

Bilateral Lesions

Case Study 2

Courtesy of:
Sunnybrook Health Sciences Centre
Toronto, ON, Canada

Clinical History

79 year old female w/ change in left-sided breast mass on screening mammography.

Findings

Further bilateral mammography and left-breast ultrasound showed multiple cysts on both breasts requiring biopsy. Biopsy revealed ductal carcinoma in situ (DCIS) with papillary carcinoma in the left breast (Figure 1) and DCIS in the right breast (Figure 2), both low-grade.

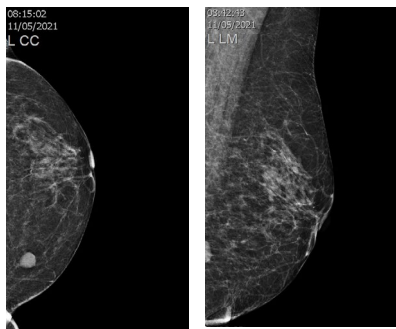


Figure 1

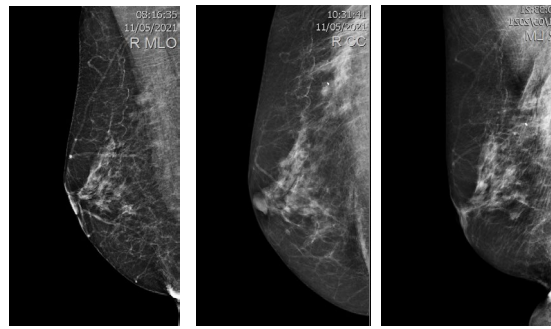


Figure 2

Procedure (Radiology):

- Prior to localization, ultrasound of the right upper outer quadrant and left lower inner breast was performed, confirming 10:00 mass in right breast and 8:00 mass in left breast.
- Ultrasound-guided localization with MOLLI Marker was then performed on both lesions (Figure 3a and 3b).
- Post localization mammography was performed on both breasts (Figure 4a and 4b).

MOLLI Marker Placement Left Breast

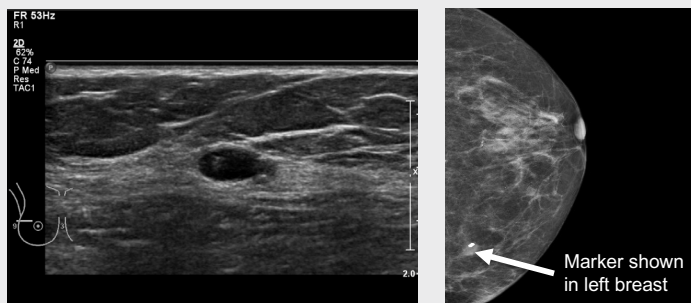


Figure 3a

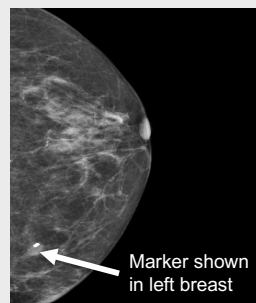


Figure 4a

MOLLI Marker Placement Right Breast



Figure 3b

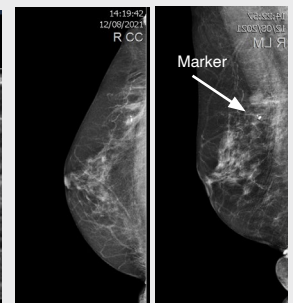


Figure 4b

Marker Verification (Radiology):

- MOLLI Marker verification images obtained on left breast (Figure 5a) and right breast (Figure 5b).

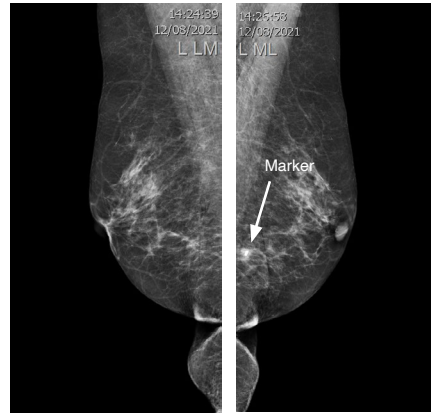


Figure 5a

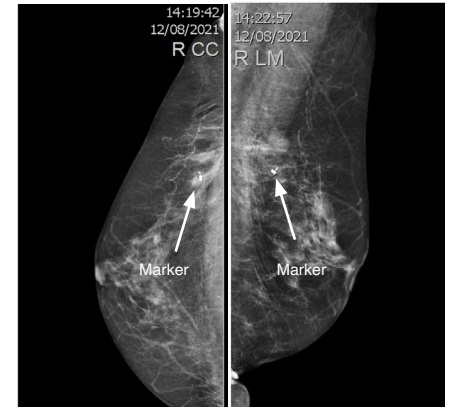


Figure 5b

Procedure (Surgery):

- In both breasts, MOLLI Markers were identified using MOLLI Wand, marked as 2 cm and 3 cm lesions in the right and left breasts, respectively, with 1 cm margins.
- MOLLI Markers and margins of tissue were dissected out circumferentially.
- MOLLI Markers were confirmed in each specimen using MOLLI Wand.
- Specimen imaging was obtained for left breast (Figure 6) and right breast (Figure 7).

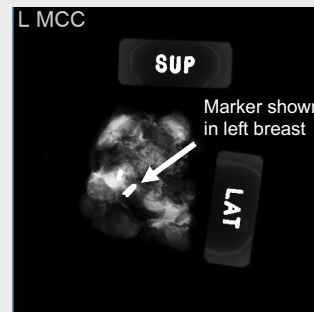


Figure 6

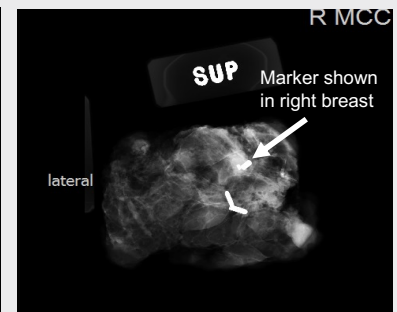


Figure 7

Discussion

Satisfaction Scores:

Radiology – 5/5

Surgery – 5/5

*Pathology – 3.3/5

**Patient – 5/5

- Surgical assistant was first-time user of MOLLI who noted that sound feedback and accuracy was better than radioactive seed localization.
- Pathologist's assistant (PA) first case with MOLLI – did not expect MOLLI Marker to stick to the blade during retrieval of marker.

**Although PA provided a lower score, this is a non-issue as there is no need to retrieve MOLLI Markers unlike radioactive seeds which must be retrieved.*

Patient Feedback:

- MOLLI Marker was implanted 1 day prior to surgery.
- Patient asked a lot of questions regarding radiation safety and was very apprehensive regarding any form of radiation used for treatment.

***Patient was comforted by the fact that the MOLLI Marker did not have radiation.*