

60 Days Ultrasound Visibility

Clinical History:

40-year-old female presented for diagnostic breast imaging of a palpable lump in the left breast.

Imaging Findings:

Diagnostic mammogram and breast ultrasound revealed a 1.5cm palpable suspicious mass in the left breast, upper outer quadrant, 1:00, middle third, 8 cm from nipple. Ultrasound-guided core biopsy was recommended.

Biopsy Procedure:

Ultrasound-guided, vacuum-assisted biopsy using the Mammotome® EX device was performed. A MammoSTAR® tissue marker was deployed at the biopsy site. Pathology results revealed a fibroadenoma (FIG. 1).

Follow-Up Imaging:

Ultrasound evaluation of the MammoSTAR® tissue marker (barbell shape) after deployment revealed a carbon-coated ceramic marker (2 hyperechoic foci) embedded in the beta-glucan carrier (hyperechoic mass).

- Visibility at 7 days (FIG. 2)
- Visibility at 38 days (FIG. 3)
- Visibility at 60 days (FIG. 4)

Discussion:

Ultrasound evaluation of the MammoSTAR® tissue marker at 60 days maintains a similar appearance as 7 days after deployment. The beta-glucan carrier is seen as a hyperechoic mass surrounding 2 hyperechoic foci which are the two ends of the barbell shape tissue marker.

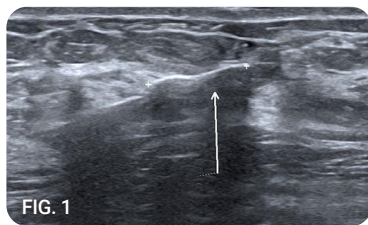


FIG. 1
Immediate Deployment

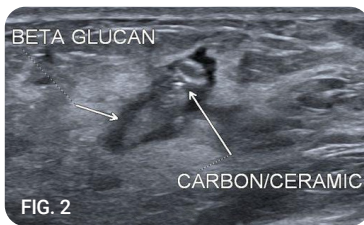


FIG. 2
7 Days

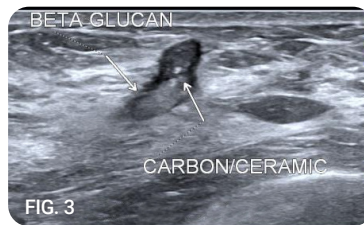


FIG. 3
38 Days

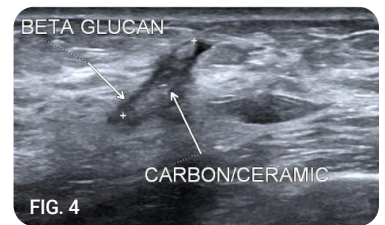
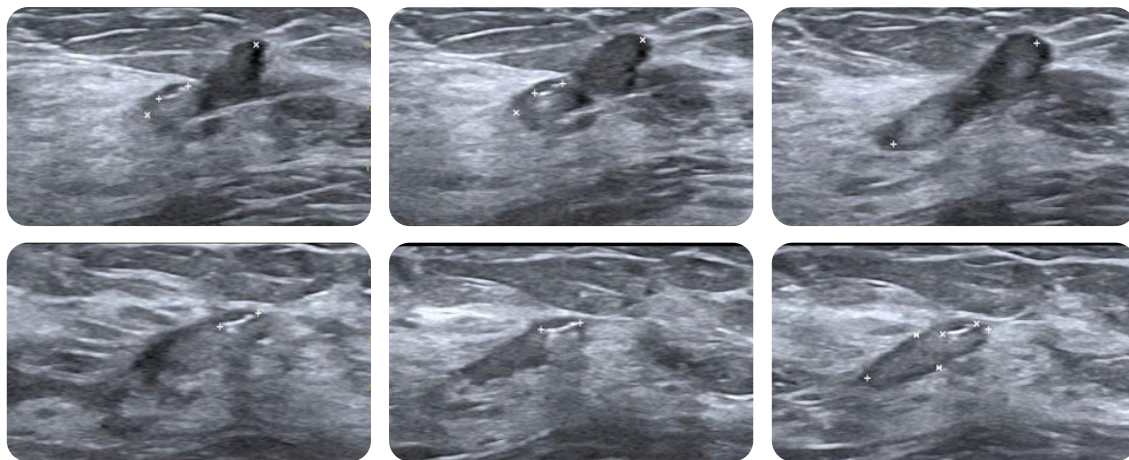


FIG. 4
60 Days

8G MammoSTAR® Marker

Visibility examples at 6 months, 27 days



Courtesy of Kimberly C. Hutcherson, MD/North Metropolitan Radiology Associates, LLP/Northside Gwinnett Breast Center/Northside Hospital Gwinnett.