

as described previously had a rCR in their axilla (44%), and 9 patients (53%) had ≥ 1 positive axillary nodes on MRI following NAC. Discrepancy between radiological response and pathological response was seen in 26 patients (57%).

	0 (pCR)	Pathological Response (No. positive axillary nodes)			Total
		1-2	3+		
MRI Radiological Response (No. positive axillary nodes)	0 (rCR)	8	4	3	15
	1-2	5	3	6	14
	3+	4	4	8	16
	Total	17	11	17	45

Conclusion: There is a clinically significant discrepancy between rCR and pCR in the axilla. This highlights the fact that MRI cannot be relied upon for accurate axillary response to NAC; surgical biopsy and histopathological assessment remains necessary in rCR patients.

PO08. IMPACT OF SENTINEL LYMPH NODE BIOPSY ON PHYSICAL FUNCTION OF THE UPPER LIMB – A PROSPECTIVE STUDY IN PATIENTS WITH EARLY BREAST CANCER

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Introduction: Sentinel lymph node biopsy (SLNB) is the standard of care for axillary staging in breast cancer for clinically node negative patients. There have been some studies looking at upper limb morbidity after SLNB. We conducted a prospective study based on patient-reported functional outcomes after SLNB for early breast cancer.

Methods: Patients operated for a wide local excision and SLNB from February to November 2017 were included in the study. Patients were required to fill a validated Quick Dash (QD) questionnaire pre-operatively, at 2-weeks and at 3-months after SLNB procedure. The QD scores were calculated (Range 0–100) with higher score indicating poorer function. QD scores before and after surgery were compared.

Results: 120 patients were included in the analysis. Ninety-nine patients met all the inclusion criteria. The mean pre-operative QD score was 8.45. This increased to 16.05 at 2-weeks and reduced to 13.35 at 3 months. In a subset of patients without pre-operative upper limb dysfunction [QD score < 10 (n = 75)], the mean scores were 1.82, 10.53 and 6.70 pre-operatively, 2-weeks and 3-months respectively. Thus, there was an increase in the scores immediately after the procedure, which returned closer to baseline at 3 months. The mean scores in patients with pre-operative upper limb dysfunction (QD score > 10) increased after surgery and remained high at 3 months.

Conclusion: The Quick Dash scores suggest that there is a temporary deterioration in upper limb function after SLNB in patients with normal shoulder function. Assessment of 12-month scores would be useful to evaluate long-term outcomes.

PO09. DOES TOTAL TUMOUR LOAD IN SENTINEL LYMPH NODE BIOPSY ASSESSED BY OSNA PREDICT FURTHER AXILLARY NODE DISEASE? CAN IT STRATIFY WHICH PATIENTS MAY BENEFIT FROM AXILLARY CLEARANCE?

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Introduction: There is a lack of consensus regarding the optimum axillary management of early breast cancer, especially in women with only one or two node involvement. More than 50% of patients who proceed to axillary clearance following sentinel lymph node biopsy have no further nodal

involvement. One-Step Nucleic Acid amplification (OSNA) is a molecular assay of cytokeratin-19 (CK 19) mRNA which can be utilised intra-operatively for detection of lymph node metastases in breast carcinoma. Our aim is to identify a correlation of CK-19 total tumour load (TTL) and further axillary disease to aid intra-operative decision making regarding complete axillary dissection.

Methods: A retrospective single centre analysis of 1131 consecutive patients (Nov 2012 to Dec 2016) with invasive breast carcinoma who underwent intra-operative OSNA assessment was performed. Patient demographics, surgical and histopathological data were analysed.

Results: 490 (43.3%) patients had nodal positivity when assessed by OSNA. 302 (26.7%) patients had micrometastatic disease and 188 (16.6%) patients had macrometastatic disease. In the macrometastatic group, 138 (73.1%) of patients proceeded to axillary node clearance. Only 59 (42.8%) patients out of this cohort had further nodal involvement. Utilising a CK 19 copy number of 20,000 as a cut-off appeared to predict further axillary disease.

Total CK-19 copy No.	No. of patients	Axillary node clearance	Further LN involved
<20000	39	39	5 (12.8%)
>20000	99	99	54 (54.5%)

Conclusion: A CK-19 total copy number of >20,000 may help predict the likelihood of further axillary disease, aid intra-operative decision making, and avoid unnecessary further axillary surgery.

PO10. A PROSPECTIVE COMPARATIVE STUDY OF SENTINEL LYMPH NODE BIOPSY WITH INDO-CYANINE GREEN (ICG) FLORESCENCE TECHNIQUE VERSUS DUAL DYE TECHNIQUE FOR EARLY BREAST CANCER - GOING BEYOND THE HORIZON IN INDIA

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Introduction: The objective of the present study was to assess the performance of sentinel lymph node (SLN) biopsy using indocyanine green (ICG) fluorescence method compared with that using the conventional method in detection of SLN.

Methods: 60 patients diagnosed with early breast cancer in a tertiary cancer center (South India) underwent the SLNB procedure using technetium 99m radio colloid (R), methylene blue dye (MB), and ICG. All SLNs removed during surgery were labelled as hot, blue or/and fluorescent and sent for pathological examination. The detection rate of SLNs and positive SLNs, and the number of SLNs of ICG, MB+ R, ICG + MB, ICG + R were compared. Injection safety of ICG and MB was evaluated.

Results: SLN was identified in all 60 cases. Total SLNs removed was 145 (Mean=2). Identification rate with dual dye technique was 95%, blue dye alone 93.6%, radioisotope alone 96.8% whereas ICG alone was 100%. Both dual dye & ICG identified all the positive nodes (46.6%). None had any local or systemic reaction with ICG, 3 patients with blue dye had tattooing & skin staining.

Conclusions: ICG is as effective as the dual dye for SLNB. In addition, as a near-infrared dye, it has the advantages of real-time visualization, lower cost, and wider availability, since no radioactive material needs to be handled. It can be a boon for developing countries & second tier centers of developed countries where there is limited access to a nuclear medicine department facility & the cost involved in its establishment.

PO11. AXILLAR MANAGEMENT AFTER NEO-ADJUVANT CHEMOTHERAPY: EDINBURGH BREAST UNIT 2016-17 PERIOD

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Introduction: Recently neo-adjuvant chemotherapy (NCAT) has gained therapeutic importance for downsizing breast tumours but also for de-escalating axillary treatment. It is early days for this approach as there is