An Atypical Case of Hodgkin Lymphoma

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INTRODUCTION

- **Hodgkin Lymphoma (HL):** A hematologic malignancy with bimodal age distribution (15-30 years & >55 years).
- **Common symptoms:** B-symptoms (fever, night sweats, weight loss) & painless lymphadenopathy.
- **Extra-nodal involvement:** Rare (10-20% of cases), can mimic other diseases.

CASE PRESENTATION

- **Presentation:** 26-year-old female with no significant past medical history presenting to outside ED with two weeks progressive dry cough, 30 lb. weight loss over 9 months. Denied fevers, chills, and night sweats.
- **Initial Findings:** CT Chest showing extensive lymphadenopathy (hilar, mediastinal, supraclavicular, axillary, left mammary chain), abnormal breast finding, lytic lesion of right rib, large left pleural effusion, collapsed left lung, and numerous pleural metastases. (**Figures 1-3**).
- **Transfer:** Transferred to tertiary care center for management of effusion and workup of presumed malignancy, breast cancer thought to be most likely etiology per radiologic findings. Subsequent imaging with CT abdomen/pelvis showed splenic lesions & abdominal lymphadenopathy.

MANAGEMENT

- **Thoracentesis:** Promptly underwent thoracentesis with 910 cc removed; fluid studies consistent with chylothorax (**Figure 4**). Chest tube placed.
- **Biopsy:** A supraclavicular lymph node biopsy showed classical HL.
- **Treatment**: Oncology consulted and initiated inpatient chemotherapy (Adriamycin, Vinblastine, Dacarbazine); discharged post chest tube removal.

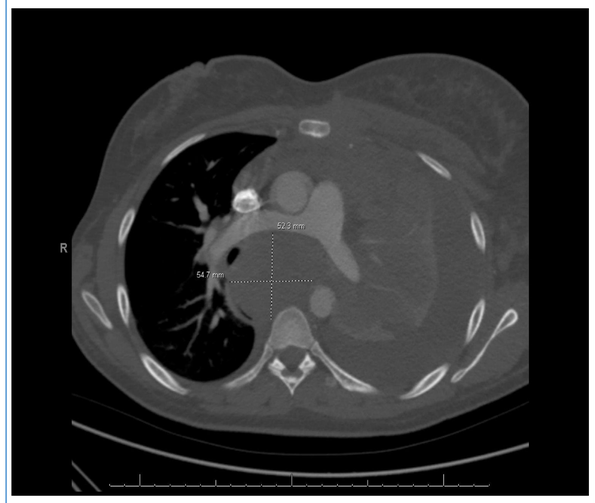

Figure 1. Admission CT Angiogram Chest slice demonstrating marked mediastinal lymphadenopathy in addition to large effusion with complete collapse of left lung.

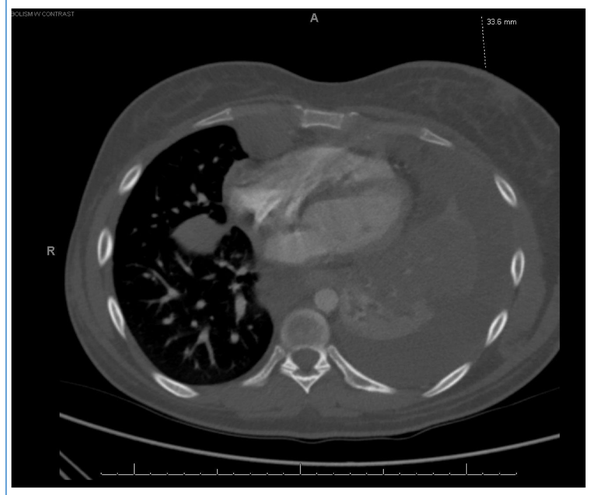

Figure 2. More caudal image of admission CT showing right sixth rib lesion and left breast abnormality.

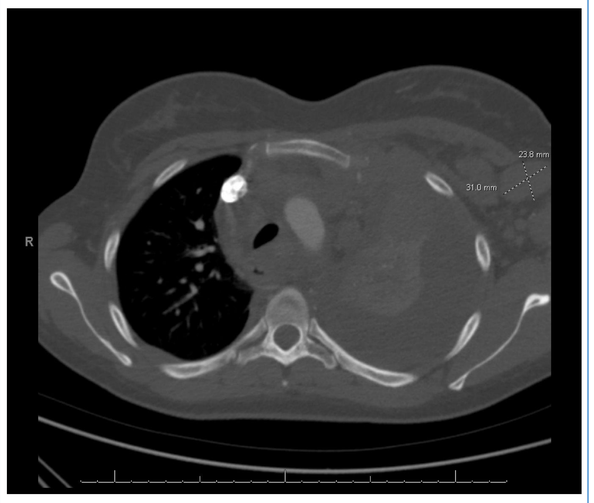

Figure 3. Another slice of admission CT highlighting left mammary chain lymphadenopathy.

CHEMISTRY, FLUID	
LD, Fluid	130
Protein, Total, Fluid	4.8
Glucose, Fluid	96
Triglycerides, Fluid	763
pH, Fluid	7.41
HEMATOLOGY, FLUID	
Volume	3.0
Appearance	White
RBC	163
Total Nucleated Cells (WBC)	6,118
Neutrophils	32
Lymphocytes	41
Monocytes	0
Eosinophils	0
Mesothelial Cells	10
Histiocytes	17
Reactive Lymphocytes	0
Other Cells	0
Absolute Neutrophils, Fluid	1,958

Figure 4. Fluid studies from thoracentesis after transfer consistent with chylothorax.

DISCUSSION

- **Atypical Presentation:** Given the significant extra-nodal involvement (pleural metastases, rib involvement, splenic metastases), a large pleural effusion, and lack of B-symptoms, HL was not the first item on the differential.
- **Diagnostic Challenge:** Radiologically, presentation was thought to be more consistent with breast cancer given the left breast abnormality, mammary chain lymphadenopathy, and extensive metastatic disease.
- **Extra-nodal Involvement:** Rare in HL, usually limited to bone marrow or lung. In this case, the presence of pleural metastases and a lytic rib lesion were particularly unusual.
- **Chylothorax:** Especially rare in HL. Occurs in lymphatic obstruction or infiltration. More common in Non-Hodgkin Lymphoma.

CONCLUSIONS

- Because of the timeliness of the lymph node biopsy, prompt treatment with chemotherapy could be initiated for classical HL.
- This case emphasizes the need for vigilance in atypical presentations to prevent diagnostic delays.

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