

axillary recurrence, while no axillary recurrences were found in the SN+ve group ($P=0.50$). Differences in tumour characteristics were reviewed, and significant differences in tumour size (larger in the SN+ve group, $P=0.014$), and lymphovascular invasion (more frequent in the SN+ve group, $P=0.026$) were noted. Other differences were not significant. Blue SNs were harvested in 244 patients (96%) and only unstained SNs were harvested in 9 patients (4%). Among the 57 SN+ve patients, foci were found in blue SNs in 40 patients (70%) while they were found in only unstained SNs in 17 patients (30%). The mean numbers of blue nodes and non blue nodes excised were 2.3 & 3.7 respectively. A single metastatic SN was found in 58% of the SN+ve patients while 19% had 3 or more +ve nodes. Two patients had allergic reactions and recovered quickly with antihistaminics.

Discussion: SNB with blue dye-assisted 4 axillary node sampling is a useful technique for surgeons who have no access to radioisotope facilities. Given that 30% had metastatic foci in only unstained SNs, we emphasize that blue dye alone is insufficient, and that careful intraoperative palpation and removal of any palpable suspicious nodes whether they are blue or not is recommended. In this study the complication rates were similar to those reported from previous ones.

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Poster

Micrometastases in Sentinel Lymph Node Biopsy. Is it Necessary an Axillary Dissection? Experience in Centro Clinico De Estereotaxia (CECLINES), Caracas-Venezuela

V. Acosta Marin¹, V. Acosta Freitas¹, C.E. Marin², M. Acosta Marin², A. Ramirez², J. Perez³, I. Longobardi³, A. Contreras¹, R. Ravelo¹, O. Martinez³. ¹Ceclines, Breast Surgery, Caracas, Venezuela; ²Ceclines, Breast Pathology, Caracas, Venezuela; ³Ceclines, Breast Imaging, Caracas, Venezuela

Background: There is controversy regarding the clinical importance and biological significance of micrometastases and because of this there is doubt on what to do with a micrometastases. Because of this our aim is to observe the outcome of a group of patients with diagnosis of micrometastases in sentinel lymph node biopsy and compare its behavior with a group of patients with sentinel lymph node negative and sentinel lymph node positive for macrometastases.

Methods: Retrospectively we studied CECLINES's database with 704 patients: 2.59% (18/693) micrometastases, 19.91% (138/693) for macrometastases (pT1-2, pN1) and 79.07% (548/693) for node negative group. Out of the 18 patients with micrometastasis, breast surgery + axillary dissection was performed in 12 patients and breast surgery plus adjuvant therapy (without axillary dissection) in 6 patients.

Results: The median follow up was 4.22 ± 0.42 years (1-22). The median age for micrometastases was 54.11 ± 1.8 (39-68). Tumor size for micrometastases group 14.05 ± 2.69 mm (0-40 mm). The hormone receptor expression was: RE+ 94.44%, RP+ 83.33%, proliferation index Ki67 83.23% (moderate or elevated). In the micrometastases group there was a 5.55% (1/18) of local recurrence. There wasn't regional recurrence. The NSLN rate for metastasis was 33.33% (8/12). The overall survival at 5y was for micrometastases 100%, for node negative 98% and for macrometastases 93% (micrometastases vs AN, $p > 0.05$ and micrometastases vs macrometastases, $p < 0.05$).

Conclusion: Because of the absence of regional recurrence and the excellent overall survival for the micrometastases group we think that an axillary dissection might be avoid in a near future in a selected group of patients with favorable histopathologic and immunohistochemistry characteristics (hormone receptors positive, low Ki67, C-erbB-2 negative, small tumor size, absence of lymphovascular invasion, low histologic grade) and under the observation of a clinical trial, but until we don't have this 'ideal profile' and because the risk of persistent disease in the axilla, an axillary dissection must be performed in every patient with a micrometastases.

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Poster

Intraoperative Assessment of Surgical Margins During Breast Conserving Surgery of Ductal Carcinoma in Situ by use of Radiofrequency Spectroscopy

M. Thill¹, J.U. Blohmer², K. Friedrichs³, K. Röder¹, K. Diedrich¹, C. Dittmer¹. ¹University Hospital of Schleswig-Holstein Campus Lübeck, Department of Obstetrics and Gynecology, Lübeck, Germany; ²Sankt Gertrauden Hospital, Department of Gynecology and Obstetrics, Berlin, Germany; ³Jerusalem Hospital, Breast Center, Hamburg, Germany

Background: Assessment of margins when excising DCIS of the breast is difficult. Frozen section is unreliable and specimen intraoperative radiography only provides information regarding the extent of the visualized lesion or the microcalcifications. Insufficient or positive margins are the strongest predictor for risk of local recurrence.

The aim of our study was to evaluate the performance of MarginProbe® (Dune Medical Devices, Caesarea, Israel) in assessing surgical margins for DCIS and lowering the re-excision rate after initial BCS.

Material and Methods: The device includes a disposable hand-held probe and a console, is based on radiofrequency spectroscopy, and detects differences in dielectric properties between normal and malignant breast tissue.

The multicenter single arm, post market study was performed on 55 patients at 3 German sites under approval of institutional review boards. MarginProbe® was used as an adjunctive tool to the current practice. All specimens were sent for paraffin embedded pathological analysis.

The procedure success was defined as both: negative margins after initial BCS; and early identification of an extended lesion, with conversion to mastectomy instead of performing a re-excision BCS.

Results: From September 2009 until May 2010, 55 patients were enrolled in the study. Thirty-nine were available for this analysis. In comparison with our historical re-excision rate of 38.8% for patients with DCIS undergoing BCS, use of MarginProbe® led to a reduction in the re-excision rate by more than 50%, down to 15% ($p < 0.01$) (surgical margin width of 5 mm). The procedure success was dependent on the clean margin width definition (5 mm: 64%; 2 mm: 77%; 1 mm: 90%). Resected average main specimen tissue volume was 37 cc. Tissue volume associated with false positive margins was, on average, 8.1 cc per patient. Due to the current discussions regarding margin width criteria, we also calculated re-excision rates using 2 mm and 1 mm margin widths. For this definition, re-excision rates were 13% and 7%, respectively.

Discussion: These results demonstrate that adjunctive use of the device is effective in achieving procedure success and reducing re-excisions for DCIS patients. Intraoperative margin assessment for invasive breast cancer can be performed by ultrasound. However, it is a macroscopic assessment. Although frozen section is a microscopic evaluation, it is time-consuming and limited to invasive cancer. For DCIS the surgeon does not have sufficient information about the margins intraoperatively.

Conclusion: MarginProbe® provides a technique that is fast and effective. The benefit for the patients results in a significantly reduced re-excision rate, which may also lead to a lower rate of infections and an improvement of patient's cosmesis. For invasive breast cancer it could replace frozen section and might be the long awaited tool for intraoperative margin assessment of non-palpable lesions and DCIS.

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A Study of Clinical and Histopathologic Differences in T Stage of Breast Cancer Diagnosed at Vacuum-assisted Breast Biopsy (VABB)

H.L. Park¹, S.H. Kwon¹, S.Y. Chang², J.Y. Huh², J.Y. Kim³, J.Y. Shim³, Y.H. Lee³. ¹Kangnam Cha Hospital Cha University College of Medicine, Breast Thyroid Surgery, Seoul, South Korea; ²Kangnam Cha Hospital Cha University College of Medicine, Diagnostic Radiology, Seoul, South Korea; ³Kangnam Cha Hospital Cha University College of Medicine, Diagnostic Pathology, Seoul, South Korea

Background: Vacuum-Assisted Breast Biopsy(VABB) is a biopsy method that allows a complete removal of target lesions with the same accuracy result as in excisional biopsy, but given it comes as multiple fragments, it is rather difficult to measure a tumor size in histopathology, leading to underestimation of staging and possibly affecting the decision on the use of adjuvant therapy. Authors have undertaken this study in order to determine the difference between clinical T stage based on ultrasound(US) imaging before surgery in VABB diagnosed breast cancer and T stage in histopathology performed after radical mastectomy.

Method: Retrospective study analyzed medical records of 168 patients diagnosed with invasive breast cancer among 248 patients who received radical mastectomy after being diagnosed with malignancies at VABB for diagnosis and treatment purposes at Kangnam CHA Hospital between Jan.