Diagnosis of Faint Calcification with Architectural Distortion

Clinical Situation

The patient was a 52-year old woman who presented for a screening mammogram. Mammogram shows faint clustered calcifications associated with architectural distortion seen on left cc view with and without magnification *(Figure 1A and B).*

Procedure

The lesion was biopsied with stereotactic guidance from the superior approach utilizing the 8G Mammotome®. Eight core specimens were obtained *(Figure 2).* The samples yielded large amounts of powdery calcifications and increased density within the specimen hat corresponded to the area of distortion on mammogram. Post biopsy left craniocaudal view shows the MammoMARK™ clip and biopsy cavity at the site of the biopsied lesion *(Figure 3).*

Discussion

The lesion to be biopsied in this case was ill defined. The Mammotome® 8G was selected in order to compensate for the difficulty of precisely targeting the lesion. Eight core samples in and around the area were taken to provide the pathologist with sufficient amount of tissue. Surprisingly, calcifications were present in six of the eight core samples. The high quality core specimens from the 8G revealed greater amount of calcifications than was apparent on the magnified views. The MammoMARK™ tissue marker was placed to provide a landmark of the biopsy site.

Summary

Diagnosis: Pathology revealed calcifications within foci of expanded lobular unit with columnar alteration (ELUCA) with hyperplasia and apocrine metaplasia, microscopic radial scar and lobular neoplasia.

Recommendation: Excision was elected because of the associated lobular neoplasia. Needle localization was performed under ultrasound guidance as the MammoMARK™ tissue marker was located at the biopsy site and could be clearly visualized sonographically *(Figure 4).* Final pathology at excision revealed no additional findings.

Since the 8G Mammotome® has a large sampling aperture, it is a good choice for sampling ill-defined lesions. The longer aperture size could potentially minimize sampling error along the Z depth. The calcifications were more extensive than was evident on the mammogram, and this discrepancy came to light due to the use of the 8G probe. In addition, the incision size and amount of bleeding was the same as it would have been for the 11G Mammotome®.

Figure 1A Faint clustered calcifications without magnification.

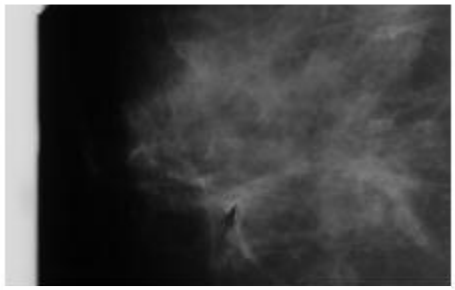

Figure 1B Faint clustered calcifications with magnification.

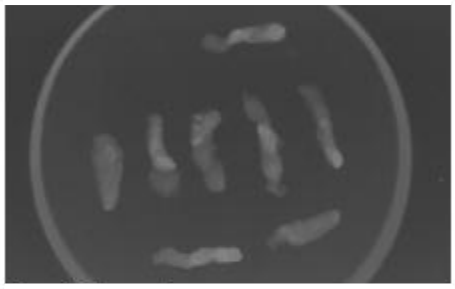

Figure 2 Core specimens.

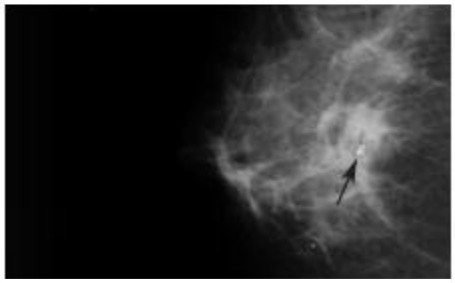

Figure 3 Tissue marker is placed at the biopsy site.

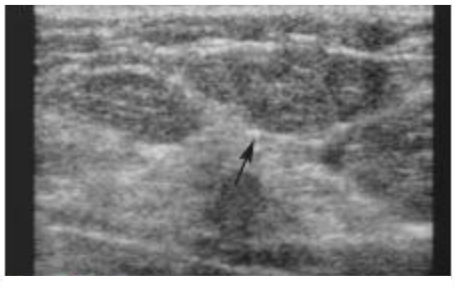

Figure 4 Tissue marker.

Courtesy

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