CASE STUDY – Mammotome 11G

Small (0.7cm) Isoechoic Solid Mass

Clinical Situation

This patient is a 67-year old woman whose baseline mammogram revealed a possible nodule in the left breast (*Figure 1*). She was recalled for additional imaging evaluation.

Findings

Spot compression views confirmed the presence of the mass (*Figure 2*). The margins were not completely circumscribed. A subsequent ultrasound revealed a 0.7cm isoechoic, but somewhat heterogeneous, solid mass (*Figure 3*). Because of the slight heterogeneous appearance and lack of smooth margins, it did not fulfill strict criteria for a probably benign lesion. A biopsy was recommended.

Procedure

An ultrasound-guided percutaneous biopsy was performed using the Mammotome® EX with an 11G probe. For lesions deep within the breast tissue, single insertion and onetime placement of the probe reduces risk for lesions close to the chest wall compared to multiple insertions. The Mammotome® probe can easily be seen directly beneath the mass (*Figure 4*). The probe was used to lift the lesion off the chest wall. A total of four tissue specimens were obtained until there was no further sonographic evidence of the mass. A MammoMARK[™] tissue marker was placed at the end of the procedure. No complications were encountered. A mammogram obtained after the procedure shows the clip where the mass had been located (*Figure 5*).

Pathology

Pathology revealed an intraductal papilloma and fibrocystic changes. No atypia was identified.

Discussion

This is a good example of the benefits of the Mammotome[®] device relative to a core needle biopsy (CNB). The pathologic diagnosis of a papilloma is concordant with the image findings. Removal of all imaging evidence provides additional likelihood of pathological concordance. If concordance is not evident to the pathologist, additional tissue can be examined. The fact that the lesion was not sampled, as with a CNB, gives the Pathologist and Radiologist a greater confidence in the diagnosis. Because no atypia was seen and because there was no longer imaging evidence of the lesion, routine yearly follow-up is acceptable. Placement of a tissue marker provides a landmark of the biopsy site for future screening mammograms.

Courtesy

Debra Somers Copit, MD Director, Breast Imaging Marion-Louise Saltzman Women's Center Albert Einstein Medical Center Philadelphia, PA 19141

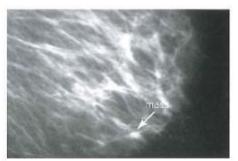


Figure 1

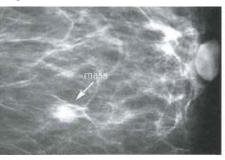


Figure 2 Mass identified on mammogram.



Figure 3 0.7 cm Isoechoic Solid Mass.

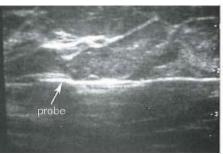


Figure 4

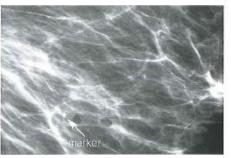


Figure 5 Biopsy site marker in place.

