Date: 1405/08/02, 2026/10/24

Patient's Name: S.M.

Responsible Physician: Dr. Alipour

Patient Presentation:

A 43 Y/O woman with IDC and DCIS of the left breast.

MRI: 76x40 mm NME (B4c) in UOQ left breast

Mammography: malignant shape microcalcifications in UOQ of left breast (B6 according to pathology)

Sonography: 2 adjacent masses (11x5.5x6.5 mm &8.5x7x3.5 mm) at 2-3 o'clock (B4a)

Left breast mass at 3 o'clock CNB:

IDC + DCIS

Intermediate grade DCIS

Lymphatic invasions+

Left breast mass 1.30 to 2.30 o'clock CNB:

DCIS

Micro invasion+

Calcification+

Intermediate grade

Left axillary lymph node FNA:

Suspicious for malignant cells

ER 100%

PR 100%

HER2 0

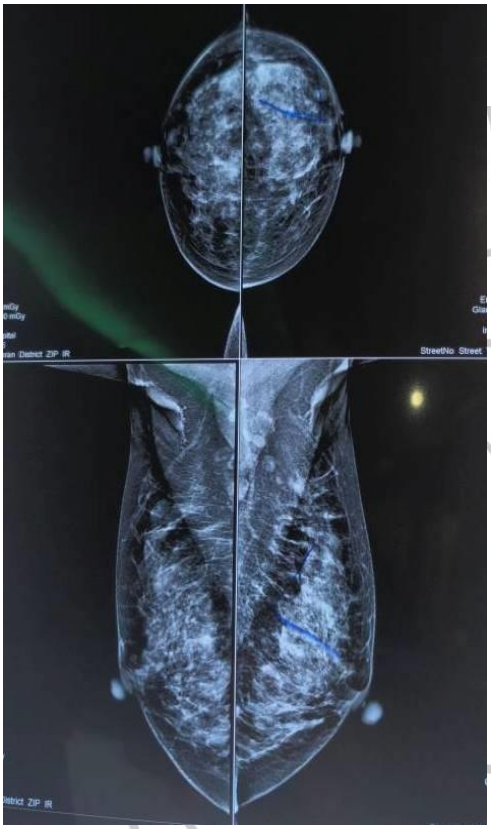
Ki67 15-16%

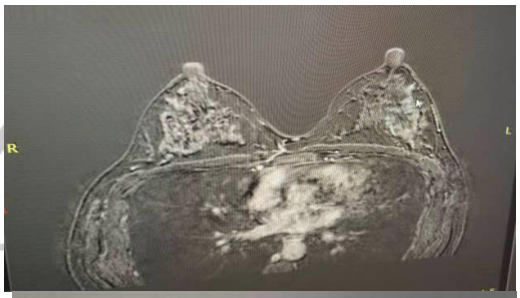
P53

The patient has a history of papillary thyroid carcinoma, for which she underwent thyroidectomy followed by neck dissection.

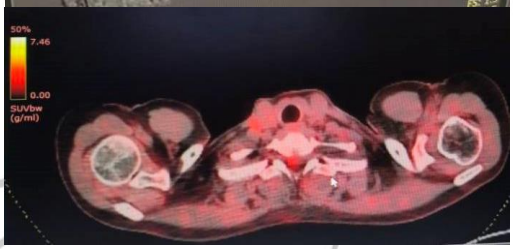
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Her current PET/CT shows suspicious cervical and supraclavicular lymph nodes. However, it is unclear whether these lymph nodes are related to the breast cancer or represent recurrent/metastatic thyroid cancer.













Question:

- ✓ Could the PET/CT be re-reviewed to assess whether the cervical and supraclavicular lymph nodes are suspicious for metastatic breast cancer?
- ✓ Could the breast MRI be re-reviewed to determine whether the entire 7-cm area of NME is suspicious for malignancy?
- ✓ What is the distance between the lesion and the NAC?

- ✓ Based on the imaging findings, is the patient a candidate for breast surgery and if so is she candidate for mastectomy or BCS?

Recommended Plan:

- ✓ Upon review of the patient's records, three suspicious axillary lymph nodes are identified on breast MRI, with corresponding FDG avidity on PET/CT. The overlying skin is involved; however, the distance from the nipple–areolar complex (NAC) is adequate, making NAC preservation feasible.
- ✓ The left breast demonstrates multiple lesions extending from the 12 to 5 o'clock positions. Two hyper metabolic lymph nodes are also noted in the right supraclavicular region and level IV of the right neck, possibly of thyroid origin. The thyroidectomy bed appears unremarkable.

Recommended workup and management:

1. Cervical lymph node evaluation: Perform targeted neck ultrasound. If suspicious lymph nodes are identified, ultrasound-guided core needle biopsy is recommended. The supraclavicular lymph node may be palpable and could be sampled directly.

2. Evaluation for thyroid cancer recurrence: If biopsy is inconclusive or no suitable lymph node is identified on ultrasound, consider an iodine scan following levothyroxine withdrawal for approximately one month, with assessment of TSH levels. If the scan demonstrates iodine-avid lesions, this would support a thyroid origin. Further management may include radioiodine therapy and/or radiofrequency ablation, depending on the findings.

3. Surgical sequencing: Core needle biopsy of the cervical lymph node should be performed first to establish its origin and guide treatment planning.

4. Breast surgery: If upfront surgery is appropriate following completion of staging, surgical management of the left breast and axilla is recommended. Given the feasibility of NAC preservation, nipple–areolar complex-sparing mastectomy may be considered.

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