

RADY 413 Case Presentation

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60-year-old female undergoing treatment
for invasive ductal carcinoma with
metaplastic features

Patient history

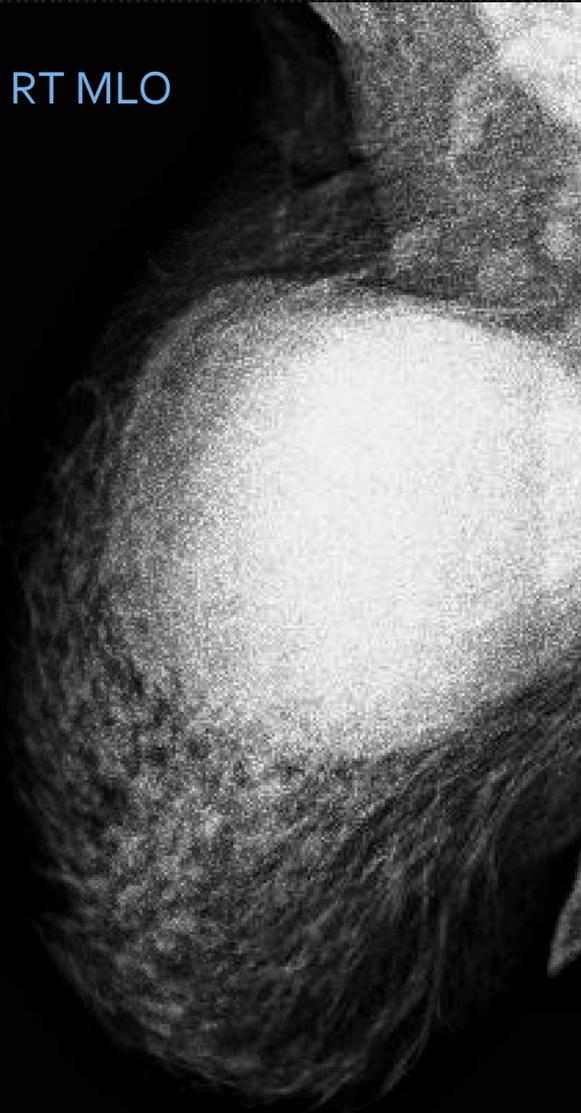
Ms. MJ is a 60-year-old female presenting to the UNCH Breast Multidisciplinary Clinic to seek a second opinion regarding course of treatment for her right invasive ductal carcinoma with metaplastic features.

Imaging studies obtained

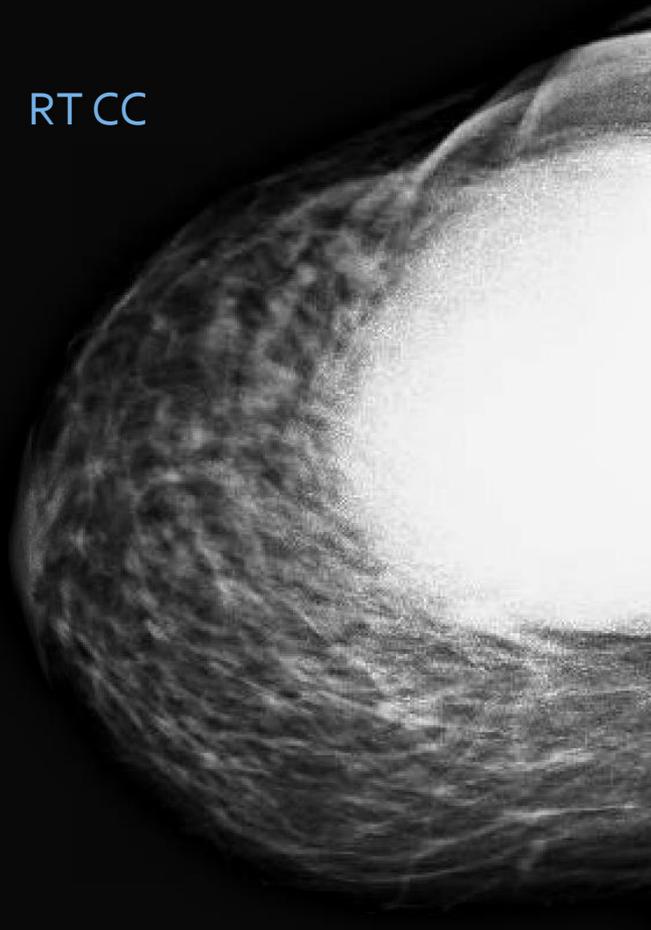
- * Bilateral diagnostic mammogram
- * Targeted ultrasound of right breast and right axilla

Right mammogram

RT MLO



RT CC



Mammogram of the right breast demonstrated a 8 cm round high density mass superiorly.

Targeted ultrasound of right breast and right axilla



1 L 8.47 cm

RIGHT BREAST RADIAL 11 AREA OF INTEREST

Targeted ultrasound of the right breast demonstrated a 8.5 cm round hypoechoic mass at 11:00.

Targeted ultrasound of the right axilla demonstrated multiple normal appearing lymph nodes.

Pathology results

- * At time of core needle biopsy, pathology results were as follows:
 - * Invasive ductal carcinoma with metaplastic features, at least 100mm
 - * Nottingham combined histologic grade: 3 (of 3)
 - * Tubule formation score: 3
 - * Nuclear pleomorphism score: 3
 - * Mitotic count score: 3
 - * No definite ductal carcinoma in situ identified
 - * Estrogen receptor: Negative
 - * Progesterone receptor: Negative
 - * HER2/neu by immunohistochemistry: Negative

Patient outcome

- * UNCH Breast Multidisciplinary Clinic recommended neoadjuvant chemotherapy with subsequent modified radical mastectomy and axillary lymph node sampling, followed by possible adjuvant chemotherapy via an ongoing clinical trial

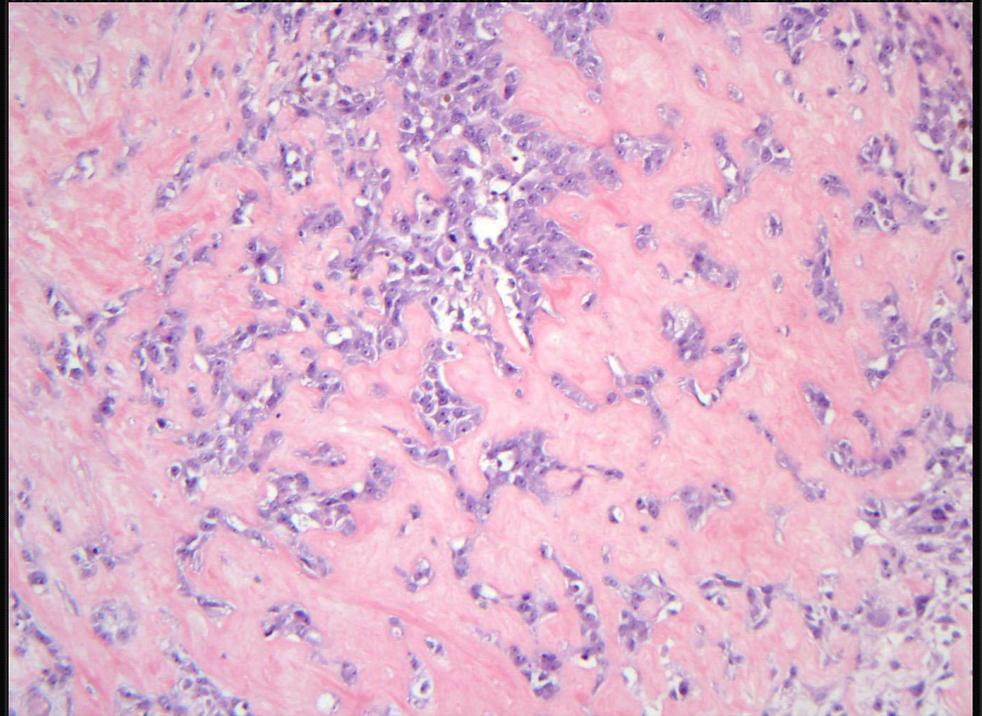
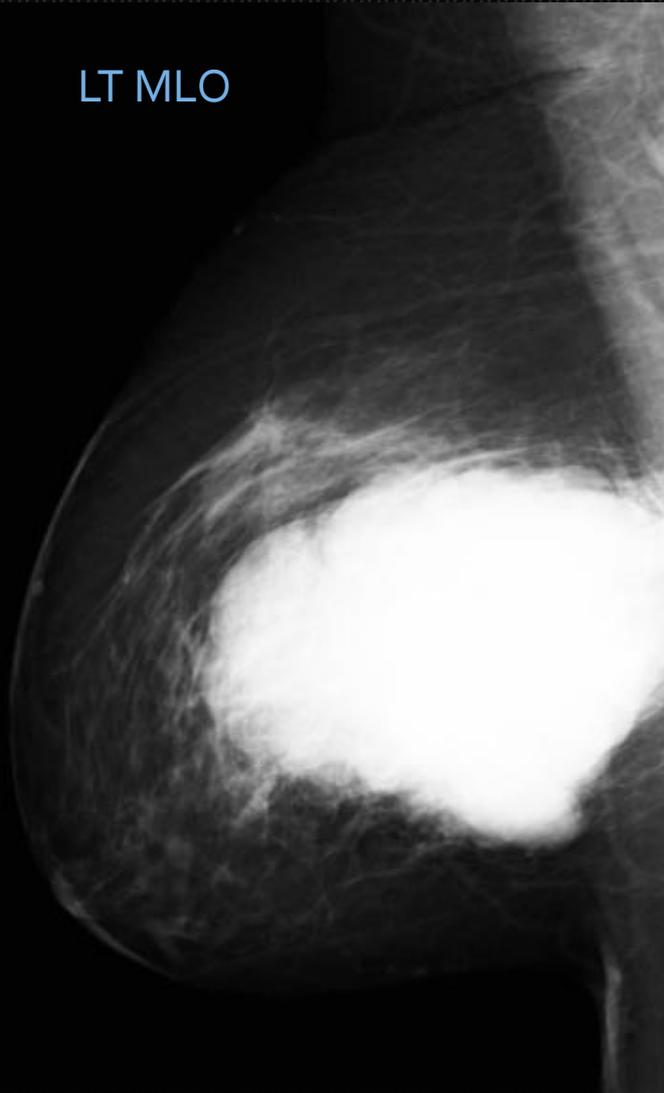
Companion case #1



Mammogram demonstrates 7 cm irregular high density spiculated mass. Chest CT demonstrates 7 cm left breast mass and large metastatic left UL lung mass.

Companion case #2

LT MLO



66 yo F presented with right breast mass. Mammogram demonstrates 20 cm irregular high density mass. Biopsy yielded MBC, with 20x H&E demonstrating osteoid and osseous components.

Discussion: MBC

- * Histologically, MBC is a poorly differentiated heterogeneous tumor containing two or more cell types, usually epithelial with a mixture of mesenchymal components such as spindle, squamous, chondroid, or osseous
- * MBC shares many similarities with invasive ductal carcinoma as well as benign lesions on imaging, complicating diagnosis
- * Epidemiology
 - * Rare, only representing 0.25-1% of BRCA annually
 - * High proportion diagnosed in Hispanic or black women

Discussion: MBC

- * Patients with metaplastic breast carcinomas commonly present stage II or higher with a large mass (> 3 cm size), rapid growth, and even distant metastases (usually brain and lung), but are less likely to have axillary nodal involvement compared to IDC
- * MBC are poorly- or un-differentiated tumors
- * MBC Immunohistochemistry: Most are ER, PR, and Her2-*neu* negative (>90%), Ki67 and p63 positive, and have worse prognosis than other triple negative BRCA
- * Genetics
 - * Majority are classified as basal-like subtype
 - * Amplification of EGFR has been reported in 10-25% of MBC's, and is more prevalent in the squamous and spindle cell subtypes

References

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