Date: 1405/08/09, 2026/10/31

Patient's Name: F.A

Responsible Physician: Dr. Omranipour

Patient Presentation:

Patient History and Initial Diagnosis:

A 36Y/O female with a lesion on the left shoulder and clavicle.

-Initial presentation: Left breast mass, first noticed in 2024 (1403)

-Initial core needle biopsy:

- Invasive ductal carcinoma, Grade 3.
- Lymphovascular invasion (LVI) present.
- ER-negative, PR-positive, HER2-negative.
- Ki-67: 60%.

Initial Surgery and Pathology:

-The patient underwent breast-conserving surgery (BCS) and sentinel lymph node biopsy (SLNB).

-Surgical pathology:

- Surgical margins were negative.
- Axillary lymph nodes were negative for metastasis.

Adjuvant Chemotherapy and Local Recurrence:

-The patient received eight cycles of chemotherapy.

-During chemotherapy, a recurrent mass developed in the left breast.

-Repeat core needle biopsy of the recurrent mass:

- ER-negative.
- PR-negative.
- HER2-negative.
- Ki-67: 70%.

-These findings are consistent with a triple-negative phenotype.

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Completion Mastectomy:

-In 2025 (1404) the patient underwent mastectomy.

Final mastectomy pathology:

- Tumor size: 5 cm.
- Surgical margins: Negative.
- Pathologic stage reported as T3N0.

Subsequent Systemic Treatment:

-The patient subsequently received seven cycles of chemotherapy and is currently undergoing systemic chemotherapy.

Previous Imaging Findings (2025):

-Chest CT revealed multiple small pulmonary nodules, including:

- 4 and 6-mm nodular opacities in the apicoposterior segment of the left upper lobe.
- A 4-mm nodule in the right upper lobe.
- A lesion in the left lower lobe, considered suspicious for metastatic disease.

New Lesion and Biopsy:

-Several months ago, the patient developed a lesion involving the left clavicular/shoulder or scapular region.

-Core needle biopsy of the lesion demonstrated metastatic carcinoma.

-Immunohistochemistry:

- ER: 40% positive.
- PR: 10% positive.
- HER2: Negative.
- CK7: Positive.
- CK2: Positive (as reported; marker designation requires verification.(
- CK AE1/AE3: Positive

Most Recent CT Findings:

-Soft-tissue mass measuring 48 × 57 mm involving the pectoral muscles.

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-Compression of the axillary vein and suspected irregularity/involvement of the left axillary artery.

-Right pleural thickening with pleural effusion.

-Multiple pulmonary nodules in the right lung.

-A 13-mm pulmonary nodule in the lingual.

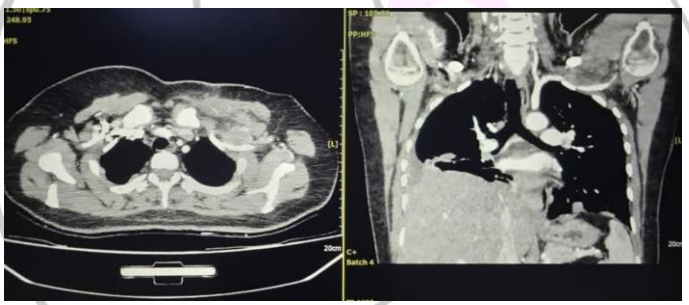
-An 8-mm nodule in the apical segment of the left upper lobe.

-Extension into the mediastinal fat.

-A 21 × 25 mm soft-tissue density at the right cardio phrenic angle, suspicious for tumor involvement.

-Left pleural involvement, predominantly along the diaphragmatic surface.

-A 9-mm soft-tissue density in the subcutaneous fat at the mastectomy site.



Bone Scan:

- Whole-body bone scan: Negative for evidence of bone metastases.

Question:

Given the locally recurrent and metastatic breast cancer, the pectoral mass with suspected involvement of major axillary vessels, and the probable pleuropulmonary and mediastinal disease, should surgical intervention be considered, or should the patient continue systemic therapy?

Recommended Plan:

- ✓ **CT scan re-reviews:** No arterial or venous involvement was identified.
- ✓ **Further evaluation:** CT angiography is recommended.
- ✓ **If surgery is feasible:** Palliative surgery followed by hormonal therapy and radiotherapy is recommended.
- ✓ **If surgery is not feasible:** Radiotherapy is recommended.

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