

P023. IS AXILLARY CLEARANCE NEEDED FOR ALL NODE-POSITIVE PATIENTS WHO ARE HAVING NEOADJUVANT CHEMOTHERAPY?

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Introduction: Controversy exists regarding ideal axillary staging procedure for node-positive patients who have neoadjuvant chemotherapy (NAC). For one abnormal lymph node (LN) and positive core biopsy, we offer sentinel node biopsy (SLNB) as an option if ultrasound scan (USS) showed good radiological response of LN and main tumour following NAC. Patients with multiple positive LN on core biopsy are offered axillary node clearance (ANC).

Aim: To investigate what proportion of patients developed nodal pathological complete response (PathCR) after SLNB and ANC and identify factors that could predict nodal PathCR.

Methods: Ninety-four consecutive NAC patients from October 2014 to January 2018 were studied.

Results: 66% (62/94) had positive nodes on core biopsy pre-NAC. 15 (24%) patients had SLNB, of which 73% (11/15) developed nodal PathCR. 47 (76%) patients had ANC, 40% (19/47) had nodal PathCR and 60% (28/47) remained node-positive. Looking at Her2 positivity and Path CR in these 47 ANC patients, 19 were Her2 positive and 68% (13/19) showed nodal PathCR. 28 patients were Her2 negative and only 21% (6/28) had nodal PathCR. This was statistically significant (p value < 0.002, Fisher's exact test, Two-tailed). 8/13 (61%) Her2 positive and nodal PathCR patients showed good nodal radiological response in their post-NAC US scan.

Conclusion: Patients with one abnormal node and good radiological response after NAC and those with more than one abnormal node but are Her2 positive and with good radiological response on US scan will have nodal PathCR in 73% and 68% respectively. SLNB can be considered in these patients.

P024. AXILLARY MANAGEMENT AFTER NEOADJUVANT CHEMOTHERAPY IN NODE POSITIVE BREAST CANCER

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Introduction: The surgical management of the axilla in patients who are undergoing neoadjuvant chemotherapy (NAC) remains unclear. There is little consensus on how best to proceed in patients with low volume axillary disease who have radiological evidence of response to treatment.

Aims: Our aim was to identify patients who can safely avoid axillary clearance in low volume nodal disease after NAC.

Methods: A retrospective single Centre analysis of 95 consecutive breast cancer patients (Jan. 2012 to Dec. 2016) who were assessed as being node positive at diagnosis and who received NAC was performed. Patient demographics, radiological assessment of response to therapy, and final histopathological data were analysed.

Results:

Response to NAC by clinical & radiological assessment = 95	No. Pts	Final nodal Status		
		Node Negative ITC/Micromet	1-3 LNS +ve (N1)	>3 LNs +ve
No tumour response + No LN response	7	1 (14.3%)	1 (14.3%)	5 (71.4%)
Partial tumour response + No /partial LN response	48	24 (50%)	16 (33.3%)	8 (16.7%)
Partial tumour response + complete LN response	9	8 (88.9%)	1 (11.1%)	0
Complete tumour response + incomplete LN response	9	5 (55.6%)	2 (22.2%)	2 (22.2%)
Complete tumour response + complete LN response	12	12 (100%)	0	0
Inflammatory carcinoma	6	3	0	3

Conclusion: In patients who had evidence of partial radiological axillary/tumour response, 49% of these had persistent nodal disease, therefore

necessitating complete axillary dissection. However, those patients with evidence of complete radiological response after NAC were all node negative, suggesting that these patients can safely avoid axillary clearance.

P025. SHOULD WE DO SENTINEL LYMPH NODE BIOPSY AFTER NEOADJUVANT CHEMOTHERAPY?

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Aim: There is a controversy with regard to timing of sentinel lymph node biopsy (SLNB) in patients undergoing neo-adjuvant chemotherapy (NAC). In our hospital, patients having NAC undergo SLNB prior to neoadjuvant chemotherapy. Aim of our study was to assess the incidence of further axillary disease at ALND after NAC and compare with those not receiving NAC.

Methods: Retrospective review of patients undergoing ALND with positive sentinel nodes between January 2016 to December 2017 at Peterborough City Hospital. Data were collected from the cancer and pathology registries. Patients who had ALND were divided into 2 groups; group 1 underwent ALND after NAC and group 2 who did not have NAC. Statistical difference between the 2 groups were calculated using Fisher's exact test.

Result: SLNB were performed in 455 patients. Only 5 patients (18%) in group 1 had further metastasis on ALND as compared to 39% in group 2 as shown in table 1. However, the difference between the 2 groups was not statistically significant (P > 0.09). Five other patients in group 1 showed only fibrosis.

Table 1

	No of patients	Mean age Years	Mean tumour size mm	Grade 3 %	Triple -ve %	Further nodal metastasis on ALND Patients (%)
Group 1	28	47	48	54	14	5 (18%)
Group 2	38	60	29	45	8	15 (39%)

Conclusion: SLNB after NAC could avoid unnecessary ALND because of downstaging of the disease. A larger randomised controlled trial should be done to establish the long-term outcome of SLNB after NAC.

P026. IS THE RESPONSE TO NEOADJUVANT CHEMOTHERAPY IN LOCALLY ADVANCED BREAST CANCER HOMOGENOUS AND PREDICTABLE?

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Introduction: 20-25% of breast cancer in developing countries present with skin involvement. The challenge in them is to achieve adequate down-sizing and R0 resection. Apart from 10% of patients which shows scattered cytorreduction, a large group show differential response pattern at the surface (skin) and in the parenchyma.

Aims: To study the post-NACT disease pattern in surface and core of the lesion histopathologically and correlate the results with cancer stem cell distribution.

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-version 24.0. 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 heterogeneous 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 35 years.

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