Results: A total of 298 patients were identified, of which 270 patients were diagnosed with Invasive ductal Carcinoma (IDC), and 28 with invasive lobular carcinoma (ILC).

The Chi-squared test was used to analyse data, and a strong statistically significant relationship was found between LVI and sentinel node positivity ($p < 0.001$) for all patients observed in this study.

There was also a statistically significant association between LVI in core biopsy tissue and IDC overall, and was particularly so for Grade 2 and 3 ($p < 0.001$). This strong association remains so even after adjusting for tumour size.

Conclusions: Our study suggests that a subgroup of breast cancer patients with Grade 2 and 3 IDC, could be offered Axillary lymph node clearance on the basis of LVI in their pre-operative core biopsy. Further large scale prospective studies are required to substantiate our findings and also to fully assess the link for ILC of all grades with LVI.

No conflict of interest.

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170. High intensity focused ultrasound (HIFU) ablation in the treatment of breast cancers: A systematic review

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Background: High intensity focused ultrasound (HIFU) is a non-invasive technique that may be used for the treatment of breast lesions. For breast cancer, it has the potential to improve cosmetic outcomes and allowing earlier administration of systemic therapies due to shorter postoperative recovery times. This systematic review evaluates the current evidence on outcomes (cosmetic, imaging and/or histopathology) of HIFU in the management of breast cancer.

Material and Methods: All studies published up to December 2013 evaluating the role of HIFU in the treatment of breast cancers were identified using Medline/PubMed library databases. Studies were considered suitable if they were performed on human subjects with breast cancers and objectively recorded at least one clinical outcome measure of response (imaging, histopathological and/or cosmetic) to HIFU treatment.

Results: A total of nine studies fulfilled the inclusion criteria. No residual tumour was found in 46% (55/119, range 17-100%), less than 10% residual tumour in 29% (35/119, range 0-53%), and between 10-90% residual tumour in 23% (27/119, range 0-60%) of patients who underwent surgical excision after HIFU treatment. Pain was the most common complication associated with HIFU (40%). Less frequent complications were oedema (17%), skin burns (4%) and pectoralis major injury (4%). Magnetic resonance images (MRI) reported post-treatment absence of contrast enhancement in 82% of patients (31/38 patients, range 50-100%) indicative of coagulative necrosis. Correlation with the amount of enhancement visible on pre- and post-treatment MRI was able to successfully predict the presence of residual disease.

Conclusions: HIFU has been shown to successfully induce coagulative necrosis in breast cancer. Large prospective trials are needed to demonstrate consistent tumour and margin necrosis (oncological safety) with reliable follow-up imaging.

No conflict of interest.

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171. The long-term prognosis of sentinel lymph node-positive breast cancer patients without axillary dissection

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Background: With the widespread concept of sentinel lymph node (SN), axillary dissection is now only performed in limited cases, even in cases with SN metastasis, exploring the possibility of avoiding radical dissection. Based on the results of a retrospective observational study in patients who had been treated at a single institution with a consistent therapeutic strategy, we discuss the long-term prognosis of sentinel lymph node-positive breast cancer patients without dissection.

Materials and Methods: The subjects comprised patients with cT1-3N0 invasive breast cancer, who had undergone SN biopsy (SNB) during the period from May 2003 to February 2014. Patients with bilateral breast cancer and those who had undergone SNB before preoperative treatment were excluded. Intraoperative diagnosis was conducted by imprint cytology with serial sectioning at 2 mm intervals. Patients diagnosed with SN (+) underwent axillary dissection. Permanent pathological diagnosis was conducted using combined cytokeratin immune histochemistry. In principle, patients were recommended to undergo axillary dissection if they were found to be positive for metastasis. However, many cases were followed up with observation without undergoing dissection under the suitable systemic therapy.

Results: SNB was performed in 1323 patients. During the intraoperative diagnosis, 233 cases were diagnosed with SN (+) and 1090 cases with SN (-). Of the SN (+) cases, 227 cases underwent additional axillary level 1 and level 2 dissection or dissection for sampling. Permanent diagnosis demonstrated macrometastasis in 204 cases, micrometastasis in 11 cases and ITC in 5 cases, no metastasis in 7 cases. The permanent pathological diagnosis of patients with SN (-) was a definite diagnosis of pN0 in 995 cases and pN1 in 95 cases (8.7%). Breakdown of the 95 cases was macrometastasis in 57 cases (60%) and micrometastasis in 38 cases. However, additional dissection was only performed in 1 case and the other 94 cases were followed up by observation. Median follow-up period was 67.5 months. Axillary recurrence was observed in: group(A) 4 of the 995 intraoperative-SN (-) pN0 cases (0.4%), group(B) 3 of the 94 intraoperative-SN (-) pN1 non-dissection cases (3.2%) and group(C) 1 of the 227 intraoperative-SN (+) dissection cases (0.4%). Distant recurrence was observed in: (A) 55/995 cases (5.5%), (B) 11/94 cases (11.7%) and (C) 42/227 cases (18.5%). With regard to (B) and (C), macrometastasis was found in (B) 7/56 cases (12.5%) and (C) 39/204 cases (19.1%) and micrometastasis in (B) 4/38 cases (10.5%) and (C) 1/11 cases (9.1%), respectively. Deaths were reported in: (A) 23/995 cases (2.3%), (B) 3/94 cases (3.2%) and (C) 20/227 cases (8.8%), respectively.

Conclusions: In cases in whom dissection was omitted, no increase in axillary recurrence was observed, and the long-term prognosis of these patients was comparable to that of patients who underwent dissection. It was suggested that it is possible to control the axillary lymph node area locally with systemic treatment and that there is no significance of adhering to dissection.

No conflict of interest.

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172. Evaluating assessment tools to predict axillary status postneoadjuvant chemotherapy in locally advanced breast carcinoma

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