

Table 1

Variable	PPV (%)	NPV (%)
US suspicious vs. US negative – all cases	59	81
T1 vs. T2 – all cases	47	74
T2 cases – US suspicious vs. US negative	75	75
T1 cases – US suspicious vs. US negative	51	86

disease. Fewer than 20% of these patients had micrometastases alone. Tumour size and grade influenced node status in US-suspicious cases only.

Conclusion: Axillary US has a moderately high PPV and NPV in preoperative axillary staging. US gives false negative results in 20% of cases and only a small proportion of these can be explained by micrometastases. Taking into account tumour size improves the predictive value of the technique.

doi:10.1016/j.ejcsup.2010.06.076

O-76 BREAST RADIOTHERAPY FOR OCCULT BREAST CANCER WITH AXILLARY NODAL METASTASES – DOES IT REDUCE LOCAL RECURRENCE RATE AND INCREASE OVERALL SURVIVAL?

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Background: The optimal management of axillary lymph node metastases from occult breast cancer (TXN1-2M0) is uncertain and practice varies in the use of primary breast radiotherapy. We conducted a retrospective review to examine clinical outcomes for patients managed with or without primary breast radiotherapy.

Materials and methods: Case records from the Clinical Oncology database were reviewed to identify patients presenting with axillary nodal metastases but no detectable primary tumour for over the period between 1974 and 2003. Fifty three patients with TXN1-2M0 breast cancer were identified representing 0.4% of patients managed for breast cancer during this period. Of those tested, 59% had oestrogen receptor positive tumours. 77% received ipsilateral breast radiotherapy.

Results: There was a trend towards reduced ipsilateral breast tumour recurrence in patients who received radiotherapy (16% at 5 years, 23% at 10 years) compared to those who did not (36% at 5 years, 52% at 10 years). Similarly, the locoregional recurrence rate at 5 years was 28% for patients who received radiotherapy compared to 53.7% for non irradiated patients. Breast cancer specific survival was higher ($p = 0.0073$; log-rank test) in patients who received ipsilateral breast radiotherapy (72% at 5 years, 66% at 10 years) compared to those who did not (58% at 5 years, 15% at 10 years).

Conclusion: Primary breast radiotherapy may reduce ipsilateral breast tumour recurrence and increase survival in patients presenting with axillary lymph node metastases and occult breast primary (TXN1-2M0). Larger studies are needed to validate these findings.

doi:10.1016/j.ejcsup.2010.06.077

O-77 SENTINEL LYMPH NODE BIOPSY (SLNB) BEFORE PRIMARY CHEMOTHERAPY (PC) IN BREAST CANCER PATIENTS

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SLNB prior to PC will minimize risk of a false negative result and allow more accurate initial staging which can guide treatment decisions for adjuvant radiotherapy and axillary surgery.

A retrospective analysis was undertaken to examine upfront SLNB amongst 46 patients with clinically node negative, non-inflammatory invasive breast cancers measuring between 2 and 5 cm on initial imaging (irrespective of modality). Axillary ultrasound was performed in most patients (43/46), 10 of whom had a negative core biopsy. Mean tumour diameter was 28.5 cm and two patients had axillary lymph node dissection (ALND) prompted by subsequent MRI size estimate (>5 cm). Dual localization methods were employed and micrometastatic foci identified on H&E sections; immunohistochemistry was not routinely performed.

The sentinel node was identified in all patients with a mean of 2.7 nodes per patient (range 1–6). A total of 13 patients had positive nodes (28%) with 10 having involvement of a single node (eight macrometastases; two micrometastases) and three patients with two separate nodes, both containing a macrometastasis (two patients) or each a macro- and micrometastasis (one patient). The mean number of nodes removed on completion ALND was 10.9 (range 7–32). Only one patient had tumour (micrometastasis) within a non-sentinel node (NSLN) and one other patient had evidence of fibrosis suggesting tumour response to PC.

A group of patients can be selected for SLNB before PC who have a relatively low axillary tumour burden at presentation. Potential downstaging with PC may result in a low incidence of NSLN involvement with viable tumour.

doi:10.1016/j.ejcsup.2010.06.078

O-78 COMPARISON BETWEEN ENDOSCOPE-ASSISTED PARTIAL MASTECTOMY WITH FILLING OF DEAD SPACE USING ABSORBABLE MESH AND CONVENTIONAL CONSERVATIVE METHOD ON COSMETIC OUTCOME IN PATIENTS WITH STAGES 1 AND 2 BREAST CANCER

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Background and aims: Breast conservative therapy is currently the mainstream of breast cancer treatment. There is increasing interest in methods to further improve postoperative cosmesis such as endoscopic surgery which was introduced in 1994 as an alternative to Conventional Conservative Method (CCM). However, data on whether endoscopic surgery confers any additional benefit to CCM in terms of cosmesis is lacking. We compared cosmetic outcome between CCM and Endoscope-assisted Partial

Mastectomy (EAPM) with filling of the dead space using absorbable meshes (polyglactin and cellulose).

Patients and methods: A total of 111 patients with stages I and II breast cancer who underwent CCM ($n = 51$) or EAPM ($n = 60$) followed by definitive radiation therapy between 1997 and 2007 were retrospectively reviewed. Postoperative cosmetic outcome was compared between CCM and EAPM according to total scores obtained based on the Al-Ghazal score which grades the following indicators on a scale of 0, 1 or 2 with larger scores corresponding to better outcome: breast retraction assessment, nipple deviation, atrophy, skin change and scar. Total scores of <6 and >7 were considered unsatisfactory and satisfactory respectively. We also performed individual analyses by the five indicators where we considered score 2 as satisfactory, and 0 and 1 as unsatisfactory.

Results: APM was associated with a significantly higher rate of satisfactory results compared to CCM (71.7% versus 52.9%; $p = 0.042$), particularly for atrophy (55.0% versus 29.4%; $p = 0.007$) and scar (55.0% versus 31.4%; $p = 0.012$).

Conclusion: EAPM is superior to CCM for postoperative cosmetic outcome, in particular, with respect to atrophy and scar.

doi:10.1016/j.ejcsup.2010.06.079

O-79 EFFECT OF LYMPHOVASCULAR INVASION (LVI) ON LOCAL RECURRENCE AFTER WIDE LOCAL EXCISION (WLE) AND AFTER MASTECTOMY (MX)

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ONCOPOOL is a data set ($n = 17,000$) compiled from primary operable (≤ 5 cm) breast cancers in women aged ≤ 50 in 12 European Breast Units, entered in 1990–1999.

Purpose of investigation: LVI has been frequently quoted as a risk factor for Local Recurrence.

Method: LVI was regularly measured by H & E staining in four units ($n = 4193$). 20% were LVI+.

Results:

- 1997 underwent Wide Local Excision (WLE) + postoperative RT. % LR rates at 10 years were: LVI- ($n = 1610$) 8 ± 1 and LVI+ ($n = 387$) 14 ± 2 . Cox Analysis entering also the Nottingham Prognostic Index (NPI) showed no individual significance to LVI; the small overall difference was because more LVI+ cases lay in the poorer NPI groups.
- 2196 underwent Mastectomy (Mx).

LVI-		LVI+	
n	% LR @ 10 years	n	% LR @ 10 years
1458	8 ± 1	738	11 ± 1

Cox analysis entering LVI and NPI showed no significance to LVI.

Conclusions:

- LR after WLE arises from residual primary tumour which LVI cannot influence.

- LR in skin is metastatic, probably through lymphatic channels but LR of this type is rare after RT.

doi:10.1016/j.ejcsup.2010.06.080

O-80 LOBULAR NEOPLASIA AND CONSERVATIVE SURGICAL MANAGEMENT

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Introduction: Lobular neoplasia (LN) is a well recognised breast condition which describes spectrum of lesions including atypical lobular hyperplasia (ALH) and lobular carcinoma in situ (LCIS). The significance of LN is poorly understood and a diagnosis of ALH/LCIS in the present clinical practice is often seen as a 'risk indicator' for future carcinoma rather than a true precursor. Various treatment options have been recorded in literature but the management of this condition has been much debated and at times been controversial. In this paper we present the results of our study of 25 cases of LN from 1996 to 2008.

Method and materials: Retrospective review of patients with histology proven LN was undertaken. All patients had triple assessment including standard core needle biopsy (CNB) for lesions identified on ultrasound scan (USS) and 2-view mammography. Biopsies reported as ALH/LCIS and staging of B3 underwent diagnostic guide wire excision biopsy (DGWB).

Results: A total of 25 LN cases were identified and age range varied from 40 years to 75 years. All patients who had excision biopsy were followed up for at least 5 years annually and subsequently they were returned to routine breast screening programme.

Median age at diagnosis was 56 years and mean follow-up was 5.08 years for this set of patients (range 1–12 years). Results showed 23 patients were pure LCIS (92%), 2 (8%) were found to have atypical ductal hyperplasia (ADH) focus along with LCIS in the excision biopsy (DGWB). Bilateral LCIS disease was noted in 4 (16%) of 25.4 (16%) cases went on to develop invasive cancer. The mean time interval from the time of diagnosis to developing cancer was 1.75 years. 3 (12%) out of the four patients with LCIS developed cancer within the same breast and 1 patient (4%) had developed papillary cancer in the contralateral breast on long term follow-up. It is interesting to note that out of the invasive cancer group of 3 patients 2 (66.6%) had bilateral LCIS condition.

All invasive cancer patients underwent mastectomy on side of disease and 2 patients had prophylactic mastectomy by choice.

Conclusion: This study agrees with the available evidence in literature about LCIS being a precursor of invasive cancer and the incidence seems to be around 12% in our study. Guide wire excision biopsy for CNB proven LCIS patients followed by annual review and surveillance mammography seems to work well in detecting recurrences and hence it is recommended for this group of patients.

We conclude that prophylactic mastectomy for all patients with LN is not necessary and close observation alone seems an appropriate treatment option.

doi:10.1016/j.ejcsup.2010.06.081