Methodology: 18 patients with post NACT T4b lesions were included in the study. Tissue was taken from the skin zone and core of the tumour. The tissues were studied histopathologically with reference to density of malignant cells (>3 clumps), tubule formation, nuclear pleomorphism, mitotic score, TILs and vascular density at the periphery. The results were analysed using t-test (first three) or chi-square (last three) using SPSS-version24.0. ALDH1 (surrogate CSC marker) expression of different areas was assessed.
Result: Malignant cell-density (p 0.023), mitotic score (p 0.0184), nuclear pleomorphism (p 0.0290) and vascular congestion (p 0.0233) was significantly more persistent after chemotherapy at the dermal component while TILs(p 1.0) and tubule formation (p 0.25) was insignificant. ALDH 1 expression was significantly (p 0.023) more in chemoresistant areas.
Discussion: Breast cancer is less sensitive to NACT once there is gross skin involvement. The disease shows a heterogenous response. This is because of the linear migration of cancer stem cells from core area to the surface. Study of T4 lesions offers opportunity for study of heterogeneous nature of breast cancer.

P027. THE UNEXPECTED UNPLEASANT SURPRISE: MALIGNANCY ON HISTOPATHOLOGY FOLLOWING DUCT EXCISION SURGERY - IS IT AVOIDABLE?

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Background: The unexpected diagnosis of cancer following total duct excision is distressing for patients. Despite advances in radiology and the description of suspicious nipple discharge, we still occasionally fail to detect malignant disease preoperatively.
Aim: To review the pathological findings of total duct excision with reference to pre-operative symptoms, ultrasound or mammographic findings and identify features associated with increased likelihood of malignant disease.
Methods: Data were collected retrospectively of all patients who underwent total duct excision surgery in single centre (2011-2017). Pre-operative demographics, symptoms and imaging findings were recorded and correlated with subsequent pathology.
Results: 214 patients underwent total duct excision; data was available for 211. Median age was 53yrs. 175/211 (82.9%) patients had benign pathology (duct ectasia, papilloma without atypia, fibrocystic change) on final histological examination, 21/211 (10.0%) had 'risk' lesions (papilloma with atypia, ADH) and 15/211 (7.1%) had malignancy (DCIS) Of the 15 patients with malignant lesions, 6/15 (40%) had normal imaging (M1, U1). 71/211 (33.6%) had normal imaging (M1, U1): 60/71 (84.5%) had benign disease, 5/71 (7.0%) had 'risk' and 6/71 (8.5%) had malignant lesions. 83/211 (39.3%) patients presented with bloody discharge: 64/83 (77.1%) had benign pathology, 9/83 (10.8%) risk and 10/83 (12.0%) malignancy. 38/211 (18%) patients presented with non-bloody discharge: 32/38 (84.2%) had benign disease, 4/38 (10.5%) risk and 2/38 (5.3%) malignant lesions.
Conclusion: Neither imaging nor presenting symptoms correlate with likelihood of malignant disease being present at final pathology. Even with advances in pre-operative diagnosis, total duct excision remains an essential diagnostic and therapeutic procedure.

P028. VITAMIN D DEFICIENCY IN MASTALGIA: IS IT A COINCIDENCE OR AN ASSOCIATION?

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Introduction: Mastalgia is the commonest reason for presentation of a female in a breast OPD. Various medicine and lifestyle modifications have been suggested with variable results. The role of Vitamin D in subtle regulation of oestrogen-progesterone internal milieu is evolving.
Aims: To evaluate the role of vitamin D in relieving mastalgia.
Methodology: Patients presenting with mastalgia were triple assessed and those presenting with clinically impalpable and radiologically benign (up to BIRAD II) were included in the study. The patients were randomly divided into 2 groups: Group A (n=79) who received EPO only and Group B (n=80) who received EPO and vitamin D at a dose of 60,000 units per week over a period of 6-12 weeks. The response rates in the two groups were assessed by VAS.
Results: Total 159 patients with mastalgia were studied. 79 patients treated with EPO only showed insignificant response -32, moderate response - 30 and good response - 17. 80 patients treated with EPO and vitamin D showed good response - 56, moderate response - 16, insignificant response -8. (Response p value= 0.016.)
Discussion: Increased levels of oestrogen and progesterone cause ductal dilatation which is responsible for breast pain prior to the onset of menstruation. Vitamin D reduces progesterone 10% and oestrogen 3% with 4ng/ml increase in vitamin D levels.
Conclusion: There is an evident deficiency of vitamin D of varying degrees (mild to severe) in 78% of patients with mastalgia. Supplementation of vitamin D in mastalgia is strongly associated with reduction of breast pain.

P029. DOES EVERY YOUNG WOMAN PRESENTING WITH A SOLID BREAST LUMP REQUIRE A BIOPSY? SIX YEAR EXPERIENCE OF A REGIONAL BREAST UNIT

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Introduction: Breast lumps are common in young women yet are frequently benign. Association of Breast Surgeons (ABS) guidance (2010) recommends that women <25 years with a presumed fibroadenoma satisfying benign criteria do not require a biopsy. We wanted to review the sensitivity of these criteria to detect benign lumps in the local population and explore whether the age could be extended to 35years.
Methods: From May 2012 to April 2013, details of all women aged ≤35 years attending a symptomatic clinic with a solid breast lump were prospectively recorded. Variables included examination (P1-5), family history, ultrasound (U1-5) and pathology. 'Benign' criteria included P1-3, size <3cm, static, no significant family history and U2. Initially all lumps were biopsied.
Results: From May 2012-April 2013 there were 61 cases ≤35 years. 33 (54%) satisfied ABS criteria and all were benign on biopsy. There were 4 cancers, all failed criteria. From these results, a 'no biopsy requirement' for women ≤25 years was introduced in June 2013. From May 2013-November 2018 there were 367 cases, 190 passed benign criteria (190/367, 52%). Of the remaining 177 that failed, all were biopsied. 158 were subsequently benign (158/367, 43%) and 19 malignant (19/367, 5%). From November 2014, the no biopsy requirement was extended to ≤30 years. To date 144 patients have been seen and discharged without biopsy.
Conclusion: Our results reaffirm ABS guidance for women under 25 years and provide evidence that this could be safely extended to include women aged 30 years and younger.

P030. RETROSPECTIVE REVIEW OF BENIGN PHYLLODES CASES TO ANALYSE TREATMENT, FOLLOW-UP PRACTICE AND FACTORS PREDICTIVE OF LOCAL RECURRENCE

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Introduction: Phyllodes tumours are rare fibroepithelial tumours, traditionally described to have high rates of local recurrence (LR). There is no consensus regarding margins of excision. Our aim was to ascertain our practice and factors contributing to LR.
Methods – Retrospective data collection from electronic patient records for cases identified from pathology data base from January 2000 to June 2018. Fisher's exact test used to calculate p values to define factors associated with LR.
Results – We identified 317 cases of phyllodes of which 155 were benign. 14 had incomplete data, hence 141 were included. Mean age was 42yrs and follow-up 35 months. Three underwent mastectomy, 62 WLEs, 73