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POSTER SECTIONS

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The role of preopperative wire localisation of occult lesions for early detection of breast cancer.

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Authors:

S. Nikolova; Strumica/MK

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Learning objectives

An increasing number of non-palpable breast lesions are being detected due to the widespread use of screening mammography in asymptomatic women. The sensitivity of the first screening mammogram increases with age. The ability of mammography to differentiate malignant lesions from benign ones is quite variable, where 9%–63% of all reported mammographic abnormalities are eventually diagnosed as malignant. Needle localisation open breast biopsy was first introduced in 1965 in order to obtain a histological diagnosis of such lesions. The placement of the radio-opaque wire percutaneously into...

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Fig. 3: *Positioning of the patient prior to wire insertion, to determine the exact...*

Fig. 4: *Determining the exact localisation of the occult lesion using the specially...*

Background

The early detection of breast malignancies decreases the mortality and morbidity of breast cancer patients. These early-detected tumours are generally small and non-palpable. Wire Guided Localization (WGL), is currently the most commonly used localization method for non-palpable breast lesions. This technique uses a wire to localize the lesion to be excised. The wire can be inserted under stereotactic or ultrasonographic guidance. WGL has several known disadvantages: the radiologically guided wire placement is technically difficult, particularly in dense breast tissue (the wire can displace and reposition...

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Imaging findings OR Procedure details

In a sitting or standing position, the breast will be positioned for a mammogram to find and measure the exact location of the abnormal tissue. Once the area is identified, a radiologist will numb the breast with a local anesthetic. A needle is inserted and a small wire threaded through the needle. The tip of the needle is placed near the abnormal tissue. Accurate placement of the wire is checked by mammogram. The wire is securely taped in place. After the surgical removal of the...

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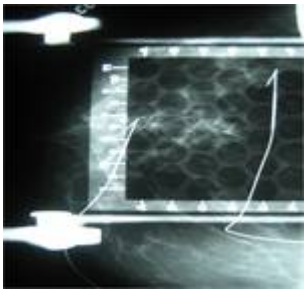

Fig. 5: *Inserting two wires on each end of the suspicious lesion.*

Conclusion

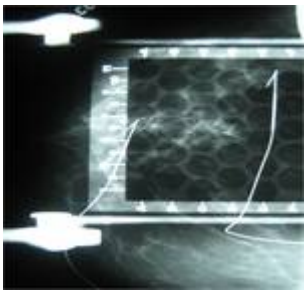

Fig. 6: *2 wires inserted end by end to the region with suspicious microcalcifications.*

In our study we had 10 patients at the age of 45-60, who didn't have any palpable breast masses but their mammography films presented suspicious clusters of microcalcifications and architectural distorsion. All of them underwent preoperative wire localization guided by mammography. At the end of the examination and comparing the results from histopathology, all 10 patients were confirmed as DCIS (Ductal Carcinoma in Situ). We can't underestimate the value of this method in the early detection and diagnosis of breast cancer. Preoperative localization should be...

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References

1. Tabar L. Control of breast cancer through screening mammography. Radiology 1990; 174:655-656. 2. Liberman L, Cohen MA, Dershaw DD, et al. Atypical ductal hyperplasia diagnosed at stereotaxic core biopsy of breast lesions: an indication for surgical biopsy. Am J Radiol 1995; 164:1111-1113. 3. Hall FM, Storella AM, Silverstone DZ, Wyshak G. Nonpalpable breast lesions: recommendations for biopsy based on suspicion of carcinoma at mammography. Radiology 1988; 167:353-358. 4. Fajardo LL, DeAngelis GA. The role of stereotactic biopsy in abnormal mammograms. Surg Oncol Clin North...

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