether ALC/AMC ratio can be a predictor of outcome in new patients with DLBCL.

Results: Methods: We retrospectively analyzed the prognostic significance of AMC, ALC/AMC ratio at presentation in 62 DLBCL patients treated with CHOP based chemotherapy regimen. 48.4% patients has stage I/II at presentation while 52.6% patients presented with stage III/IV. B symptoms were present in 59.7 % (n=37) patients. Fifty-five patients completed three years of follow up and were discharged from system while one patient remained in remission but died after two years of follow up due to complications of chronic diarrhea. Six patients presented with disease relapse. Median time for relapse was 24.1 months. Cut off values of AMC and ALC/AMC ratio were determined according to the literature data as $0.59 \times 10^9/L$ and 2.8 respectively. At presentation twenty-three patients had a low AMC value of $< 0.59 \times 10^9/L$ while thirty-nine patients had a high AMC value of $> 0.59 \times 10^9/L$ while twenty-five patients had high ALC/AMC ratio of < 2.8 while thirty-seven patients had low ALC/AMC ratio of > 2.8 . Among relapsed patients five of the six patients had high AMC and low ALC/AMC ratio.

Conclusion: Our results correlate with previously reported data in the literature. In addition to high IPI score, High AMC and low ALC/AMC ratio at presentation can be used independently to predict the risk of relapse and may be useful prognostic factors in patients with diffuse large B cell lymphoma. A study with large number of patients would add more power to the results and further studies are needed to determine which of these parameters has the highest predictive value.

005-O

A SINGLE CANCER CENTER EXPERIENCE WITH RHABDOMYOSARCOMA.**RAHEELA MANSOOR AND SAADIYA J. KHAN****DEPARTMENT OF PEDIATRIC ONCOLOGY, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTRE LAHORE.**

Introduction: Rhabdomyosarcoma (RMS) is the most common soft tissue sarcoma in children.¹ There is disparity between tumor site, histology and clinical behavior of RMS hence making molecular biology an essential means of disease risk stratification. Treatment strategies include systemic chemotherapy along with surgery and/or radiotherapy as local control options.

Materials & Methods: In this study, we conducted a 7-year retrospective chart review of 24 patient records from January 2011 to December 2017. Data collection included clinical characteristics, treatment plan and outcomes of children with RMS treated at the Shaukat Khanum Memorial Cancer Hospital (SKMCH).

Results: There were a total of 13 males and 11 females. Median age of diagnosis was 2.5 years (range: 9-months to 17 years). Patients were risk stratified using the Children's Oncology Group (COG) classification.² According to this classification 4 (16.7%) were low risk (LR), 14 (58.3%) were intermediate risk (IR) and 6 (23.0%) were high risk (HR). Only 2 (8.3%) had the alveolar subtype. The primary sites of tumor were head and neck region (n=4, 16.7%); genitourinary (n=15, 62.5%) and abdomen/retroperitoneal (n=5, 20.8%). Two patients abandoned therapy. At the time of analysis, 9 (37.5%) patients had died because of disease, 1 alive with evidence of disease and 12 (50%) were alive with no evidence of disease. All patients with LR disease are alive and were treated on chemotherapy with surgery &/or radiotherapy. Seven (50%) patients with IR survived. Whereas only 1 (6.25%) having HR disease is alive and disease free on last follow-up.

Conclusions: Large sized tumors, tumors at unfavorable sites and treatment abandonment contributed to inferior outcomes. We conclude that there is need for parental education to seek medical help for masses in children that persist for more than 4-6 weeks.

References: Pizzo PA, Poplack DG. Principles and Practice of Pediatric Oncology. 5th ed. Philadelphia: Lippincott Williams & Wilkins; 2006. Raney RB, Maurer HM, Anderson JR et al. The Intergroup Rhabdomyosarcoma Study Group (IRSG): Major lessons from the IRS-I through IRS-IV studies as background for the current IRS-V treatment protocols. *Sarcoma* 2001;5:9-15.

006-O

CLINICAL OUTCOMES OF BURKITT LYMPHOMA IN CHILDREN: SINGLE INSTITUTIONAL EXPERIENCE.

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Background/Objectives: Burkitt lymphoma accounts for almost 30-50 percent of childhood lymphomas. In the past the outcome of Burkitt and other non-Hodgkin lymphoma has been poor, but over the years due to short and intensive chemotherapy regimens the outcome has improved. This study has been conducted to determine the initial stage of presentation of Burkitt lymphoma in children, clinical course and long-term outcomes post treatment.

Materials and Methods: A retrospective analysis was done, of all the patients presenting to shaukat khanum memorial cancer hospital from January 2010 till December 2016, with Burkitt lymphoma.

Results: A total 202 patients presented from January 2010 till December 2016, with mean age of presentation 6.43 ± 3.42 , out of which 73.8% were males and 26.2% were females. The majority patient had extensive disease on presentation, stage III in 56% and stage IV in 29%. The common site involved was abdomen, in 77.2%, followed by cervical lymph nodes in 9.5% patients. The course of disease and treatment was complicated with febrile neutropenia episodes, the most common organisms isolated were Escherichia coli in 32.1% followed by kleibsella in 25% patients. Out of 202 patients, 57.9% achieved complete remission, 34.7% of patients died during the course of treatment whereas 1.0% patients had relapse disease, whereas 5.9% patients left treatment. When analysing we observed that 56% of patients died cause of neutropenic colitis where as 21% died cause of tumour lysis syndrome leading to renal failure, during the initial course of treatment.

Conclusion: Most of our patients had extensive disease on presentation and the disease course was complicated with neutropenia and sepsis.

007-O**PREVALENCE OF SYMPTOM CLUSTERS IN CANCER PATIENTS UPON FIRST PRESENTATION TO A PALLIATIVE CARE CLINIC****DR. IRUM GHAFOOR, FARHAT NAZ, DR. HAROON HAFEEZ, MOHAMMAD ABUBAKAR
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Objective: To determine the overall prevalence of symptoms and symptom clusters and to identify the most severe symptom at the time of first visit to Palliative care clinic by using HIS Palliative First Assessment note indicating Edmonton symptom scale.

Methodology: It was a retrospective study. Data was collected from HIS system at Shaukat Khanum Memorial Cancer Hospital and research Centre. The duration of data collection was three months from June 2017 to August 2017. We included all patients who had visited palliative care clinic for the first time during this duration at the out-patient clinic and in-hospital after they were referred to palliative care. All patients who had their Palliative first assessment done during this time were enrolled. All those patients who were terminally ill at the time of Palliative First assessment and could not reply to physician were excluded. Data was analyzed from HIS Edmonton symptom assessment scale that includes pain, drowsiness, tiredness, lack of appetite, shortness of breath, anxiety and depression and the patient's disease was also identified. Statistical analysis was carried out using the SPSS software (version 20.0). Agglomerative hierarchical cluster analysis with dendrogram was used to create the symptom clusters.

Results: There were total 182 patients and the most prevalent symptoms were tiredness (84.06%), lack of appetite (74.72%), pain (74.17%), nausea (57.14%), anxiety (54.9%) depression (53.3%) drowsiness (50.5%) and shortness of breath (46.15%). Two symptom clusters were defined as a result of cluster analysis: 1st: depression, anxiety, pain, tiredness, lack of appetite 2nd: nausea, drowsiness and shortness of breath.

Conclusion: Symptom cluster study is a beneficial tool to improve overall patient's health. By identifying the relationship among the symptom clusters and by treating these clusters, better symptom control leading to enhancement in the general wellbeing of a patient can be achieved hence will significantly decrease morbidity of these patients as well.

008-O

PRE-OPERATIVE PEG TUBE IN OESOPHAGEAL CANCER PATIENTS IS NOT ASSOCIATED WITH INCREASED POST-OPERATIVE COMPLICATIONS AND MORTALITY

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Background: The percutaneous endoscopic gastrostomy (PEG) tube in oesophageal cancer patients has not been widely recommended owing to the risk of tumor seeding at PEG site, difficulty in using stomach as a substitute of oesophagus in oesophagectomy and fear of post-operative complications, including anastomotic leak^{1,2}.

Objective: To see post-operative complications in oesophageal cancer patients, who had PEG tube insertion before oesophagectomy.

Material and methods: We performed a retrospective cross-sectional review of the patients, who presented with oesophageal or gastro-oesophageal (GOJ) cancer from 1-1-2010 to 31-12-2014 (5years) at our center. Out of these 800 patients, a total of 168 were included in the study, who had PEG placed, T4a disease at baseline PET scan and a neoadjuvant treatment, followed by surgery was planned. One-month mortality after PEG, post-operative complications and outcome at 3 years in terms of remission, recurrence and death were assessed.

Results: The mean age of our patients was 52.64 ± 12.01 . The average BMI of patients remained maintained after PEG tube insertion during neo-adjuvant treatment (22.34 before PEG and 21.85 after PEG, p-value: 0.1). Out of 168 patients, 135 (80.3%) did not show any PEG related complications, while 24 (14.2%) had PEG site infection, perforation occurred in 4 (2.3 %), the PEG site tumour inoculation in 3 (1.7 %) and 2 patients had minor bleeding or aspiration pneumonia. The PEG related mortality at one month was 0 %. Surgery was performed after a neo-adjuvant treatment in 99 (59 %) patients, only in 2 patients, it was deferred due to PEG related complications. i.e. PEG site tumour inoculation. Gastric conduit formation was possible in all of 99 patients, while post-operative complications were seen in 17 (17 %), out of which, surgical site infections were 6 (6 %), anastomotic leak 6 (6 %) and anastomotic stricture 4 (4 %). The overall survival at 3 years was 76.8 %, while it was 89.04 % in those, who underwent surgery. The disease-free survival was 52 % in surgery group and 43 % in those, who did not have surgery.

Conclusion: The pre-operative PEG tube in oesophageal cancer patients is safe and does not compromise anastomosis. The limitation of our study was that we did not have control group without pre-operative PEG.

009-O

MICROBIOLOGY AND CLINICAL CHARACTERISTICS OF ACUTE CHOLANGITIS WITH THEIR IMPACT ON MORTALITY; A RETROSPECTIVE CROSS-SECTIONAL STUDY.**FURQANA AKHTAR, MUHAMMAD ZEESHAN SIDDIQUE, AUN RAZA, SHAFQAT MEHMOOD, M. ABU BAKAR, FAISAL SULTAN, MUHAMMED AASIM YUSUF****PRESENTER: M. ZEESHAN SIDDIQUE, FELLOW INTERNAL MEDICINE, SHAUKAT KHANUM MEMMORIAL CANCER HOSPITAL AND RESEARCH CENTER, LAHORE**

Background: Acute cholangitis is associated with high mortality, particularly in patients with Tokyo grade-II & III of severity, which can be significantly reduced with early administration of effective empirical antibiotics and biliary drainage. However, the irrational use of antibiotics and malignant biliary obstruction has caused emergence of resistant strains, which necessitates a change in empirical antibiotic regimen. Moreover, current guidelines recommend early biliary drainage but time to intervene has not been elucidated.

Objective: 1. To evaluate microbiology and clinical characteristics of acute cholangitis with their impact on mortality
2. To evaluate role of early (within 24 hours) vs late biliary drainage in the management.

Methods: A retrospective review was performed of all the patients, who presented with acute cholangitis from June, 2012 to June, 2017. The risk factors, yield of blood cultures, resistance pattern of microbial pathogens and severity according to Tokyo guidelines were assessed in addition to the associated mortality and recurrence at 3 months.

Results: A total of 230 patients were identified to have acute cholangitis during the study period. The mean age of the patients was 56 years \pm 13 SD and 60% were males. Out of 230 patients 80.7 % had prior history of biliary instrumentation, 40% revealed history of prior cholangitis and 71 % were diagnosed to have distal CBD stricture. The most common isolated organisms were *Escherichia coli* (*E. coli*) 70.12% (54/77), with resistance to ampicillin as 96 %, 3rd generation cephalosporins 87 %, ciprofloxacin 81 % and piperacillin / tazobactam as 27 %, while carbapenem resistance was only 5 %. The clinical severity (p value 0.001), late biliary drainage (p value 0.001) and use of multiple stents (p value 0.03) were associated with increased mortality. However, in multivariable analysis, only high BMI (AOR 1.20, 95 % CI 1.07 1.34, p-value 0.01) and Tokyo severity of grade-II & III (AOR 47.14, 95 % CI 8.87 - 250.61, p-value 0.001) were statistically significant to impact mortality, though late biliary drainage appeared to have increased risk (AOR 0.91 vs 1.78).

Conclusion: Cholangitis is associated with significant mortality and morbidity. We recommend an early identification of risk factors, administration of appropriate IV antibiotics and establishing early biliary drainage, are the key management steps to reduce mortality

010-O

THE PREVALENCE OF HIGH GRADE CERVICAL INTRA EPITHELIAL NEOPLASIA IN PRIMARY HUMAN PAPILLOMA VIRUS (HPV) CERVICAL SCREENING WITH CYTOLOGY NEGATIVE SMEAR RESULTS**AYESHA ANWAR, SIMON WILLIAM, GAMAGE WIJESIRI, NORTH CUMBRIA UNIVERSITY HOSPITAL NHS TRUST, CARLISLE , UK**

Cervical cancer is the second biggest cancer killer in women worldwide. Due to an effective screening programme in UK, deaths have fallen by 60% since the national screening programme was launched in 1988. High risk HPV is found in 99.7% of cervical cancers. The causative role of HPV in cervical cancer has led to the inclusion of HPV testing as part of cervical screening. HPV triage of women with borderline/mild cytology is current policy throughout the NHS Cervical Screening Programme in UK (NHSCSP). A pilot of HPV testing as primary screening is now under way in the six pilot sites in England. North Cumbria University Hospital (NCUH) NHS Trust is a part of six pilot sites. In this pilot, women with a HPV positive/cytology negative result are recalled at 12 months and persistent HPV infection with negative cytology smear for two consecutive years initiates a referral for colposcopy.

Objective: The main objective was to assess the prevalence of high grade CIN/invasive cancers in patient referred to colposcopy services at NCUH NHS Trust with HPV positive /cytology negative smear.

Method: The study was conducted at NCUH NHS Trust between January 2015 and December 2017. Data was collected from the colposcopy data base (INFOFLEX). All patients with HPV positive/cytology negative smear seen in colposcopy clinic during study period were included. Colposcopic findings and biopsy results were assessed. Patients with high grade CIN/Cervical glandular intra epithelial neoplasia (CGIN) or invasive cancer were recorded.

Results: 763 women were included in the study. A total of 50 (6.5%) women had high CIN/CGIN or invasive cancer. Of these, 48(6.2%) had high grade CIN, 2/50 had cervical adenocarcinoma. 40/50(80%) women were treated by large loop excision of transformation zone (LLETZ). One patient was treated by laparoscopic pelvic node dissection followed by chemoradiation.

Conclusion: HPV primary screening is more sensitive than cytology based screening. High grade HPV+ve smear with negative cytology, persisting for 2 years warrants referral for colposcopy as 6.5% of

011-O

ETHNIC DIFFERENCES IN HORMONAL RECEPTOR STATUS (ER, PR & HER2/NEU) AMONG BREAST CANCER WOMEN: A SINGLE INSTITUTION EXPERIENCE

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Background: Studies have shown differences in Hormonal Receptor Status (HRS) of Estrogen Receptor (ER), Progesterone Receptor (PR) & Her-2/neu expression among Breast cancer women of different racial and ethnic groups, however to the best of our knowledge at Pakistan level no such study has been conducted separately to evaluate the differences in HRS by ethnicity.

Objectives: To evaluate Ethnic Differences in HRS among Breast Cancer Women at our institute JPMC, the largest public sector tertiary care hospital in Karachi.

Materials & Methods: The study consisted of 450 breast cancer women of different ethnicities who visited oncology ward from 1st June 2017 to 31st July 2018. Data from patients was collected regarding tumor histology, grade, HRS & ethnicity. Data analysed in SPSS version 20 using the Chi-Square Test to compare differences in HRS of different ethnicities.

Results: The mean age of patient was 46.57 years. The Urdu speaking Patients out numbered other ethnicities. Overall HRS showed ER+ 61.30%, PR+ 53.30%, Her-2/neu+ 33.10%, Triple Positive 14.2% and Triple Negative 20.90%. However analysis of HRS as per ethnicity showed that ER was proportionately more positive in Pushtoons patients at the rate of 75.7% as compared to Urdu Speaking 60.4%, Punjabis 60%, Sindhis 56.7% and Balochis 61.1%. Similarly PR and Her-2/neu receptor were also more high-flying in Pushtoons at the rate of 64.9% & 40.5% respectively. The behavior of Triple Positivity was also more prominent in Pushtoons at the rate of 24.3% and the Pushtoons were also proportionately less likely to be Triple Negative at the rate of 13.5% as compared to other ethnicities.

Conclusion: In this study we observed relatively high expression of ER, PR and Her 2/neu Receptors in Pushtoons as compared to other ethnicities. Understanding the factors underlying these differences may provide further insight into the breast cancer etiology in different populations. However, it is an ongoing study, let the number of patients be further increased and then see either the same trend continues or vice versa. More studies are required on a larger scale in different parts of the country to reach a conclusion regarding ethnic differences in Hormonal Receptor Status among Breast Cancer Women in Pakistan.

012-O**EVALUATION OF THE CLUSTERED MICROCALCIFICATION AND ARCHITECTURAL DISTORTIONS ON STEREOTACTIC BIOPSY WHICH WERE INITIALLY GRADED AS LIKELY MALIGNANT ON MAMMOGRAM.****HAFSA S. BABAR, ANIS-UR-REHMAN. RADIOLOGY DEPARMENT, SKMCH&RC, LAHORE**

Introduction: Stereotactic guided breast biopsy with large-core needles is an invincible tool to sample abnormalities visible only on mammography with subtle or occult ultrasound findings. The common mammographic abnormalities which require stereotactic core biopsy include, calcifications, architectural distortion and satellites. The use of stereotactic large-core needle breast biopsy is increasing with advancement in techniques for adequate localization of lesions.

Materials and Methods: One hundred and six patients, from out patients clinic, who underwent stereotactic biopsies over a period of three years, were included in this study. The ages of these patients varied between 28 years to 81 years. Biopsies were taken using a 14-gauge core needle, long throw(22 mm excursion). Lesions which were initially labeled as likely malignant(category 4 B and 4C) were localised with use of a digital detector, included in the stereotactic table. A pathologist evaluated the histology of specimens.

Conclusion: The study predicted the diagnostic accuracy of sterotactic guided biopsies to be 100 percent. 56 percent of the clusters of microcalcification which were initially labeled as likely malignant turned out to be malignant even on histopathology, whereas; 43 percent of them were diagnosed as benign breast parenchyma.

013-O

RADIOFREQUENCY ABLATION OF LIVER LESIONS-INITIAL EXPERIENCE AT A TERTIARY CARE CANCER HOSPITAL

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Background: Many patients with primary or metastatic hepatic tumors are not candidates for resection because of co-morbidities, anesthetic and medical fitness issues, unfavorable location, multifocality or inadequate hepatic function related to coexistent cirrhosis. Image guided percutaneous techniques for local tumor ablation is proving promising in the treatment of liver malignancies and radiofrequency ablation (RFA) is the most widely available ablative technique so far.

Objective: To review our patients data and share our institutional experience of RFA for liver lesions and its complications.

Materials & Methods: We retrospectively reviewed all patients who underwent RFA over a period of 5 years from July 01, 2012 to June 30, 2017. Electronic records were retrieved including patient age, gender, primary malignancy, initial imaging, MDT discussion, RFA technique, any complications, follow up imaging where available and technical results.

Results: A total of 14 patients were deemed suitable for RFA after MDT decision. Ultrasound guided RFA of liver lesions was done in interventional radiology suite, one patient had per operative RFA of segment 8 lesion and one patient had procedure under CT. She had suboptimal ablation and second session was done under CT. All procedures were done under general anesthesia and were admitted overnight for post procedure observation. Out of 14, 9 (64%) patients were female and 5(36%) were male. All patients were above 50 years of age except a 36 year lady with metastatic liver lesion. 12 (85.7%) patients had hepatocellular carcinoma while remaining 2(14.2%) had metastatic liver lesions from primary colonic malignancy. Size of ablated lesions ranged from 1.5-3.5 cm. 7(50%) patients showed satisfactory ablation achievement on post RFA imaging. Two patients had no local recurrence but progressed with new lesions. Results of 2 patients are awaited. One patient decompensated after per operative RFA with ascites and S/bilirubin rising to 17.35 mg/dl in immediate post-operative period but he made uneventful recovery eventually. There was no procedure related mortality.

Conclusion: Radiofrequency ablation of liver tumors is a safe and effective therapeutic treatment option in suitable patients with good outcomes.

014 -O

FREQUENCY OF SKELETAL METASTASIS IN PATIENTS WITH NASOPHARYNGEAL CARCINOMA ON BASELINE Tc- 99m MDP BONE SCINTIGRAPHY

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Introduction: Nasopharyngeal carcinoma (NPC) is relatively rare malignancy. However, it is notorious for distant dissemination hematogenously. The overall frequency of bone metastasis in patients with NPC has been reported to be 11 to 36 %. Bone Scintigraphy is an important tool to detect skeletal metastases.

Objective: To determine the frequency of skeletal metastasis in patients with nasopharyngeal carcinoma on baseline Tc-99m MDP bone scintigraphy.

Methods: A total of 140 cases of newly diagnosed nasopharyngeal carcinoma were enrolled in the study. Baseline bone scans of all these patients were reviewed for any metastases.

Results: In our study 140 patients (Males=93, Females=47; age range: 25 - 80 years) were analyzed in 12 months period [February 2017 till February 2018]. The majority of cases (51.4%) were from age group in between 41 to 60 years. Stage IVA (36.4 %) was the most frequently found stage of NPC. On the basis of histopathology; undifferentiated (62.1%) pathology was the most frequent finding followed by moderately differentiated (5%) and well differentiated (5%) pathology. In 27.8% cases the degree of differentiation was not found out. Non keratinization (25.7%) was more frequent as compared to keratinization (0.7%) in histology. Baseline bone scan results showed presence of bone metastases in 10% cases. Multifocal metastases were more frequent (7.1%) as compared to unifocal metastases (3.5%). Metastases involved axial and appendicular skeleton (6.4%) and axial only skeleton (4.2%). Visceral involvement was found out in 2.9 % cases. Statistically significant correlation was found for TNM stage ($p = 0.00$). All 14 positive cases were found in patients with stage IVC disease. However, 5 cases with stage IVC did not show skeletal metastases. On bivariate analyses no statistically significant correlation was found between age ($p=0.43$), gender ($p=0.027$), histopathological degree of differentiation ($p=0.41$) and keratinization ($p=0.91$).

Conclusion: Skeletal scintigraphy is indicated in NPC for symptomatic patients and those with visceral involvement.

015-O**ANALYSIS OF LYMPHOCYTIC INFILTRATION IN BREAST CANCER****DR. TANWEER AHMED SHAIKH¹, DR. BINA FSHA MANZOOR SYED², PROF. IKRAMDIN UJJAN¹, PROF. JAWAID NAEEM QURESHI³****¹DEPARTMENT OF PATHOLOGY, LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO, ²MEDICAL RESEARCH CENTRE, LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO, ³INDUS MEDICAL COLLEGE, TANDO MOHAMMAD KHAN, PAKISTAN,**

Introduction: Adaptive immune system plays a diverse role depending upon cellular infiltration in breast cancer. This study therefore aims to tumor infiltrating lymphocytes (TIL) in breast cancer.

Patients and Methods: The tumor blocks were retrieved from prospectively collected institutional archive of Department of Pathology LUMHS Jamshoro. The patients included were a consecutive series presented during three years period (2015-17). A total of 54 good quality tumor blocks of biopsy proven Breast cancers were assessed on H&E. The lymphocyte infiltration and their histological grades were evaluated.

Results: Out of 54 breast cancer cases, 36 (66.7%) were below 50 years of age showing TIL in 29 (80.5%) cases and 18 (33.3%) cases above 50 years of age with TIL in 12 (66.6%) cases. The low histological grades showed high lymphocyte infiltration (grade I & II= 38/47 (88.3%) versus grade III =6/7 (85.7%).

Conclusion: Tumor Infiltrating Lymphocytes may represent antitumor activity and can be an independent prognostic marker, TIL can have immunotherapeutic role in breast cancer

016-O

COMPARISON OF 2 PLANNING TECHNIQUES: CONVENTIONAL FIELD BASED AND VOLUME BASED CT PLANNING FOR SUPRACLAVICULAR RADIOTHERAPY**Raheel Mukhtar, Sumera Butt, Tabinda Sadaf, Mohammad Abdur Rafaye, Ambreen Muzaffer.
SKMCH&RC, LAHORE, PAKISTAN**

Aim: Aim of this retrospective study is to compare the two planning techniques which are used to irradiate the supraclavicular nodes as adjuvant treatment in breast cancer. It is important to make sure that the intended treatment area should receive prescribed dose. One technique involves single anterior field arrangement with no contouring of supraclavicular nodes and dose prescribed on reference point at 3 cm depth. Other technique involves the contouring of supraclavicular nodes in CT Planning for adequate 95% dose coverage of the contoured SCF volume. This study of 50 patients data shows how well the supraclavicular nodes are covered in both conventional field based technique and volume based CT planning technique.

Material and Methods: Radiotherapy plans of 50 patients were compared for both conventional and volume based CT planning techniques. CT data from the Varian's planning software ARIA 11 allowed us to make this comparison. The dose volume histogram (DVH) showed the percentage of prescribed dose received by ratio of total structural contoured SCF volume (PTV) in CT volume based technique and conventional field based planning technique. The planning techniques were compared based on indicator that contoured volume should receive 95% dose. 6MV photon energy was used in software for these plans.

Results: In CT planning volume based technique, the supraclavicular nodes received mean dose of 85.6% of the Prescribed Dose (P.D), with lower bound 83% and upper bound 88%. The median received dose was 87% and maximum dose was 97.55%. In conventional field based technique, in which dose is prescribed at 3 cm reference point depth, the SCF nodes were covered by mean dose 67.4% of the prescribed dose with lower bound 64% and upper bound 70.9%. The median received dose was 70% (min 36%-max 95%). The mean supraclavicular nodes depth was 5.6 cm (range 3.1 cm-9 cm) in volume based planning as compared to conventional 3 cm depth.

Conclusion: CT Planning volume based technique of SCF irradiation offers greater coverage of SCF nodes compared with conventional single field based technique.

017-O**FIELD-IN-FIELD TECHNIQUE WITH INTRAFRACTIONALLY MODULATED JUNCTION SHIFTS FOR CRANIOSPINAL IRRADIATION (CSI) PLANNING WITH 3D-CRT AT ZIAUDDIN HOSPITAL**

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KARACHI, PAKISTAN. KARACHI, PAKISTAN.**

Purpose: To plan craniospinal irradiation with “field-in-field” (FIF) homogenization technique in combination with daily, intra-fractional modulation of the field junctions, to minimize the possibility of spinal cord overdose. Photon-based techniques for craniospinal irradiation (CSI) may result in dose inhomogeneity within the treatment volume and usually require a weekly manual shift of the field junctions to minimize the possibility of spinal cord overdose. Nowadays field-in-field technique is used to feather out the dose inhomogeneity caused by multiple fields. We have started using this technique after acquiring advanced technology machines in recent years.

Methods and Materials: 16 patients (2 adults, 14 children) treated with 3D-CRT for craniospinal irradiation were retrospectively chosen for this analysis. These patients were planned and treated during 2016-2017. Contouring of Brain and Spine Cord and organ at risk were already done and planning done on EclipseTM Treatment Planning System (Varian). All of these patients were planned Lateral cranio-cervical fields and posterior spinal fields were planned using a forward-planned, FIF technique. Field junctions were automatically modulated and custom-weighted for maximal homogeneity within each treatment fraction. Dose volume histogram (DVH) was used for analysis of results. A corresponding plan without FIF technique was planned and maximum dose at the junction was noted for each patient with both plans and the readings were evaluated.

Results: Plan inhomogeneity improved with FIF technique. Planning with daily modulated junction shifts provided consistent dose delivery during each fraction of treatment across the junctions. The maximum doses calculated at the junction were higher in the CSI plans without FIF compared to those with FIF technique.

Conclusion: This paper hence proves that FIF technique is better in planning craniospinal irradiation.

018-O

DIAGNOSTIC DELAY IN BREAST CANCER DIAGNOSIS – THE ROLE OF HEALTH PRACTITIONERS

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Objectives: To compare the role of traditional and formal healthcare practitioners in referral of patients to specialized care for symptom/s suspicious of breast cancer

Methods & Material: This exploratory study recruited a purposive sample of 200 breast cancer patients for interview from Jinnah and Mayo Hospital, Lahore. Role of health practitioners including *Pir*, *Hakim*, *Homeopathic doctor*, *general practitioner (GP)* and *consultant* was assessed by quantifying patient's number of visits made to practitioner, time spend under treatment, practitioner fees and number of patients referred to the diagnostic facilities by the practitioner following a symptom suspicious of breast cancer. Descriptive statistics (i.e., percentages, frequencies, median and interquartile range) were used to summarize the data. Kruskal-Wallis H test with Post-Hoc test was also employed to estimate the differences among the different groups for the aforesaid variables.

Results: Breast cancer was fairly advanced by the time it was diagnosed (36 [18%] in stage-II, 108[54%] in stage-III and 56 [28%] in stage-IV). Of the 200 patients, 16% (32) reached to the diagnostic facilities directly. Remaining, 84% patients consulted various health practitioners following a symptom suspicious of breast cancer. In terms of system delay, patients visiting *pir* had longest median delay (130 days) followed by *hakim* (120 days), homeopathic doctor (30 days), GP (30 days) and consultant (15 days). *Hakim* was the highly paid health practitioner among all (i.e. PKR 18,000 per visit). *Pir* and *Hakim* failed to determine diagnosis, hence, referred no patients to the healthcare facilities. However, homeopathic doctor, GP and consultant referred 2(8%), 64(53.78%) and 41(73.21%) patients, respectively. There were statistically significant differences among the different groups for all the variables under study [Table 1].

Conclusion: There was a considerable delay from identification of a breast cancer-related symptom till the diagnosis of breast cancer. Patients visited different practitioners before they arrived at a diagnostic facility causing massive system delays. A well-functioning primary care system needs to be in place for early diagnosis and treatment. Effective breast self-examination awareness programme is needed to prevent delays, adequate training of health care practitioners and established referral systems are the key to minimising such delays.

019-O

MINIMALLY INVASIVE 3 STAGE ESOPHAGECTOMY**DR AUN JAMAL GILL****MBBS(GOLD MEDALIST),FCPS(GENERAL SURGERY)****FELLOW SURGICAL ONCOLOGY (SHAUKAT KHANAM MEMORIAL HOSPITAL)**

Introduction: Esophageal cancer is the 8th most common cancer world wide and carries a high mortality rate. The concept of 3-field esophagectomy was introduced by McKeown, who described transthoracic esophagectomy with cervical anastomosis, in which the thoracic esophagus and adjacent lymph nodes were removed en bloc using thoracotomy combined with laparotomy and cervical incision. In an effort to decrease the morbidity, allow a quicker recovery, and return to normal activities, several centres have introduced minimally invasive approaches to esophagectomy.

DePaula and colleagues and Swanstrom and Hansen were the first to report a total minimally invasive approach to esophagectomy (MIE). Their procedure included laparoscopic trans hiatal esophagectomy similar to the open trans hiatal technique described by Orringer and Sloan.

The Minimally invasive esophagectomy (MIE) was introduced into clinical practice with the background aim to reduce the morbidity rates with practically same oncological outcomes. The 3 stage minimally invasive esophagectomy consists of laparoscopy for doing the abdominal part and creating a conduit, thoracoscopy includes mobilization of the thoracic part en bloc and a neck incision that leads to an anastomosis in the neck. The mechanism of MIE may lie in minimizing the reaction to surgical injury and inflammation. We at Shaukat Khanam hospital are routinely doing minimally invasive 3 stage esophagectomy.

Aims and Objectives: The objectives of this video presentation are to demonstrate our technique of MIE (Minimally invasive esophagectomy), that we are doing at Shaukat Khanam memorial hospital

Note: This abstract was written for video presentation that will be presented at the symposium.

020-O

MODIFIED RADICAL MASTECTOMY WITH IMMEDIATE RECONSTRUCTION WITH LATISSIMUS DORSI FLAP AND EXPANDER IMPLANT**AUTHORS : HUMA MANNAN¹, SHEHRYAR RIAZ¹, MARIAM BAIG¹, RUQQAYA KHAN¹, BUSHRA REHMAN¹, AMINA KHAN¹, MUHAMMAD ASAD PARVAIZ¹****1 .DEPARTMENT OF SURGICAL ONCOLOGY, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTER LAHORE**

Introduction: Oncoplastic Surgery of the breast (OPS) has revolutionized the surgical practice in the last few years worldwide and has become an integral part of the breast cancer surgical treatment. OPS blends the principals of good local oncological control with plastic surgery techniques for immediate breast reshaping to provide best cosmetic results as well as oncological safety. Volume replacement techniques are used when local breast glandular tissue is inadequate for cosmetic closure of the wide local excision defect. Such defects are filled by autologous tissue flaps brought from elsewhere, most commonly from tissues adjacent to the breast. They include both advancement pedicle flaps as well as free flaps with vascular anastomosis. Volume replacement techniques include various types of flaps depending on the location of the tumor and donor site volume

Procedure: After induction of general anesthesia, patient was prepped and draped in a standard fashion Elliptical mastectomy incision given, superior flap to include palpable superficial cancer. Superior and inferior flaps raised to clavicle and infra mammary fold respectively Dissection carried forth to lateral border of Latissimus Dorsi muscle Entire breast excised off Pectoralis major incorporating its fascia completely as the deep margin . Perforating vessels ligated with clips and transected Hemostasis secured. Axilla entered via same incision Latissimus Dorsi and Long Thoracic neuro vascular pedicles identified via lateral to medial axillary mobilization - meticulously dissected and preserved Axillary vein identified and extraneous tributaries ligated Level 2 axillary lymph node dissection performed Hemostasis ascertained Elliptical skin incision given over upper back for extended Latissimus Dorsi Musculocutaneous flap raised, rotated over pedicle, good healthy vascular Flap secured with 2/0 vicryl over chest wall . Silimed round implant placed under Latissimus dorsi flap over pectoralis major, secured all around by anchoring pectoralis major to Latissimus dorsi flap. Insetting done. Haemsostasis secured Irrigated prior to closure Drains placed

021-O

LOWER LIMB SALVAGE FOR TUMORS OF TIBIA WITH IPSILATERAL PEDICLED FIBULA (VIDEO PRESENTATION)**MIAN ABDULLAH ANWAR, ROMAISA SHAMIM KHAN, AHMAD FARAZ BHATTI, ILYAS RAFI.
SKMCH&RC, LAHORE, PAKISTAN**

Introduction: In lower limb sarcomas the Excision and Intercalary Tibial reconstruction with medialization of ipsilateral pedicled fibula is a technique with some advantages like less operation time and avoidance of operation on the contralateral leg with the challenges of obtaining a complete resection and balancing it with adequate fixation while achieving no recurrence and preserving the maximum function of the lower limb. This study focuses on a early outcomes of a case series of Paediatric patients undergoing Tibial Sarcoma excision and reconstruction with medialization of the ipsilateral pedicled fibula.

Patients and methods: Our inclusion criteria was Paediatric patients with nonmetastatic disease and no neurovascular involvement by the tumours. In this study we analysed four patients who underwent Limb salvage with resection of Tibial Sarcoma and reconstruction with ipsilateral pedicled fibula between January 2018 to June 2018. Two cases had Osteosarcoma of the left Tibia, One had Osteosarcoma of the Right tibia and one had Ewing Sarcoma of the Right tibia. The mean age was 12.5 years (8 to 16) and the mean follow up was 4.25 months (2 to 7 months). The mean operative time was 376.5 minutes (326 to 460)

Results: All patients underwent successful reconstruction with ipsilateral pedicled fibula flap. There were no flap related complications like bleeding, flap failure or infection. All had clear resection margins but one having a close 1mm resection margin and has been put on close surveillance. Early complications included one patient having an intra articular screw which was removed within the same admission. Late complications included one patient having external rotation/valgus deformity of proximal tibia corrected with closed manipulation eventually resulting in union. One patient had a malunion at the distal end which was not amenable to closed manipulation despite removal of K wire. Three patients had intact distal neurovascular status with one having a foot drop being treated in Knee ankle foot orthosis. All patients are ambulating non weight bearing within a long leg cast.

Conclusion: Ipsilateral pedicled fibula is a limb salvage technique with reduced operating times and lesser complications. This however is not without its fair share of complications. It will become apparent after a longer follow up whether this procedure is beneficial once recurrence, metastasis and functional mobility of these patients can be determined.

022-O**LIVER RESECTION (POSTERIOR TRISECTIONECTOMY) VIDEO PRESENTATION**

**MUHAMMAD TABISH SALEEM , MUHAMMAD HAROON, HASSAAN BARI, NAMRA UROOJ, FAISAL HANIF
SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTER LAHORE.**

Objective: To demonstrate the technique we use at our center for resection of liver lesions

Introduction: Dr. Ichio Honjo and Dr. Jean-Louis Lortat-Jacob were first to report liver resections (hepatectomies) in 1949 and 1952 respectively. Hepatectomies are performed mostly for liver neoplasms, both benign and malignant. Benign neoplasms include hepatocellular adenoma, hepatic hemangioma and focal nodular hyperplasia. Most of the liver neoplasms are secondary tumors and colorectal metastasis being the most common amongst them. The most common primary malignant neoplasms warranting liver resection are hepatocellular carcinomas. In our center we have performed more than 85 liver resections, and most common indications for them being liver metastases, gall bladder CA, hepatocellular carcinoma and hepatoblastoma.

Technique: Liver resection is deemed a major surgery and patients undergo pre-operative anesthesia assessment, intra-operative standard and invasive monitoring and post-operatively are managed in an HDU unit. All patients are staged and investigated preoperatively with triphasic CT scan of liver. We use an inverted L incision for exploration. Intra-operative ultrasound is used to identify resection margins and to rule out any other liver lesions. We use harmonic, CUSA and endovascular stapler for parenchymal resection of liver. To decrease the intraoperative bleeding, Pringle's maneuver is used to control the inflow and central venous pressure is kept less than 5mmHg. Staging laparoscopy prior to liver resection is done to rule out peritoneal metastatic disease when indicated.

Procedure: This case is of a 72 years old gentleman who was diagnosed to have solitary 4.5 X 4.1 cm HCC lesion in segment 7 of the liver. He was planned for liver resection. Inverted L incision was used for approach. After mobilizing right lobe of the liver and standard cholecystectomy, intra-operative ultrasound was used to identify the extent of liver lesion and rule out any other lesions. Tumor was demarcated with monopolar, Harmonic was used to dissect the capsular layer and CUSA was used for parenchymal resection. Hilar plate was divided using vascular stapler. Pringle maneuver was used 3X for 15 min each and CVP was kept less than 5mmHg during the parenchymal resection to help minimize the blood loss. In the end hemostasis was secured and drain was placed in subhepatic area. Patient had unremarkable and smooth recovery and is doing well at 6 weeks follow up.

Note: This abstract is written for a video presentation session in upcoming symposium

023-O

ENDOBONCHIAL ULTRASOUND-GUIDED TRANSBRONCHIAL NEEDLE ASPIRATION (EBUS-TBNA) IN DIAGNOSING MEDIASTINAL LYMPHADENOPATHY

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Background: A 35years old female visited in pulmonology outpatient with history of shortness of breath, dry cough and one episode of hemoptysis for last 3 months associated with arthralgia involving small joints of hands and knees, myalgia, on and off pain and redness in her eyes. There is a strong family history of pulmonary tuberculosis. A chest xray was performed on which there was mediastinal widening with bilateral hilar lymphadenopathy. A CT scan thorax was performed at an outside facility, which showed normal lung parenchyma with enlarged bilateral mediastinal and hilar lymph nodes. We planned endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) of lymph nodes to diagnose the cause of mediastinal lymphadenopathy considering tuberculosis, sarcoidosis and lymphoma as our differentials.

Method: EBUS-TBNA was performed after 8 hours fasting period. While inj midazolam and fentanyl were used for sedation and pain control; inj lignocaine 2% and 4% were used as a local anaesthetic during procedure. Inspection revealed normal vocal cords with splayed carina. Bronchial mucosa looked normal. EBUS Nodes were identified at station 4R (Right lower Para tracheal), 4L (Left lower Para tracheal), 7 (subcarinal), 10R (right hilar), 11R (right interlobar). EBUS – TBNA of station 4R done with adequacy. Samples taken for cell block, cytology and cultures. In the end airways examined and clear with active suctioning.

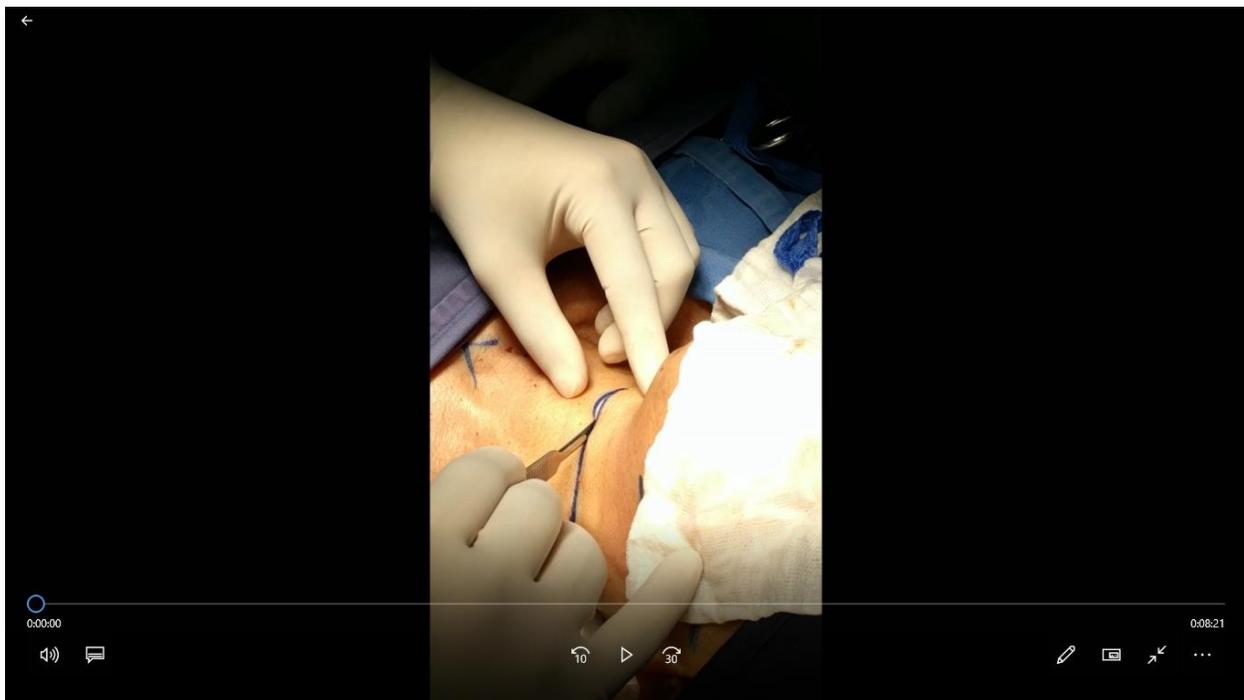
Results: Smears and cellblock revealed lymphocytes, few multinucleated giant cells and loose aggregates of epithelioid histiocytes suggested granulomatous inflammation. Ziehl-Neelsen staining Negative for acid-fast bacilli. Gene Xpert and 6 week TB and other cultures were also negative. Overall procedure was conclusive for granulomatous disease, sarcoidosis.

(Words count: 260)

024-O

SELECTIVE NECK DISSECTION-HOW WE DO IT**Muhammad Faisal, SKMCH&RC, LAHORE, PAKISTAN****Institute:** Shaukat Khanum Memorial Cancer Hospital and Research Center

Neck dissection is still considered a therapeutic surgical approach in the treatment of lymph node metastasis due to head and neck tumors. Radical neck dissections imply the “en bloc” removal of all the lymphatic tissue found in the lateral regions of the neck, including the sternocleidomastoid muscle, internal jugular vein and accessory nerve. During the years several variations of the original procedure have arisen, with the aim to reduce postoperative complications and morbidity, assuring a better quality of life, while preserving the same oncological efficacy. The presence of metastatic adenopathy lowers the patient's survival rate with approximately 50%. The surgical treatment of cervical adenopathies plays a crucial role in the future outcome of the patient's evolution. The current tendency is toward less radical types of neck dissections i.e. modified neck dissection, selective neck dissection; we consider selective neck dissection as a trustworthy procedure in the treatment of head and neck tumors. Our aim with this paper is to showcase the procedure, offer a technical description, underline its importance and emphasize some of the lessons we have learned during the treatment and follow-up of these patients.



025-O

LAPAROSCOPIC MANAGEMENT OF LARGE RIGHT ADRENAL TUMOUR

AUTHORS: DR M AHSAN GHUMMAN, PROF DR M FAROOQ AFZAL , DR SHABBIR AHMED, DR IMRAN KHOKHER, DR ANWAR ZEB, DR QASIM FAROOQ, **INSTITUTE:** SURGICAL NIT-L LGH, LAHORE.

Background / Introduction: A 40 year old Zaib u Nisa resident of Kot Adu presented with chief complain of pain right lumber region, headache, palpitation for 6 months, after serology and radiological work up she was diagnosed as a case of large right sided pheochromocytoma & laparoscopic adrenalectomy was planned. She recovered uneventfully and discharged.

Aims: To share our experience of laparoscopic management of adrenal tumor at public teaching hospital.

Methods: After making left lateral position three ports inserted one 10 mm & two 5mm as shown in figure 1.2. tumor mobilized medially from inferior vena cava, 8*8 cm large adrenal tumour was excised after controlling and ligating all the vascular pedicles, patient recovered uneventfully and discharged. Histopathology revealed phrochromocytoma.

Conclusion: Laparoscopic management of adrenal tumour is safe and feasible in a public teaching hospital; capacity building of surgeons for advance laparoscopic procedure is the need of the hour.

026-O

“SKIN SPARING MASTECTOMY (SSM) & IMMEDIATE RECONSTRUCTION WITH SUBMUSCULAR CPX4 TISSUE EXPANDER”

NAMRA UROOJ, MARIAM BAIG^A, RUQQAYA KHAN^A, BUSHRA REHMAN^A, AMINA KHAN^A, MUHAMMAD ASAD PARVAIZ^A, DEPARTMENT OF SURGICAL ONCOLOGY, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTER LAHORE

Introduction: Advances in reconstructive breast surgery with new materials and techniques now allow us to offer our patients the best possible cosmetic results without the risks associated with oncological control of the diseases. Types of breast reconstruction includes implant based and autologous type. Here we are presenting Implant based reconstruction.

Operative Technique: Skin sparing Mastectomy + ALND : After the induction of general anesthesia, patient was prepped and draped in a standard sterile fashion. Peri-areolar incision made. Superior and inferior flaps raised to clavicle and inframammary fold. Dissection carried forth to lateral border of Latissimus Dorsi muscle. Entire breast excised off Pectoralis. Axilla entered via same incision. Latissimus Dorsi and Long Thoracic neuro vascular pedicles meticulously dissected and preserved. Axillary vein identified and extraneous tributaries ligated. Complete level I & II ALND performed. Mastectomy weight performed.

Reconstruction with CPX4 tissue expander: Pectoralis major and serratus anterior fascia lifted off rib cage. Mentor CPX4 tissue expander 350 cc selected, air removed, placed in submuscular pocket. Lateral border of pectoralis major and medial border of serratus fascia sutured 2/0 vicryl. Good anterior and lateral muscle coverage provided for expander. Inferiorly lower end of expander lies subcutaneously for creating natural ptosis. Skin closed in layers. 100/350cc saline injected in expander.

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027-O**OUR EXPERIENCE :TRANSHIATAL LAPROSCOPIC ESOPHAGECTOMY IN ESOPHAGEAL CARCINOMA****FAROOQ AFZAL, ADEEL KAISER, MADIHA ASLAM. LAHORE GENERAL HOSPITAL, LAHORE, PAKISTAN****Objective:** To share our experience of transhiatal laproscopic esophagectomy in esophageal carcinoma.**Introduction:** Esophageal carcinoma is the eleventh most common carcinoma world wide.It has poor prognosis.Surgery remains the best choice for operable oesophageal carcinomas.Laproscopic transhiatal oesophagectomy has been reported as a safe alternative to open procedure in selected patients with esophageal carcinomas.**Case Report:** In this case report we describe a case of 20 yrs old female who presented with difficulty in swallowing and weight loss.Barrium swallow shows mucosal irregularity and a growth projecting into lumen from right lateral wall of middle 2/3 of esophagus. Biopsy of lesion under endoscopy demonstrates a well differentiated squamous cell carcinoma of esophagus (Keratinizing type). We performed transhiatal laproscopic esophagectomy, esophagogastrotomy and pyloroplasty after neo adjuvant chemo-radio therapy. Histopathology analysis of tumor reveals histological characteristics typical of well differentiated squamous cell carcinoma of esophagus. 5 months after surgery endoscopic assessment reveals no evidence of recurrence of carcinoma.The patient is alive with no evidence of dysphagia and recurrence of tumor.**Conclusion:** Comprehensive treatment of neoadjuvant chemo- radio therapy and transhiatal laproscopic esophagectomy appeared to be effective in this case. Laproscopic procedure.appears to be safe and minimally invasive which reduces the perioperative pain,,complication,and hospital stay with better outcome.It should be considered as a treatment of choice in esophageal carcinomas.

028-O

PANCREATICOGASTROSTOMY (PG) DURING WHIPPLE'S PROCEDURE

MUHAMMAD HAROON, HASSAAN BARI, FAISAL HANIF,
SKMCH & RC LAHORE, PAKISTAN

Introduction: Among common cancers, pancreatic cancer has one of the poorest prognoses. Because pancreatic cancer often grows and spreads long before it causes any symptoms, the 5-year survival is only about 6% after diagnosis. For resectable pancreatic cancer patients, however, a complex surgery known as the Whipple's Procedure may extend survival and could be a potential cure. Those who undergo a successful Whipple's Procedure will have a five-year survival rate of up to 25%.

The classic Whipple's Procedure is named after Allen Whipple, MD, who performed this surgery for the first time in 1935. It involves removal of the "head" of the pancreas and duodenum, portion of the distal bile duct, gallbladder, and sometimes part of the stomach. Afterward, surgeons reconstruct the remaining intestine, bile duct, and pancreas. The pancreatic stump must be connected to intestinal tract where pancreatic secretions play their role in digestion of food. Pancreas can either be anastomosed with stomach (PG-Pancreaticogastrostomy) or loop of jejunum (PJ-Pancreaticojejunostomy). Multiple randomized controlled trials have been done to compare the postoperative complications in PG and PJ. None showed any difference between these two techniques with regards to post operative leak and complications.

We have performed around more than 150 Whipple's Procedures at Shaukat Khanum Memorial Cancer Hospital from October 2014 to June 2018. The most common tumor was Periapillary (49.5%) followed by pancreatic head tumors (32.7%). PG was performed in 87% patients while PJ was done in 13% patients. PJ was generally offered where pancreatic duct size was more than 3mm, mobilization of the remaining pancreatic stump was less than 5cm and pancreatic parenchyma was non friable. Postoperative complication rate and outcome of the patients are not changed with any of these two techniques.

Pancreaticogastrostomy involves 3 layered anastomosis of pancreatic stump with posterior wall of the stomach. After taking stay sutures on both corners, the first layer of anastomosis is made with Prolene 3/0 suture, continues between posterior wall of the stomach and the anterior aspect of the pancreas. Then gastrostomy is made via harmonic device and second layer is applied with same suture between the posterior margin of the stomach (gastrostomy site) and anterior surface of the pancreas. Interrupted sutures are used in this second layer. Third layer of this anastomosis is between the anterior margin of stomach (gastrostomy site) and the posterior aspect of the pancreatic stump. These interrupted sutures are passed before the pancreatic stump is inserted into the gastrostomy site. Pancreas with then pushed into the posterior gastrostomy and then hand knots are applied on already passed interrupted sutures.

Objectives: The objective of this video presentation is to demonstrate the basic operative steps of Pancreaticogastrostomy during Whipple's Procedure which we routinely perform at our institute.

029-O

A TAILORED APPROACH TO ABDOMINO-PERINEAL RESECTION FOR RECTAL CARCINOMA

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Background: Abdominoperineal resection (APR) of rectum has evolved over a century with little modifications until 2007 when extralevator APR was introduced. The wider excision of extra tissues mainly levators and ischioanal fat improved disease control locally but also resulted in significant rise of perineal complications. We believed that the use of wider excision was not mandatory in all patients undergoing APR. We adopted a modified approach where we tailored our dissection according to tumour involvement. The aim of this study was “to study short and long term oncological outcomes following our tailored APR.”

Methods: This study was retrospective review of a prospectively maintained database at three centres. Study period included consecutive patients who underwent APR from October 2008 until April 2018 under supervision of senior most author. The consecutive series included all the patients during the study period to minimise selection bias. However the predictor analysis using Cox regression model was performed on the patients operated with curative intention to study the real effect of variables on survival outcomes (death and disease relapse). The hospitals included in the study were Portsmouth Hospital NHS trust, Hampshire (UK), Poole General hospital, Dorset (UK) and Champalimaud's Cancer Foundation for the Unknown, Lisbon, Portugal.

Results: Total number of patients who underwent rectal cancer surgery was 584 while 65 patients underwent APR during the study period. The APR ratio was 65/584 (11%). Median age was 66 years (Interquartile range 62-75). Majority of the patient were males. The commonest ASA scoring was ASA II. Almost one fourth of patients had BMI of more than 30. Neoadjuvant treatment was given in 48 (74%) of patients. Majority of the patients underwent surgery via minimal invasive approach 59/65 (91%). Most of the patients in the series 55/65(83%) were treated with curative intention. Median height of tumour from anal verge was 4cm (IQR 2-6). Length of stay in hospital was 7 days (IQR 6-12) Median blood loss was 50ml (IQR 30-80) and the median duration of surgery was 250min (IQR 220-270). Median number of lymph nodes harvested was 12 (IQR 8-18). Patients were followed up to a median of 41.87 months (IQR 21-78).

None of the patients had perforation of specimen but 4 patients had positive CRM margins (6%). Only one patient in the patients treated with curative intention developed local recurrence. Overall 5 years survival was 64% while disease free survival at 5 years was 62%.

Conclusions: Our data suggests that our tailored procedure has similar short term and long-term oncological outcomes compared with ones following extralevator APR. We advocate wider use of the tailored technique and obtain a much larger sample size to accurately assess its effectiveness and oncological outcomes.

030-O

THERAPEUTIC MAMMOPLASTY: AN INSTITUTIONAL EXPERIENCE IN DEVELOPING WORLD

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Objective: Oncoplastic surgery (OPLS) as part of breast conservation surgery (BCS) has resulted in improved oncological and cosmetic outcomes. Type 2 OPLS includes different forms of mammoplasty techniques. We report our experience of establishing type 2 OPLS at our breast cancer unit, where this service was not available previously.

Materials and Methods: This study included patients undergoing BCS with type 2 OPLS at our institution from September 2016 to February 2018. Patients were evaluated for tumor size, histopathological type and grade, lymph nodal disease, and receptor status. Oncological outcomes following surgery in terms of margin status and locoregional recurrence were reviewed.

Results: During the study period, 23 patients underwent BCS with OPLS. Median age was 41 years (IQR 35-50). Median BMI was 32 (IQR 27-35). Unifocal disease was present in 11 patients while 6 had multifocal and 4 had multicentric disease. 21 patients had T2 and 2 had T3 disease. Node positive disease was present in 14 patients. Neoadjuvant therapy was given to 13 patients of which 1 patient had complete resolution of lump on ultrasound (US) while 12 had partial resolution. Median tumor size on US was 30 mm (IQR 22-40). One patient had complete pathological response, 2 patients had ypT1, and 16 had ypT2. Axillary dissection was performed in 14 patients. 10 patients underwent Sentinel lymph node biopsy of which 4 were positive and subsequently required axillary surgery. Of the mammoplasty techniques lateral mammoplasty and Grissoti's flap were performed in 16 patients, whereas 4 patients were the candidates for Round block Mammoplasty. 2 patients underwent inferior pedicle mammoplasty and only one patient had Lateral Intercostal Artery Perforator (*LICAP*) flap breast reconstruction. On final histopathology all patients had clear resection margins and none required re-excision. Over a short term median follow-up of 11 months (IQR 7-15), all patients were alive and disease free.

Conclusion: BCS using therapeutic mammoplasty techniques has been successfully established at our institute within developing world resulting in acceptable short term oncologic outcomes and we aim to expand this service. These techniques can be safely employed in surgical treatment of breast cancer amenable to BCS.

031-O

NO ADDED ONCOLOGICAL BENEFIT FROM ROUTINE 'DOUGHNUT' HISTOLOGY AFTER STAPLED END TO END COLORECTAL ANASTOMOSIS

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Objective: Circular staplers are commonly used for end to end anastomosis during colorectal resections for rectal and sigmoid cancer. This produces two doughnuts, a proximal colonic and a distal rectal doughnut. Royal College of Pathologists guidelines state " it is usually not necessary to examine the doughnuts from stapling devices histologically if the main tumor is >30mm from the longitudinal margin of the main specimen, resection margins are not involved ". We aimed to audit institutional practice to ascertain the need for doughnut histology after stapled end to end colorectal anastomosis.

Method: Retrospective analysis of histopathology of all the patients who underwent stapled end to end colorectal anastomosis from January 2011-December 2015 using hospital electronic database was done. Tumor characteristics, resection margins and pathological findings in the doughnuts were analysed.

Results: Total of 218 patients underwent stapled end to end colorectal anastomosis for rectal and sigmoid cancer. No histopathology was available for 6 patients. Both the doughnuts were sent in 193 pts. In 18 patients the doughnuts were not sampled.. 4(0.02%) patients had benign pathology in the doughnuts (2 patients had hyperplastic polyp, 1 had adenoma and 1 had tubulovillous adenoma with low grade dysplasia). 1(0.005%) patient had synchronous adenocarcinoma in the distal doughnut with negative resection margins. The distance of the main tumor from the longitudinal margin of the main specimen was >30mm in 84 patients. 70 doughnuts were unnecessarily subjected to histopathology incurring a total cost of £4200.

Conclusion: Variations exist subjecting doughnuts for histopathology. This study demonstrates no added oncological benefit for histopathological analysis of doughnuts. Although in this study one case was found to have synchronous adenocarcinoma in the distal doughnut with negative resection margins but this did not alter the patient's outcome. Cost to single institute is not large but consider wider impact. More cost effective guidelines can therefore be applied without compromising patient care.

032-O

EARLY ENTERAL FEEDING IN PATIENTS WITH ESOPHAGEAL CANCERS UNDERGOING ESOPHAGECTOMY, A SINGLE CENTER EXPERIENCE

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Objective: The purpose of this study was to assess the feasibility and safety of introducing early enteral nutrition in patients undergoing esophagectomy and to analyze whether this lead to better operative outcomes.

Methodology: This retrospective cohort included all patients with esophageal cancer operated between October 2017 and June 2018 who were given enteral feeding through a jejunostomy or a naso-jejunal tube in the immediate post-operative period. Patients' demographic and disease information was acquired from the Electronic medical database of Shaukat Khanum memorial Cancer hospital. Patients were then allocated in two sperate groups of those undergoing three stage esophagectomy and those who underwent transhiatal esophagectomy. Both groups were analyzed for short-term outcomes including complications, graded as per Clavien-Dindo classification system, operative time in minutes, length of hospital and Intensive Care Unit (ICU) stay in days, hospital mortality and re-admissions.

Results: A total of 60 patients were enrolled during the study period, 9 of whom underwent transhiatal esophagectomy and the other 51 had 3 stage esophagectomies. Overall complication rate for Grade I and II complications accounted for 30 % of total whereas grade III and IV accounting for 14% in both groups. Overall anastomotic leak rate was 3.3 %. Patients who underwent transhiatal esophagectomy had significantly better outcomes with mean length of hospital stay of 8 days compared to 10 days in patients who underwent 3 stage esophagectomy. Patient who underwent 3 stage esophagectomy had a thoracic duct injury rate of 14.4 %.

Conclusion: Early feeding is feasible in patients undergoing esophagectomies for esophageal cancer, with significant benefit to patients who undergo transhiatal esophagectomy. Whether early feeding accentuates the rate of thoracic duct injury, or brings it forth earlier, remains to be elicited with future prospective trials.

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033-O

ROLE OF NEGATIVE PRESSURE WOUND THERAPY ON MANAGEMENT OF OPEN ABDOMINAL WOUNDS. OUR EARLY EXPERIENCE. PICTORIAL REVIEW.

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Objective: To show our experience on management of large open abdominal wounds with negative pressure wound therapy.

Methodology: From March 2017 to July 2018 all patients admitted in our ward who had large , open and non healing abdominal wounds due to different etiologies were included in the study. Regular wound debridement followed by application of NPWT (Wound VAC) was done . Time to closure of wound and total hospital stay were recorded for each patient.

Results: From March 2017 till July 2018 a total of 23 patients were included in the study. Group A (11 out of 23) was managed by conventional wet to dry dressing for the management of wounds and Group B(12 patients) were managed with NPWT. The mean time to closure in Group A was 12 days as compared to 5 days in Group B. average hospital stay for Group A was 14 days with Group B having up to 8 days.

Conclusion: NPWT is a very efficient method for the management of large , non healing open abdominal wounds. It decreases the number of total dressings required and total hospital stay.

Key words: NPWT (Negative pressure wound therapy) , VAC (Vacuum assisted closure)

034-O

RISK FACTORS AND PATTERNS OF RECURRENCE AFTER CURATIVE RESECTION FOR GASTRO-OESOPHAGEAL JUNCTION CARCINOMA AT A SPECIALIST ONCOLOGIC CENTER

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Introduction: The incidence of Gastro-Oesophageal Junction carcinoma (GOJC) has shown a steady increase over last few decades despite a decrease in overall incidence of esophageal carcinoma. Survival of patients with GOJC after curative resection stays low (30-40%). We aim to review the risk factors and patterns of recurrence following surgical treatment of GOJC with curative intent

Methods: Medical records of patients with GOJC undergoing resection with curative intent between Sep 2009 and Sep 2016 were reviewed. Tumors located within 5cm of GOJ on endoscopy were included in the study as GOJC. Recurrence was defined as presentation of disease at local and distant site after curative surgery and was confirmed by radiological or pathological methods. Clinical details, neo-adjuvant therapy, operative details, clinical and histopathologic staging, margin status and data regarding recurrence were studied and analyzed using IBM SPSS version 20.0.

Results: During the study period, we identified 154 patients with gastro-esophageal junction cancer. Out of them 83 patients have GOJ adenocarcinoma (39 patients with GOJ type I, 18 with type II tumors and 26 patients with GOJ type III tumors) Median age was 56 years \pm 10. Male to female distribution was 76 verses 24%. All patients except 3 received neoadjuvant therapy. Most of the patients were managed with Surgery predominantly Transhiatal esophagectomy (33 patients) and Total Gastrectomy (24 patients). 13% patients showed complete response Advanced pT stage (p value<0.022) and pN stage (<0.05) were found to be significant risk factors for recurrence. Type of surgery was related to be but not found statistically significant risk factor of recurrence (p value=0.06) After a median follow up of 16.6 months 20 patients developed recurrence of which 5 had local recurrence, 11 had distant metastases and 4 had both. Almost half of the recurrences were in liver (51%).

Conclusion: The incidence of recurrence following curative resection of GOJC is 24%. This high rate of recurrence suggests the need for careful selection of patients who will benefit from curative resection. Patients with GOJ carcinoma are best managed in specialist oncological center

035-O**MALIGNANT CHEST WALL MASSES WITH RESECTION AND RECONSTRUCTION OF CHEST WALL. EXPERIENCE OF 78 CASES****PROF FARHAN A MAJEED, DEPARTMENT OF THORACIC SURGERY, COMBINED MILITARY HOSPITAL LAHORE, PAKISTAN**

Objectives: The study was carried out to share the experience of chest wall resection and reconstruction on 78 malignant chest wall masses and to determine the outcomes of the procedure.

Study design: Prospective descriptive case series.

Place and duration of study: The study was conducted in CMH Rawalpindi and CMH Lahore from Jan 2010 to Aug 2017.

Methodology: Total number of cases operated for chest wall malignant masses were 78. Locoregional recurrent breast tumours and malignant masses of chest wall were included in the study. Metastatic disease was excluded from the study. Resection of malignant chest masses with primary chest reconstruction was done with mesh reinforcement and muscle flap.

Results: 78 chest wall malignant masses were included in the study. 53 (67.9%) out of 78 cases were of malignant chest wall masses and 25 (32%) were of recurrent breast carcinomas. 12(15.3%) cases were of Ewing sarcoma, osteosarcoma were 13(16.6%) and chondrosarcomas were 7(6.4%). Transfusion was required in 51(65%) of the cases. There was no perioperative mortality. 14(17.9%) patients had formation of seroma. 8(10.02%) had surgical site infection which was treated conservatively. Ventilatory support was required in 2 patients.

Conclusion: Chest wall masses treated with wide excision of chest wall along with ribs, primary reconstruction and prolene mesh augmentation with local muscular flaps can be considered a safe and effective procedure with acceptable morbidity and mortality.

036-O**MANAGING MEGA TUMORS OF LIVER – SURGICAL PLANNING AND MANAGEMENT STRATEGIES**

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INSTITUTE(S): SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTRE,
PAKISTAN

Background/Aims: The aim of this study was to share the management strategies and surgical planning for mega liver tumors (greater than or equal to 10 cm in size).

Methods: Records of patients referred for evaluation of giant liver tumors on radiological investigation (≥ 10 cm) between October 2014 and December 2017 were retrospectively analyzed. The presenting complains, results of imaging studies, surgical treatments and outcome were reviewed.

Our routine strategy in patients with healthy liver is upfront hepatectomy. However, patients in whom future liver remnant (FLR) seems to be inadequate on preoperative imaging, augmentation is done with either Associating liver partition or portal vein ligation for staged hepatectomy (ALPPS) or portal vein embolization (PVE). For aggressive tumors ALPPS is done and for non-aggressive tumors PVE is utilized to augment the FLR.

Results: A retrospective analysis was performed for 08 patients who met the predefined criteria. Median age was 38.5 and all patients had ASA level of II. Five patients (62.5%) were male. Most of the lesions (62.5%) were involving right lobe of the liver along with extension in segment IV. Mean tumor size was 15.5 cm (SD \pm 4.6). Hepatoblastoma (25%), primary neuroendocrine tumor of liver (25%) and secondary liver tumors ((25% - adrenocortical tumors with liver invasion) were the most commonly observed pathology, followed by hemangioma (12.5%) and colorectal liver metastasis (12.5%).

Right portal vein embolization along with segment IV branches was performed preoperatively in one patient with neuroendocrine tumor which is considered a slow growing tumor. ALPPS technique was used for a young patient with very aggressive and huge colorectal liver metastatic deposit, involving whole of the right lobe. Preoperative chemotherapy was offered to patients with hepatoblastoma to downsize the tumor.

Right hepatic tri-sectionectomy was performed in four and right hemi-hepatectomy in two patients. Non-anatomical liver resection, for hemangioma) was performed in one patient. Median intraoperative blood loss was 525 mls (287 – 1775mls). Four patients received intraoperative transfusion. Our mean duration of surgery was 325 ± 127 minutes. Over all hospital stay was 10.3 ± 6.5 days, including ICU stay of 2.5 ± 1.6 days. Only two patients developed postoperative morbidity. One had bile leak and other patient developed right leg DVT.

Conclusion - Surgery for mega tumors of liver is challenging. Assessment of FLR and judicious use of portal vein embolization, ALPPS or neoadjuvant chemotherapy is a must for resection of these large liver tumors safely.

037-O**SURVIVAL OUTCOMES OF RADICAL NEPHRECTOMY WITH IVC THROMBECTOMY FOR RENAL CELL CARCINOMA IN A SERIES OF 25 PATIENTS, A SINGLE HOSPITAL EXPERIENCE****MUHAMMAD ARSHAD IRSHAD KHALIL, NOUMAN KHAN, AZFAR ALI, MUHAMMAD IJAZ ASHRAF, FAISAL HANIF, SURGICAL ONCOLOGY DEPARTMENT, SHAUKATKHANUM CANCER HOSPITAL & RESEARCH CENTER, LAHORE, PAKISTAN**

Objectives: The incidence of renal cancer is on the rise worldwide. Since RCC is resistant to chemotherapy and radiotherapy; surgery remains the only treatment option. Around 4-10% of patients with renal cell carcinoma (RCC) present with tumor thrombus within the inferior vena cava (IVC) that can only be cured with surgical excision along with radical nephrectomy (RN). Studies conducted in Pakistan about the outcomes of surgery for RCC with IVC extension are scanty. The objective of this study is to assess the long-term outcomes and recurrence in the surgical management of RCC with level 1 & 2 venous thrombi at Shaukat Khanum Memorial Cancer Hospital and research center, Lahore, Pakistan.

Material & Methods: Data was collected retrospectively from January 2009 until December 2016. Twenty five patients who underwent Radical Nephrectomy and lateral venorrhaphy with primary IVC repair for Stage T3a&b RCC were included in the study. Clinical presentation, radiographic staging, postoperative clinical course, long term survival and recurrence were analyzed in SPSS 20 software.

Results: Majority of patients, 18 (72%), were males and 7 (28%) female with an overall mean age of 56.2 years (range: 33-79 years). Incidentally diagnosed accounted for 24% of patients with 16 (64%) patients having tumor on the right while 8 (32%) had on their left side. Mean length of follow-up was 24.6 ± 17.2 months, median survival time was 36 ± 13.7 months while the overall 5-year survival was 43%. On multivariate analysis using Cox Regression model, none of the variables were associated with decreased survival. The median time to recurrence was 8.5 ± 18 months and median disease-free survival was 4 months. However the overall 5-year survival with metastatic disease remained 30%.

Conclusion: IVC extension of RCC is not uncommon. Surgical outcomes are good in specialized centers with minimal operative mortality and morbidity for level 1 & 2 IVC thrombus and satisfactory long term survival outcomes.

038-O

CLINICOPATHOLOGICAL AND OUTCOME ANALYSIS OF SOME RARE TUMORS OF MAXILLOFACIAL REGION, 8 YEARS EXPERIENCE OF A TERTIARY CARE TEACHING HOSPITAL IN LAHORE PAKISTAN.**G ZULFIQAR, MA NAQASH, FT ZAHRA, A B ASLAM, F AHMED, SS AHMED****DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY.****INSTITUTION: ALLAMA IQBAL MEDICAL COLLEGE / JINNAH HOSPITAL, LAHORE, PAKISTAN**

Background: Maxillofacial region has maxilla, mandible and related tissues where multitude of tumors can arise. Malignant tumors include Odontogenic carcinomas and Odontogenic sarcomas whereas Benign tumors include Ameloblastoma, Osseous dysplasia, Giant cell lesions etc. Most of the maxillofacial tumors are discovered late because of being symptomless.

Aims and Objectives: The objective of this study to analyze the clinical behavior and management outcomes of some rare tumors of maxillofacial region encountered in a period of 8 years and the role of free flaps in reconstruction.

Methods: This is a retrospective clinicopathologic analysis of the tumors which were histologically diagnosed as rare tumors of the maxillofacial region. These tumors had not received treatment elsewhere. The Patients were analyzed for age, sex distribution, tumor location, clinical behavior, staging, metastasis and reconstruction.

Results: Out of total 39 patients, 15 were malignant: Malignant melanoma n=2, Intra-osseous mandibular Ewing sarcoma n=1, Adult Rhabdomyosarcoma n=2, Chondrosarcoma n=4, Ameloblastic Carcinoma n=1 Clear Cell Odontogenic Carcinoma=1 and Adenoidcystic carcinoma of palate n=4. Among benign tumors n=24: Giant cell tumor n=7, Muscular Capillary malformations n=3, Nasopharangeal angiofibroma n=3, Intra-masseter lipoma=1, Fibromyxoma of mandibular gingiva n=2, Inverted papilloma n=3, Condylar osteoma n=1, Odontogenic myxoma of Maxillary sinus n=3, Mucinous myoepithelioma of palate n=1 were included.

Conclusion: Among the rare tumors, jaw bones are affected more commonly than the soft tissues. Surgical treatment revealed a better long-term outcomes. However, multimodal therapy in malignant tumors improves survival outcomes.

The introduction of free flaps has broadened the boundaries of surgical treatment and helps in improving quality of life of patients particularly mandibular defects.

Keywords: Rare Maxillofacial Tumors, outcome analysis, staging, metastasis, reconstruction

039-O

OUTCOME OF NODULAR LYMPHOCYTIC PREDOMINANT HODGKIN LYMPHOMA (NLPHL); A 20-YEAR POPULATION BASED STUDY IN A TERTIARY CARE CANCER HOSPITAL IN PAKISTAN.**CHANDUMAL, FAREEHA SHEIKH, MUHAMMAD ABU BAKAR, IQRA NAEEM, NEELAM SIDDIQUI, SKMCH & RC, LAHORE, PAKISTAN**

Objective: To describe the treatment outcome of nodular lymphocytic predominant Hodgkin lymphoma (NLPHL) in (SKMCH & RC) between 1996 to 2016

Introduction: NLPHL represents a rare, distinct entity from classical Hodgkin lymphoma. The hallmark histological features are the presence of nodular and diffuse proliferation of scattered lymphocyte predominant LP tumor cells. LP cells are large multilobulated nucleus and have scanty cytoplasm. Most cases of NLPHL present at earlier stage and can be treated with radiotherapy alone. For NLPHL there have been recent reports of excellent response to “Rituximab” (CD20 antibodies) in relapsed cases.

Methods: This is a retrospective review of all 84 patients with nodular lymphocytic predominant Hodgkin lymphoma treated at Shaukat Khanum Memorial Cancer Hospital and Research Center, Lahore, Pakistan from 1996 to 2016.

Results: Mean and standard deviation of age at diagnose was (30.71 ± 9.83); (79.8%) of the patients were male; B symptoms were present in (34.5%); and stage I (23.8%), stage II (33.3%), stage III (11.9%) and stage IV (31.0%). Patients were treated with primary chemotherapy (47.6%), radiotherapy alone 14.3%, combined modality (radiotherapy and chemotherapy) (38.1%) respectively. ABVD and CHOP were administered (32.1% and 15.5%) respectively and ABVD and radiotherapy (25.0%) and CHOP and radiotherapy (11.9%) and GDC and radiotherapy (1.2%) and radiotherapy (14.3%). Relapse occurred in (23.8%) patients with a median and standard error of months (13 ± 2.98). Death occurred in (13.1%) patients. The estimated 10-years overall survival was 82% and the 10-year progression free survival was approximately 58%. For all relapse cases treatment includes salvage chemotherapy. Out of twenty relapse cases only four received rituximab immunotherapy. Histological transformation occurred in seven patients; three Diffuse large B-cell lymphoma and three T-cell rich (TCR) large B-cell lymphoma (BCL) and only one case having mixed feature of both (TCR BCL and NLPHL).

Conclusion: In conclusion, the results from our study corroborate the results of other recent studies and may serve to develop international joint strategies to optimize treatment for patients with NLPHL. Our study confirms the distinct characteristics of NLPHL with a relatively good long-term prognosis. Most patients achieve an excellent response to therapy. There is a tendency to relapse. It may be possible to reduce treatment intensity in early stage NLPHL without affecting long term outcome. However, the risks of late relapse irrespective of initial therapy necessitates a long term follow up of these patients.

040-O

ASSOCIATION OF DISCOVERED NOVEL SNPS OF AR GENE WITH INCREASES RISK OF PROSTATE CANCER**1MOHAMMAD HAROON KHAN, 2RAISA BANO AND 3HAMID RASHID****1CITY UNIVETSITY OF SCIENCE AND INFORMATION TECHNOLOGY, PESHAWAR, PAKISTAN****2CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLMABAD, PAKISTAN****3COMSATS UNIVERSITY SAHIWAL CAMPUS, SAHIWAL PAKISTAN**

Purpose/Objectives: AR gene is usually highly expressed in multiple organs including male accessory sex organs which are also the sites affected primarily by the alterations in AR signaling. A number of SNPs in AR have been reported that are associated with prostate cancer risk. The aim of this study was to comprehensively investigate the association between genetic variations in the AR gene and risk of prostate cancer in Pakistani men.

Material/methods: Genomic DNA was extracted from 1000 confirmed prostate cancer samples of different ethnic backgrounds along with an equal number of controls. All the samples were amplified with primers specifically designed for AR gene. Band shifts detected by SSCP were used for sequencing analysis. The sequence data obtained was then analyzed with the help of Bioinformatics techniques to establish their pathogenicity and annotations. The data was also statistically analyzed for the association of observed genetic variants through logistic regression using R version 3.1.1.

Results: Two novel variants in the non-coding regions of AR gene were identified in this study. The variants were located at position g.67637091 (T>A in intron-1) and at g. 67724021 (T>C in 3' UTR region). Both the variants showed significant differences between PCa patients and controls. The homozygous AA participants of T<A variant had 3.68-fold higher risk of prostate cancer. The carriers of A allele were found significantly associated with increased risk of PCa in all the models with highest OR of 3.68 (95%CI 2.02-6.71; P<0.0001) in the AA vs TT model. T>C variant also was found significantly associated with increased risk of PCa in all the models with highest OR of 3.74 (95%CI =1.98-7.07; P<0.0001) in the CC vs TT model.

Conclusion: Pakistani men with the AR variants T<A at g. 67637091 and T<C at g. 67724021 have significantly higher risk of PCa.

Keywords: AR gene, prostate cancer, SNP, Association.

041-O**UNPLANNED ADMISSIONS AFTER DAY CASE SURGERY****F. Ahmad, S.S Ali, A. Bashir, A.W Khan
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BACKGROUND / INTRODUCTION: Day case surgery is a modern concept, which is not only time-saving but also efficient and economical. For day case procedure, patient show up directly to theatre, operated upon and discharged on the same calendar day. However, un-anticipated admissions following day surgery can happen due to multiple reasons. It is considered as one of the main quality indicators of the patient care world-wide.

To identify the number of unplanned admissions and associated reasons after day case surgical procedure.

METHOD: Data collected from Hospital Information System about patients who underwent day case surgery in last 1 year (from 1-8-17 to 31-07-18) at Shaukat Khanam Memorial Hospital and Research Centre Lahore. The reason for unplanned admission was noted.

RESULTS: Over the stated period, a total of 5436 patients underwent day surgery under different surgical specialties. Out of all, only 160 patients required unplanned admission (2.9%). Most common cause being post-operative hemodynamic monitoring 45%, while extensive surgery than expected contributed to 21%. 18% patients were admitted due to other reasons related to their cancer treatment. Airway related events, medical reasons, pain, surgical complications, haemorrhage and PONV (post-op nausea and vomiting) contributed 4.4%, 3.8%, 2.5%, 1.9%, 1.9% and 0.6% respectively. Admission on patient request remained 0.6%.

CONCLUSIONS: Our results show almost 3% unplanned admission after day case surgery in one-year time. More intense screening and optimization of patients may help to reduce this number even more and also the scope of day case surgery can be increased to more surgical procedures and in patients with well controlled medical problems.

042-O

ROLE OF CARDIOPULMONARY EXERCISE TESTING IN PREDICTING POSTOPERATIVE OUTCOMES: A PRELIMINARY ANALYSIS IN PAKISTAN**S.S ALI , A.W KHAN
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Background: Cardiopulmonary exercise testing (CPET) has become an important tool to evaluate exercise tolerance and predict outcome in patients undergoing major surgical procedures.

It provides assessment of cardiovascular, pulmonary, skeletal muscle responses during exercise, all of which are activated during the neurohumoral stress response to surgery.

By measuring dynamic gas exchange during exercise, CPET can identify potential deficiencies within these systems. These are often not adequately reflected in the indices of resting lung and cardiac function.

Methods: We analyzed the medical records of all the patients that underwent Cardiopulmonary exercise testing (CPET) planned for major elective surgery from September 2017 to July 2018. In the setting of shaukat khanam cancer hospital and research center. The demographic data, diagnosis , type of surgery, Anaerobic threshold , VO₂max, Length of ICU/HDU stay, Length of hospital stay, case cancellation, postoperative complications and number of mortality days were noted. Postoperative complications were observed using POMS tool (postoperative morbidity survey).

Results: Total 23 patients underwent cardiopulmonary exercise testing out of which 3 patients could not perform the test, Out of 23 patients, 9 patients were planned for Esophagectomy, 5 Whipple's procedure, 4 gastrectomy, 3 hysterectomy, ,1 hepatic resection and 1 ileostomy reversal out of which 9 patients proceeded for surgery and 11 patients were cancelled. 5 patients had postoperative complications which were observed using POMS tool, out of these 5 patients 2 had Anaerobic threshold of below 10, 1 with 12.8 and 2 had above 15. No Mortality was recorded.

Conclusion: From this CPET study mix results were obtained. The ability of CPET to predict morbidity and mortality is limited due to small number available for analysis.

043-O**A RANDOMIZED CONTROL TRIAL TO DETERMINE EFFECTS OF PECS BLOCK ON PAIN RELIEF AND DISCHARGE FROM POST ANESTHESIA CARE UNIT IN BREAST CONSERVING SURGERIES**

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Background: Post-Operative pain is one of the most common and feared sequelae of surgery. It can lead to patient distress, psychological stress for patient and family, prolonged hospital stays, increased cost of health care, hemodynamic instability, neuro-endocrine disturbance and ultimately patient morbidity. Studies have shown that when combined with General Anesthesia, combination of regional and General Anesthesia can improve pain control and improve discharge times.

Methods: A total of 122 patients undergoing surgery under general anaesthesia for breast conserving surgeries were included. Group-A is PEC block group and group-B is control group. Independent t-test was used to check the mean difference between above mention groups.

Results: A total of 122 patients divided into two groups; PEC block group 61 (50.0%) and control group 61 (50.0%) were included in this work. Mean age in years for PEC block group was 44.25 ± 9.79 and for control group 44.41 ± 10.40 with p-value 0.93. Mean Intraoperative morphine in mg used for PECs group was 4.28 ± 1.50 and for control group 6.62 ± 7.16 p-value 0.17. Mean morphine in mg used as rescue analgesia in PACU for PACU for PECs group was 2.67 ± 1.03 and for control group 2.92 ± 0.29 with p-Value 0.59. Discharge time was calculated as mean duration of stay in PACU in minutes for group A 115.06 ± 37.62 group B 122.36 ± 39.21 with p-Value 0.42. The mean and standard deviation of total stay in post anesthesia care unit (PACU) between PEC block and control group was 106.03 ± 28.3 and 119.41 ± 42 respectively with p-value 0.04. Consequently, the mean stay in PACU for PEC block group was less than the mean stay in PACU for the control group.

Conclusion: It has been concluded from the interim analysis that there was significant decrease in morphine requirement intraoperatively requirement post operatively in PACU. Additionally, there was significant change in discharge time from PACU in both groups.

Key words: PEC block, breast conserving surgery, Post-operative analgesia

044-O

INDICATIONS AND CLINICAL OUTCOMES OF INDWELLING PLEURAL CATHETER PLACEMENT IN PATIENTS WITH MALIGNANT PLEURAL EFFUSION IN A CANCER SETTING HOSPITAL

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Introduction: The placement of indwelling pleural catheters (IPC) is a reasonable and efficacious approach in the management of malignant pleural effusions (MPE).

Rationale: To determine the indications and outcome of IPC in patients with MPE. To strengthen the evidence in guiding a more united approach for risk stratifications, prevention and management of IPC-related complications.

Methods: We retrospectively reviewed demographic, clinical, radiological, microbiological information of patients who underwent IPC insertion from July 2011 to July 2018 at Shaukat Khanum Memorial Cancer Hospital, Lahore. The data were expressed as mean +/- standard error of mean. The distribution of the data were analysed with Shapiro Wilk normality test. The Mann-Whitney test was used for analysing 2 groups with non-parametric distribution. The exact p values were calculated using GraphPad PRISM 6.0 software (GraphPad Software, Inc., San Diego, CA, USA). A p-value of <0.05 was considered significant.

Results: 74 patients had IPC insertion with mean age 50.4 years including 21 males and 53 females. The indications for IPC insertion were failed talc pleurodesis (12%), trap lung (19%) and remaining 69% had IPC insertion as a primary intervention. There is a higher IPC infection rate of 28% among these patients, of which 70% had micro-organisms contributing to hospital acquired infection (MRSA, pseudomonas, acinetobacter, serratia, stenotrophomonas and Klabsiella pneumonia), and 30% (MSSA, enterobacter, and E.coli) with community acquired infections. 62% of patients with infected IPCs did not receive documented education for home management of IPC. The infection rate was higher among the patients who received chemotherapy post IPC insertion (48% vs 19%, p value 0.01), with multiloculated effusion (61.5% vs 16%, p value 0.001), with non-ultrasound guided IPC insertion (33.3% vs 24%) and the ones who had talc pleurodesis prior to IPC insertion (66.5 vs 23.5, p value 0.01).

Conclusion: The nosocomial IPC infections are commoner than community acquired infections. There is a higher incidence of IPC related infection in patients with multiloculated effusions, post IPC chemotherapy and post pleurodesis. Also non ultrasound guided IPC insertion and lack of patient education regarding management of IPC at home are the contributing factors.

045-O

ENDOBONCHIAL ULTRASOUND GUIDED FINE NEEDLE ASPIRATION OF MEDIASTINAL LYMPH NODES- AN OVERVIEW OF DIAGNOSTIC UTILITY AND ACCURACY

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Background: Endobronchial Ultrasound (EBUS) guided fine needle aspiration (FNA) is a novel diagnostic technique for etiology of enlarged mediastinal lymph nodes. It is acknowledged widely for its diagnostic efficacy (sensitivity 93%, specificity 100%)¹ and minimal invasiveness, thus making it a useful diagnostic tool for both malignant and non-malignant lymphadenopathies

Objective: To evaluate the diagnostic histological yield of FNA sampling of mediastinal lymph nodes via EBUS in patients with known or suspected malignant and non malignant diseases

Materials and Methods: Out of the total 619 EBUS procedures performed at Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, we acquired data of 123 patients (Dec 2017 till Jun 2018). Relevant demographic, diagnostic, histological and microbiological information was gathered from medical records.

Results: Of the total 123 patients who underwent EBUS- FNA, 54% (n=67) were males. 88% (n=108) patients were either diagnosed with or had high suspicion of malignancy. Remaining 12% (n=15) patients underwent the procedure with suspicion of benign/granulomatous disease. Among patients who underwent the diagnostic procedure with suspicion of malignant adenopathy (n=108), EBUS-FNA yielded malignant cytology in 30% (n=32) while 18% (n=19) had yield of granulomatous histology. The remainder 52 % (n= 57) patients had benign/reactive histology. 6- Month radiographic and clinical surveillance in the group with benign histology concurred with absence of malignancy in 77% patients while remaining continue to be on surveillance. 3/57 patients underwent Mediastinoscopy for further work up, all 3 (100%) had reactive lymph nodes on FNA again. Among patients with suspected benign condition (n=15), granulomatous histology was detected in 67% (n=10) patients while 33% (n=05) had reactive lymph nodes. Among total patients with granulomatous histology (n=29), 6-week TB cultures were positive in 14% (n=4) patients with granulomatous histology, while 02 patients with benign/reactive histology also had positive TB culture. MTB Gene Xpert was positive in 04 patients with reactive histology, apart from 02 patients with granulomatous histology. On site evaluation reported adequacy in 89% (n=110) FNA samples in total.

Conclusion: Our study showed excellent on- site adequacy of EBUS-FNA. Overall histological and microbiological results had important implications on disease prognostication and management of patients.

046-O

CONTRIBUTION OF PTEN GERMLINE MUTATIONS TO BREAST CANCER PATIENTS IN PAKISTAN

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Objectives: Germline mutations in high-, moderate- and low-penetrance genes (*BRCA1*, *BRCA2*, *ATM*, *RAD51C*, *CHEK2*, *BRIP1*, and *PALB2*) account for ~30% of high-risk breast cancer (BC) families. Since genetic susceptibility for the majority of familial BC is unexplained, additional cancer syndrome associated genes – such as *PTEN* in Cowden syndrome (CS) – may be involved. CS is a rare familial trait characterized by hamartomas and the predisposition to cancer of the breast, thyroid and gastrointestinal tract. To explore the pathogenic role of *PTEN*, the present study aimed to investigate the contribution of *PTEN* germline mutations to Pakistani BC patients tested negative for *BRCA1*, *BRCA2*, *CHEK2* and *RAD51C* mutations.

Materials and methods: Sixty-six index patients diagnosed with invasive BC and family history of abdominal cancers (n=55), cancers of the thyroid (n=6) and throat (n=5) were included in this study. Complete *PTEN* coding region and exon-intron junctions was screened using denaturing high-performance liquid chromatography analysis, followed by DNA sequencing. All identified *PTEN* variants were analyzed for their potential functional effect by *in silico* analysis tools. Moreover, potentially deleterious variants were screened in 186 Pakistani healthy female controls.

Results: No *PTEN* protein truncating or splice-site mutations were identified. However, eight different intronic variants were detected. Of these variants, one intronic variant, c.80-63A>T, was predicted to be potentially deleterious using *in silico* analysis tools. It was identified in a 47-year-old BC patients of Punjabi background, presented with invasive ductal carcinoma, grade 2, positive for ER/PR but negative for HER2 receptor. Her mother was diagnosed with BC at age 37 and two paternal uncles were affected with nasopharyngeal and colorectal cancer at age <80 and 60, respectively. A stomach cancer at age 47 was also reported in a distant relative of the index patient. This variant was predicted to create a cryptic splice-acceptor site at c.80-50 in intron 1 and was not detected in 186 healthy controls, further supporting its pathogenicity.

Conclusion: Our findings suggest that *PTEN* germline mutations may not contribute significantly to BC patients with a family history of abdominal cancers or cancers of the thyroid and throat in Pakistan.

047-O

CONTRIBUTION OF TRIP13 GERMLINE MUTATION TO WILMS TUMOR CASES IN PAKISTAN**HUMAIRA NAEEMI¹, ABID QUDDUS QAZI², NOOR MUHAMMAD¹, MANSOOR AHMAD², NAZNEEN RAHMAN³, MUHAMMAD USMAN RASHID¹****1BASIC SCIENCES RESEARCH, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTRE (SKMCH&RC), LAHORE, PAKISTAN; 2SURGICAL ONCOLOGY, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTRE (SKMCH&RC), LAHORE, PAKISTAN; 2DEPARTMENT OF PEDIATRICS, DOCTORS HOSPITAL MEDICAL CENTRE LAHORE, PAKISTAN; 3INSTITUTE OF CANCER RESEARCH, SURREY, UK**

Objectives: Wilms tumor is the most common childhood malignant renal tumor. Approximately 5% of Wilms tumor develops in a patient with one or more relatives with this tumor. Genetic susceptibility to Wilms tumor is highly complex. Several Wilms tumor susceptibility genes have been identified including *WT1*, *BRCA2*, and *PALB2*. Recently, a founder mutation, c.1060C>T (p.Arg254X) in a mitotic spindle checkpoint gene, *TRIP13*, has been reported in children with Wilms tumor from UK. This mutation is identified in several unrelated children with Wilms tumor (5/31; 16.1%), of Pakistani origin. This observation suggests that other children with Wilms tumor residing in Pakistan may also harbor this mutation. We conducted the first study to assess the contribution of *TRIP13* c.1060C>T mutation to Wilms tumor in Pakistan.

Materials and methods: Constitutional genomic DNA from 20 unrelated Wilms tumor cases from Pakistan were screened for *TRIP13* c.1060C>T mutation localized in exon 11 using denaturing high-performance liquid chromatography analyses followed by direct DNA sequence analysis of variant fragments. Positive controls were also included in the analyses. The change in relative synonymous codon usage (Δ RSCU) was calculated to measure the effect of synonymous variant on local translation elongation rates.

Results: The *TRIP13* c.1060C>T mutation was absent in 20 index cases affected with Wilms tumor (0/20; 0%). Another *TRIP13* synonymous variant, c.1105T>C (p.Leu369Leu) was identified in two index cases diagnosed with Wilms tumor at age 4 and 6 with no family history (2/20; 10%), and belonged to Pathan and Punjabi ethnicity, respectively. Δ RSCU was calculated and the measured value of 1.6 revealed that this change initiates a frequent codon that may be linked with the increased rate of translation elongation compared with the wild type. This variant could be disease-causative.

Conclusion: Our findings suggest that *TRIP13* c.1060C>T mutation rarely contributes to Pakistani Wilms tumor cases. Identification of c.1105T>C variant is deemed likely to have an effect on the protein. To assess the role of *TRIP13* gene in Wilms tumor predisposition in Pakistan, comprehensive gene screening is warranted.

048-O

OUTCOME OF PANCREATICODUODENECTOMY – OUR EXPERIENCE**MUHAMMAD ASIF NOOR, HASSAAN BARI, FAISAL HANIF, SURGICAL ONCOLOGY DEPARTMENT, SKMCH & RC, LAHORE.**

Objective: To describe the outcome of pancreaticoduodenectomy in patients with periampullary and pancreatic head tumors with emphasis on surgical technique, thirty days morbidity & mortality and three years survival.

Study Design: Case series.

Place and Duration of Study: This study was carried out at Shaukat Khanum Memorial Cancer Hospital and Research Center, Lahore, from 1st October 2014 to 31th October 2017.

Methodology: Patients undergoing pancreaticoduodenectomy for pancreatic head and periampullary tumors were selected. Patients' characteristics including demographics, surgical technique, and 30-day morbidity and mortality and three years survival were recorded.

Results: A total number of 101 patients underwent pancreaticoduodenectomy. 57.4%(n=58) were males and 42.4%(n=43) were females. Mean age was 51.5 ± 14.17 year. The most common tumor was periampullary (n=50, 49.5%) followed by pancreatic head tumors (n=33, 32.7%) and others (n=18, 17.8%). Most common pathological T stage was T3 (n=48, 47.5%) followed by T2 (n=37, 36.6%) and T1 (n=16, 15.8%). 57.4% patients had node positive disease. Pancreaticogastrostomy was done in 87.13%(n=88) patients while pancreaticojejunostomy was done in 12.87%(n=13) patients. Long term recurrence was noticed in 12% of patients. Mean survival of Pancreatic tumors was (787.04 ± 81.89 days) comparatively less than Periampullary tumors (983.10 ± 52.27 days) with P value P=0.08. Overall mean survival was 924 ± 41.3 days. There was one death within 30 days of postoperative period.

Conclusion: Pancreaticoduodenectomy has been evolved as a safe procedure with excellent postoperative outcome. Patients with periampullary tumors had a better outcome than pancreatic head tumors in this series. Pancreaticogastrostomy can be a safer alternative to pancreaticojejunostomy especially in patients with soft pancreas and non dilated pancreatic duct.

Key Words: Whipple's procedure. Pancreaticoduodenectomy. Pancreatic tumors. Periampullary tumors.

049-O**THE EFFECTIVENESS OF TYROSINE KINASE INHIBITORS AND MOLECULAR RESPONSE IN NEWLY DIAGNOSED PATIENTS OF CHRONIC MYELOID LEUKAEMIA.****NOOR MUHAMMAD SOMROO, NOORULAIN FAREED, SAEED QURESHI
ONCOLOGY DEPARTMENT, DR. RUTH K. M. PFAU, CIVIL HOSPITAL KARACHI**

Introduction: The Aim of oral tyrosine kinase inhibitor (TKI) treatment in chronic myeloid leukemia (CML) is to get ideal hematological, cytogenetic, molecular responses at the critical time points. The depth of the response obtained with TKI and the time to achieve this response are both important in predicting the prognosis in patients with CML.

Objective/Rationale: This study observes the response of Tyrosine kinase inhibitors in patient of Chronic Myeloid Leukaemia in public sector hospital.

Study Design: Cross sectional observational study.

Setting: This study was conducted for a time period of 05 years from 2012 to 2017 at Civil Hospital Karachi.

Subjects: 1233 CML patients were enrolled in the study.

Material& Methods: After gaining informed consent from the patients, a performa was filled which included details i.e. age, gender, presence and duration of the symptoms. Samples of the patient including the blood sample, bone marrow aspirate and trephine along with the cytogenetics sample was obtained. Diagnosis was done on the morphological basis and BCR-ABL mutation by PCR/FISH. All patients received Tyrosine kinase inhibitors including Imatinib and Nilotinib. 1123 patients received Tab Imatinib 400mg od and 289 patients received Tab nilotinib 300 mg od.

Results: A total of 1233 patients were included in the study out of which 519 were females and 713 males. The mean age of the patients was calculated to be 38.5 yrs (range: 02yrs – 82yrs). Most of the patients fall in age group of 31-40 years. These patients came from different districts of sindh province. After the start of Tyrosine kinase inhibitors, most of the patients achieved Complete haematological response. Major molecular response of 836 patients was monitor through PCR at 1 year of treatment. 469 patients achieve major molecular response at 1 year and 367 patients fall in suboptimal response & failure of response.

Conclusion: Among community-based CML patients who received first-line TKI therapy, patients treated with either Imatinib or nilotinib achieved higher rates of CCyR and MMR. Our study showed the most of patients diagnose in younger age as compare to European data whose patients diagnose in older age. Increased understanding of the dynamics of leukemic response to TKI therapy has led to definitions of molecular responses that are optimal and those that are suboptimal. Suboptimal responses are associated with a significantly higher risk of mutations and loss of response. Regular molecular monitoring will allow loss of response to be recognized at an early stage in most cases and may also facilitate better compliance. The resistance profile of each TKI to specific mutations has been better defined so that clinical recommendations based on these findings are now being established.

Keywords: Chronic myeloid Leukaemia, Tyrosine kinase inhibitor, Major molecular response.

050-O

SURVIVAL OUTCOMES OF RECTAL CANCER – A SINGLE INSTITUTION EXPERIENCE.

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Purpose: Standard therapy for locally advanced rectal cancer (LARC) is pre-operative chemo radiotherapy (CRT) and post-operative chemotherapy. We report the safety and efficacy of neo adjuvant chemotherapy before CRT on tumor downsizing, pathologic complete response (pCR) and survival outcomes of patients treated at our institution.

Methods: Records of 311 patients treated between April 2007 to November 2014 were retrospectively reviewed, using the hospital information system. Patients were treated by multimodality approach. Eastern co-operative oncology group (ECOG) performance scale was used to evaluate performance. Common terminology criteria for adverse events grades used to measure chemo toxicity. Survival curves were estimated using the Kaplan Meier.

Results: Total 311 patients. Age range was 16-89 years. 211(68%) were males and 100(32%) were females.220(71%) had ECOG 0,86(28%) had ECOG 1,5 (1%) had ECOG 2.Prechemo-radiation TNM stage, T2 :9(3%), T3:237(76%),T4:65(21%).N0 : 22(7%), N1 :54(18%),N2 :235(75%).M0:245(79%),M1: 66(21%).Histological types were Adenocarcinoma 238 (77%), Mucinous/Signet ring carcinoma73(23%). Pathological grades: Well 60(19%), Moderate 139(45%),Poor 103(33%),Unknown 9(3%). Chemotherapy used Capecitabine and Oxaliplatin.289 (93%) patients received neo-adjuvant chemotherapy.221 underwent surgery after neo adjuvant chemotherapy.52 out of 221 had pathologic complete response.194 (63%) of those receiving neo adjuvant chemotherapy had R0 resection.

Chemo toxicity grades : Hand-Foot syndrome: Grade 0 :242 (78%),Grade 1 :58(18%),Grade 2:10(3%)Grade 3 : 3(1%).Hematological toxicity, Yes 53(17%).Skin reaction, Grade 0: 161 (52%)Grade 1:72(23%),Grade 2: 57(18%), Grade 3:20(6%), Grade 4 :1 (0.1%). Diarrhea Grade 0: 147 (47%) Grade 1:78(25%) Grade 2: 61(19%) Grade 3: 25(8%).

116 patients relapsed, 27 locally and 89 had distant relapse.5 years overall survival 30%.10years overall survival 3%.

Conclusion: Neo adjuvant chemotherapy before planned surgery results in tumor regression ,a high rate of pathological complete response and R0 resection. Chemotherapy is well tolerated either is neoadjuvant/concurrent/adjuvant settings. Further randomized clinical trials are needed to support this evidence.

051-O

TITLE: INCREMENTAL VALUE OF THERANOSTIC HYBRID IMAGING IN DIFFERENTIATED THYROID CANCER – 4 YEARS EXPERIENCE**AUTHORS: MAIRAH RAZI, SAIMA RIAZ, AAMNA HASSAN, HUMAYUN BASHIR****AFFILIATION: DEPARTMENT OF NUCLEAR MEDICINE, SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL AND RESEARCH CENTRE, LAHORE.**

Background: Theranostics approach is an established tool for specific molecular targeting both for diagnosis and therapy. Radioiodine was first theranostic radiopharmaceutical which continues to survive the test of time. I131 whole-body scan (WBS) is an important imaging modality for staging and follow-up in patients with differentiated thyroid cancer (DTC). Post I131 therapy planar WBS detects additional metastatic foci in 10 to 26% of cases compared with diagnostic WBS. SPECT/CT improves disease localization and lesion characterization, leading to more accurate N and M staging and has major effect on outcome.

Objective: To review the added value of SPECT/CT to radioiodine WBS in management of patients with DTC.

Methods: Retrospective review of planar and SPECT-CT imaging performed in 151 post-thyroidectomy DTC patients between January 2014 and December 2017. Findings obtained on planar imaging were compared with SPECT-CT for lesion characterization, TNM staging, American thyroid association (ATA) risk stratification and patient management.

Results: A total of 105 females and 46 males [Mean age: 35.6 years \pm 12.4SD] were included. TNM staging in postoperative patients; stage I [n=117], II [n=13], III [n=15] and IV [n=6]. Initial ATA risk stratification; Low [n=25], intermediate [n=111], high [n=9] and indeterminate [n=6].

In comparison to planar WBS, SPECT-CT led to better localization of thyroid remnants as expected. In addition, neck nodes (27.8%), pulmonary nodules (7.9%), bone (1.3%) and liver (0.6%) lesions were identified. False positive radioiodine avidity on planar WBS was characterized as thyroglossal duct remnant (7.9%), rib fracture and contamination [0.6% each], esophagus [6%], thymus (0.6%) and breast (2.6%). Two indeterminate lesions on SPECT-CT required MRI correlation. In 11% non-radioiodine avid pulmonary nodules were identified. Overall, SPECT-CT upstaged disease based on ATA risk stratification (10%, $p < 0.001$) which led to change in management plan. Of these, 2.6% were upstaged from low to intermediate, 1.3% low to high and 3.3% intermediate to high risk and downstage in 0.6%. The 2.0% where ATA risk was indeterminate on baseline workup, SPECT-CT stratified these to intermediate risk.

Conclusion: The addition of SPECT-CT imaging significantly changed the pre-therapy ATA risk stratification, thereby altering patient management recommendations in terms of follow up.

052-O

RETROSPECTIVE ANALYSIS OF CLINICAL FEATURES AND TREATMENT OUTCOMES OF CHILDREN WITH HODGKIN'S LYMPHOMA TREATED WITH DIFFERENT CHEMOTHERAPY PROTOCOLS AT TERTIARY CARE CENTRE IN PAKISTAN.

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Purpose - Hodgkin lymphoma (HL) is one of the most curable pediatric cancers, with long-term survival rates now exceeding 90% after treatment with chemotherapy alone or combined with radiotherapy (RT). Treatment options for Hodgkin's Lymphoma differ among various study groups and there is still no consensus regarding the standard treatment for Hodgkin's lymphoma.

Objectives: Taking into account the impact of treatment-related mortality in low- and middle-income countries a retrospective analysis of the different chemotherapy regimens that were used over a period of time at our centre was done along the clinical parameters and staging with outcomes.

Methods: Medical records of Pediatrics patients registered with Hodgkin's Lymphoma up to the age of 20 years from January 2009 till December 2015 was retrospectively collected after IRB approval.

Results: A total of 748 patients were reviewed retrospectively. Mostly (45%) were in 6-10 years age group. Male showed predominance at 81%. B symptoms were present in 51%, bulky disease in 44% and ESR was more than 30mm in 26% of patients. CD 30 was positive in 95%, Bone marrow involved in 13% of patients. Early stage was seen in 35 % and advanced stage 65% of patients. COPDAC/ABVD was given in 412 patients, CHLVPP/ABVD in 176, OEPA/COPP in 57, OEPA in 35, OEPA/COPDAC in 33 and rest of patients received various chemotherapy combination. Of these 86% of patients were alive, 5% patients died, 3% patients absconded, 6% patients relapsed, 3% patients have primary progressive. Of total mortality, 21% deaths in patients treated on OEPA/COPP, 6.8 % in CHLVPP/ABVD, 9 % with OEPA/COPDAC and 2.6% deaths in patients treated on COPDAC/ABVD. Advanced stage (stages III and IV), the presence of B symptoms, and bone marrow involvement were identified as poor prognostic factors for EFS and OS (P<0.001). 5 years OS was 94% and 5 Years EFS was 91%. Minimum hematological and other toxicity was seen in patients who had received COPDAC/ABVD when compared to other regimen.

Conclusion: Outcomes of patients with Hodgkin's lymphomas are good with different chemotherapy regimens however our experience shows that the COPDAC/ABVD regimen is better tolerated with minimum toxicity with good outcomes.

Keywords: Clinical features, outcomes, Hodgkin's Lymphoma