

Diagnosis Sampling of an Indeterminate Lesion

Clinical Situation

The patient was a 70-year old female who presented for her screening mammogram. A new high density, speculated lesion was seen in the right breast at the 12 o'clock position on her mammogram (*Figure 1A and B*). The ultrasound images show an irregular, hypoechoic mass at the 12 1B position in the right breast, 1cm from the patient's nipple (*Figure 2*). The overall dimensions of the lesion are 13 x 12 x 13mm. The lesion is highly suspicious for a malignancy; therefore a biopsy using an 8G Mammotome® probe was performed.

Procedure

Under ultrasound guidance, the lesion was localized. A buffered general anesthetic was used to bathe the lesion. Additionally a deeper anesthetic was used to provide extended pain relief. The anesthesia was introduced with multiple needle lengths to ensure the entire area surrounding the lesion was anesthetized. A 20G spinal needle was also used to help create a tract for the 8G Mammotome® probe to slide easily into position below the lesion (*Figure 3*). Twelve samples were obtained without difficulty. A marketing clip was subsequently placed in the region of the lesion. A post biopsy mammogram revealed the clip to be within the lesion (*Figure 4*). A specimen radiograph was also obtained to ensure the lesion was contained within multiple samples (*Figure 5*).

Discussion

Multiple samples of the mass were quickly obtained. In addition, it also provides flexibility to access multiple sites within the lesion. This was to ensure any heterogeneity of the lesion was included in the samples for the pathologist. A tissue marker was placed to provide a landmark of the biopsy site for follow-up.

Summary

Pathology Report: Infiltrating Ductal Carcinoma Nuclear Grade II

An indeterminate lesion is an excellent choice for a biopsy under ultrasound guidance using an 8G Mammotome® probe. A biopsy using an 8G Mammotome® was preferable so the pathology was highly accurate with little likelihood of discordance.



Figure 1a Lesion as seen on mammogram



Figure 1b

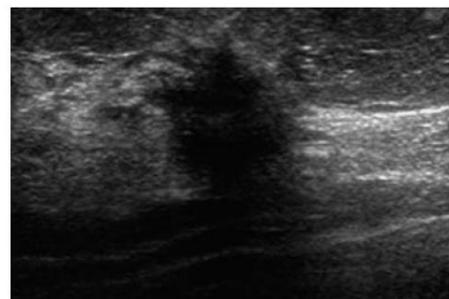


Figure 2 Lesion as seen on ultrasound

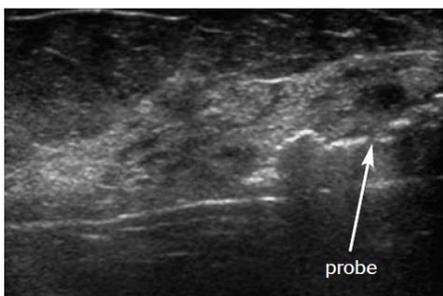


Figure 3 Probe insertion

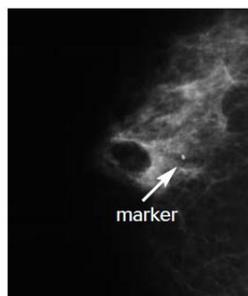


Figure 4 Post-biopsy mammogram with clip

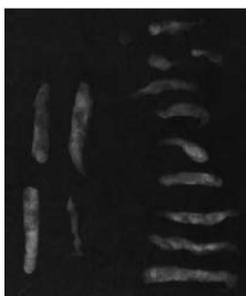
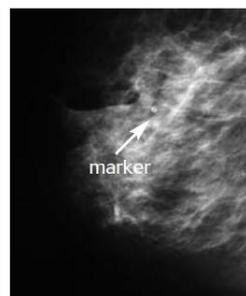


Figure 5 Biopsy samples

Courtesy

Terri Ann Gizienski, MD
UPMC Passavant Hospital
Department of Imaging Services
9100 Baybock Boulevard, Pittsburgh, PA 15237