Case Study



Sampling Multiple Small Lesions in Dense Breast Tissue

Clinical Situation:

The patient was a 60-year-old female with a palpable abnormality in the left breast. The breast tissue was composed of heterogeneously dense fibroglandular elements (FIG. 2.1).

Findings:

Mammography: A subtle area of focal asymmetry was visible in the mammographic evaluation of the upperouter aspect of the left breast.

Sonography: Sonographic evaluation performed at the 2:00 location, 12cm from the nipple, demonstrated a small shadowing hypoechoic lesion measuring 6mm x 4mm x 3mm (FIG. 2.2). The evaluation also identified a second area at the 2:00 location, 10cm from the nipple, measuring 5mm x 5mm x 6mm (FIG. 2.3). Sonography also identified a focus of hypervascularity adjacent to this lesion.



Anesthesia: Due to the area of hypervascularity described, Lidocaine and Epinephrine were used to anesthetize the area surrounding both lesions.

Biopsy: As there were two masses requiring diagnosis, two separate biopsy needles were used for the procedure. For both lesions, the same process was followed. Under ultrasound guidance, the 13 gauge Mammotome® Elite device was positioned immediately underneath each of the subcentimeter masses (FIG. 2.4, 2.5). Four core samples were obtained from each lesion.

Tissue Marking: Following the biopsy, a coiled HydroMARK $^{\mathbb{M}}$ breast biopsy site marker was placed in one of the biopsy cavities, and a butterfly HydroMARK $^{\mathbb{M}}$ marker was placed in the other biopsy cavity.

Pathology:

The samples were adequate for evaluation of immunohistochemistry for both lesions.

Pathology results for the lesion located at 2:00, 12cm from the nipple, demonstrated invasive lobular carcinoma of the breast, Grade 1, measuring at least 3mm.

The lesion located at 2:00, 10cm from the nipple, demonstrated invasive lobular carcinoma of the breast, Grade 1, measuring at least 4mm.

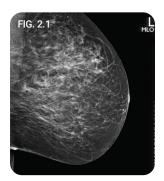
Discussion:

Breast biopsy devices that require multiple insertions present a challenge when biopsying small lesions. As samples are acquired with these devices, it becomes more difficult to visualize the area of concern, requiring more time scanning and targeting with each subsequent sample.

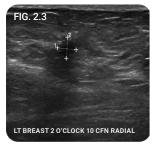
The design of the Mammotome® Elite device allows the user to take multiple samples in one insertion without repositioning the needle. The device is able to quickly and adequately sample the entire target area and can be observed "marching through" the lesions with each sample, thereby improving the confidence of sampling accuracy.

Additionally, the Mammotome® Elite device's sharp cutting blade requires little effort to advance through the patient's dense breast tissue. The benefits the product provides make it an ideal choice for performing breast biopsy procedures involving small lesions

Courtesy of Christopher Ananian, M.D., Princeton Radiology, Princeton, NJ













Product may not be approved or available in your region. Please check with your local Mammotome representative.