Case Study



Sampling of a Solid Mass Adjacent to an Implant in a Reconstructed Breast

Clinical Situation:

The patient is a 48-year-old woman with a history of left breast cancer who presents with an enlarging palpable mass in her reconstructed left breast, interposed between skin and submuscular implant.

Findings:

MRI: Contrast enhanced MRI of the breasts shows a uniformly enhancing (plateau dynamic curve) oval mass at the 4 o'clock position, resting along the margins of the implant and measuring 3.5cm x 1.5cm x 1cm (FIG. 1.1 & 1.2).

U/S: Second look ultrasound confirms the presence of an isoechoic, relatively avascular solid lesion, corresponding to the MRI and palpable finding (FIG. 1.3).

Procedure:

Local anesthesia was carefully introduced into the skin, subdermal tissue and into the targeted mass under sonographic guidance. A skin nick was carefully created, the tip of the scalpel almost reaching the margin of the implant. Under ultrasound control, a 13 gauge Mammotome® Elite biopsy device probe was inserted into the mass. Samples were acquired with the trough aperture directed in four different directions (FIG. 1.4).

After the samples were obtained, a petite HydroMARK $^{\text{\tiny{M}}}$ biopsy clip was introduced into the mass within the biopsy cavity (FIG. 1.5).

Pathology:

Histopathology revealed fibrosis with nests of atypical cells requiring the patient to have the lesion surgically excised.

Discussion:

Sampling of the enlarging solid mass in this patient with a history of left breast cancer and implant reconstruction presented a great challenge due to its very close proximity to the implant and immediately beneath the skin. The vacuum assistance, sharp cutting blade, and small size of the Mammotome® Elite device allowed for careful control in positioning of the probe and monitoring of the cutting blade during the procedure. These features allow for more confidence and success in our biopsies, even under difficult circumstances.

Courtesy of Robin B. Shermis, MD, MPH, FACR, Medical Director of ProMedica Breast Care











