CASE

Dr. Surbhi Chauhan Dr. Pratiksha Yadav

HISTORY

- 36 year old female came to Dr. D Y Patil Hospital with complaints of painless lump in left breast since 20 days. She was referred to radiology department for ultrasound of bilateral breast.
- No history of nipple discharge, nipple inversion or skin changes. No other palpable mass.
- No history of weight loss, fever.
- No known family history of breast cancer.

ULTRASOUND OF LEFT BREAST







DIGITAL MAMMOGRAPHY AND TOMOSYNTHESIS



MRI



SUMMARY

An irregular mass in upper outer quadrant of left breast involving 1-2 o'clock position with spiculated margins and microcalcifictions, showing type III enhancement curve on dynamic MRI with multiple small similar lesions surrounding is highly suggestive of multifocal carcinoma breast (ACR BIRADS V).

FINAL HISTOPATHOLOICAL DIAGNOSIS

Biopsy of the lesion was performed and it was confirmed to be a moderately differentiated invasive ductal carcinoma (grade II) with focal DCIS.

DISCUSSION

- Breast cancer is the most frequently diagnosed cancer in women and it is the third leading cause of death.
- It accounts for 27% of all cancers in women in India.
- The incidence rates in India begin to rise in early thirties and peak at ages of 50-64 years.
- Incidence is more common among urban women.
- The high prevalence and need for an early treatment of breast malignancy emphasizes the need for early and accurate diagnosis.

Multicentric Breast Cancer, Multifocal and Contralateral Breast Cancer



Multifocal breast cancer is defined as the presence of two or more tumor foci within a single quadrant of the breast or tumor foci within 5 cms of each other.

Multicentric breast cancer is defined as the presence of two or more tumor foci within different quadrants of the same breast or tumor foci separated by more than 5 cms.

- Metachronous breast cancers are two breast cancers that occur in either breast in two different time periods.
- Synchronous breast cancers are two breast cancers that occur in either breast at the same time.
- Multifocal breast cancer tumors tend to develop in 10-12% of patients, depending upon when screening occurs. A *'synchronous'* contralateral tumor is found by physical exam or mammography approximately 2% of the time.
- For women who present with unilateral breast cancer, a subsequent 'metachronous' contralateral cancer tends to develop at a rate of 0.5-1% per year, which represents a cumulative risk of 15%.

Contralateral breast cancer screening

- Contralateral mammography is a mandatory follow-up for all patients with breast cancer.
- If multifocal or multicentric breast cancer is truly present, the sensitivity of mammography to detect these lesions is between 15% to 45%, for whole breast sonography is between 48% and 62% and magnetic resonance imaging is the most sensitive screening tool, with a detection rate of around 81%.
- The sensitivity of mammography in detecting multifocal breast tumors is more in 'fatty' pattern of breast density. In women with dense breast, the sensitivity of mammography in detecting multifocal breast tumors is about 10%.

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THANK YOU