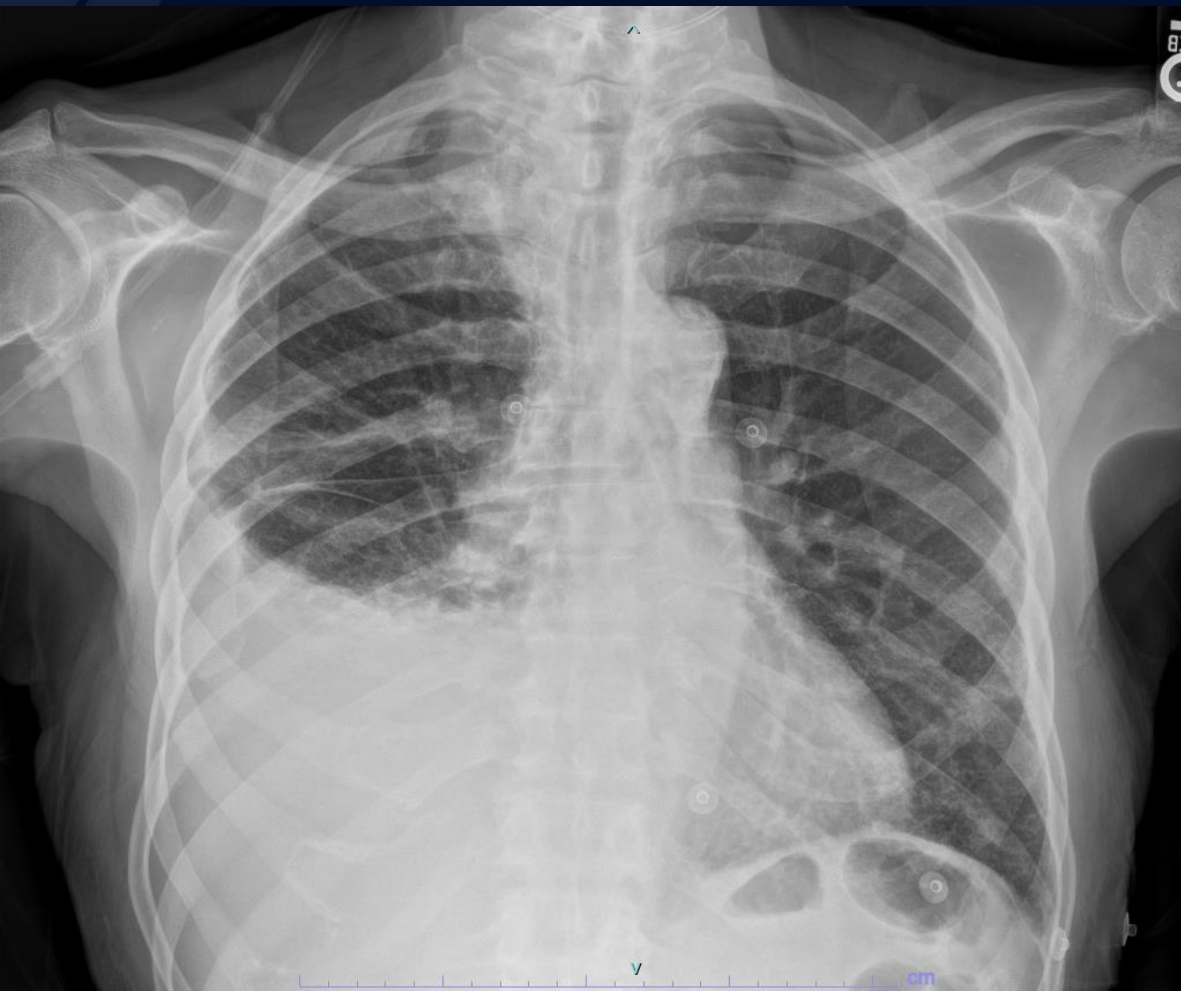
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text.

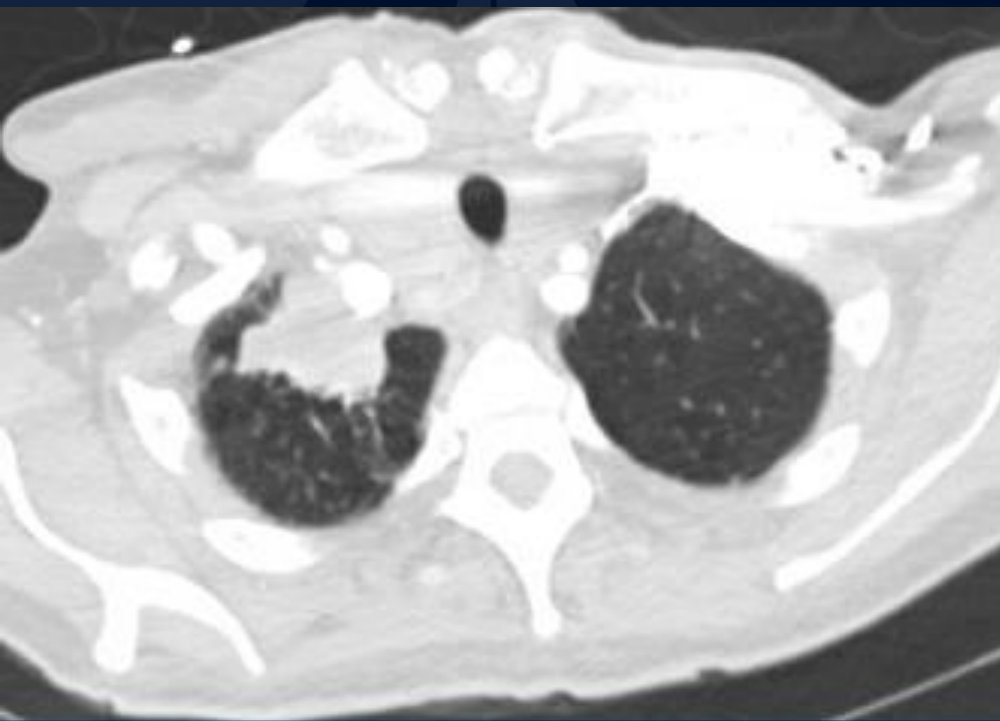
87-year-old male presenting with
worsening dyspnea on exertion,
fatigue and weakness

Prakhar Bansal, MS3

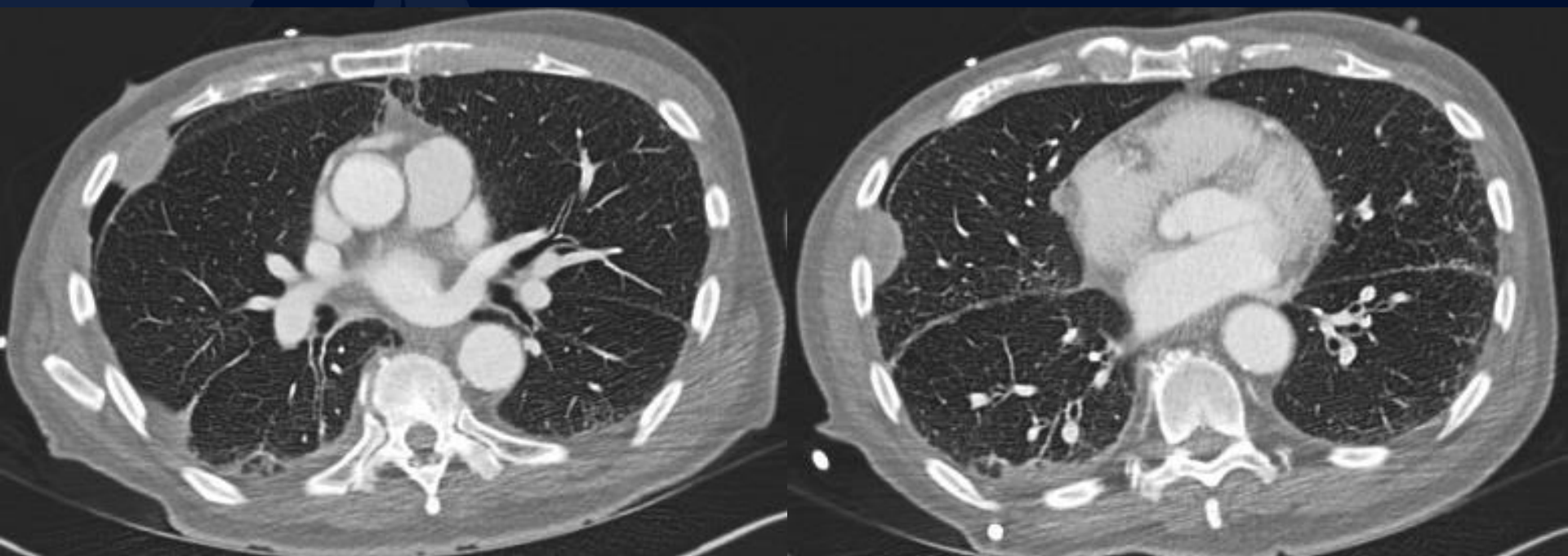
Radiographs



CT



CT

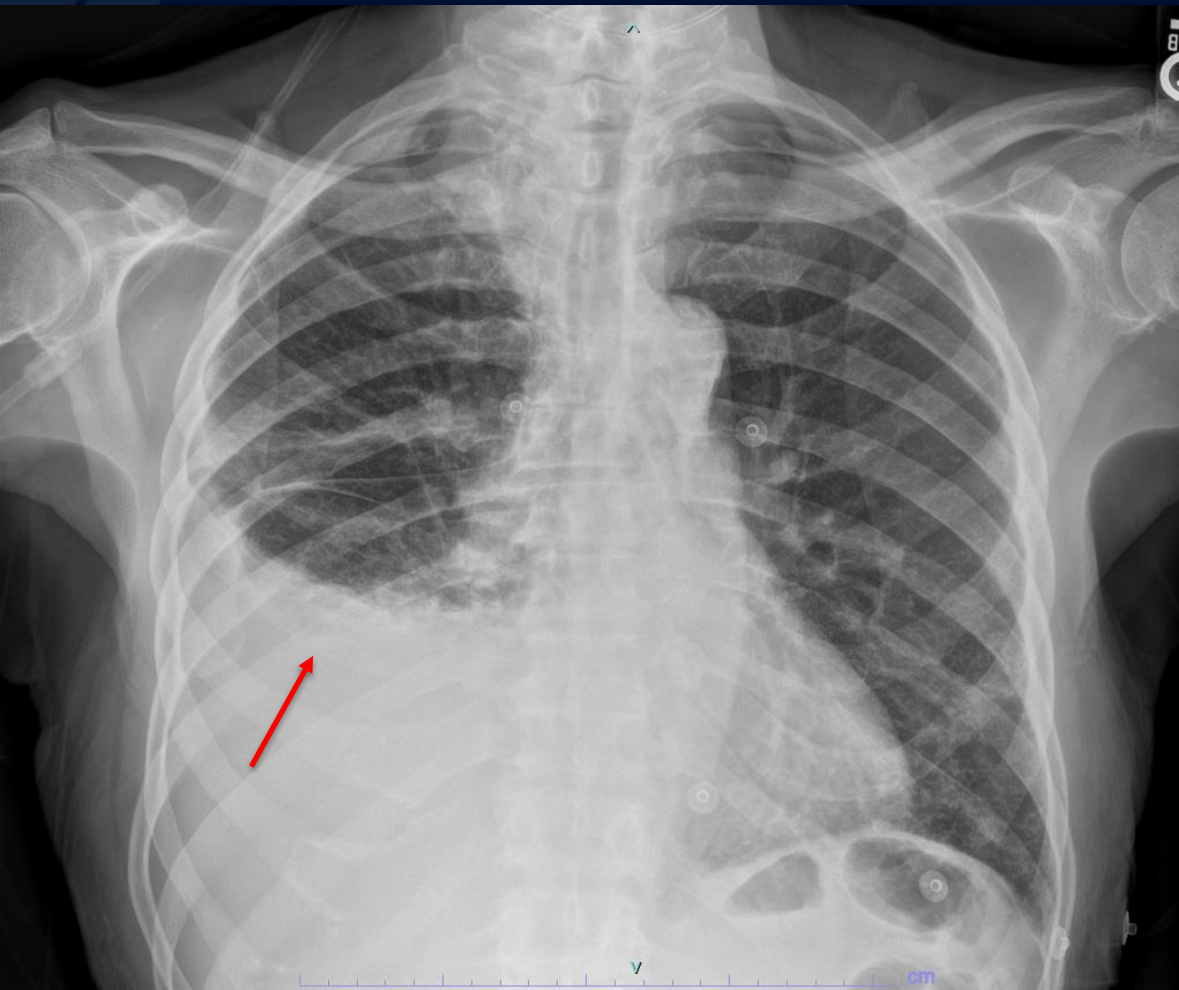




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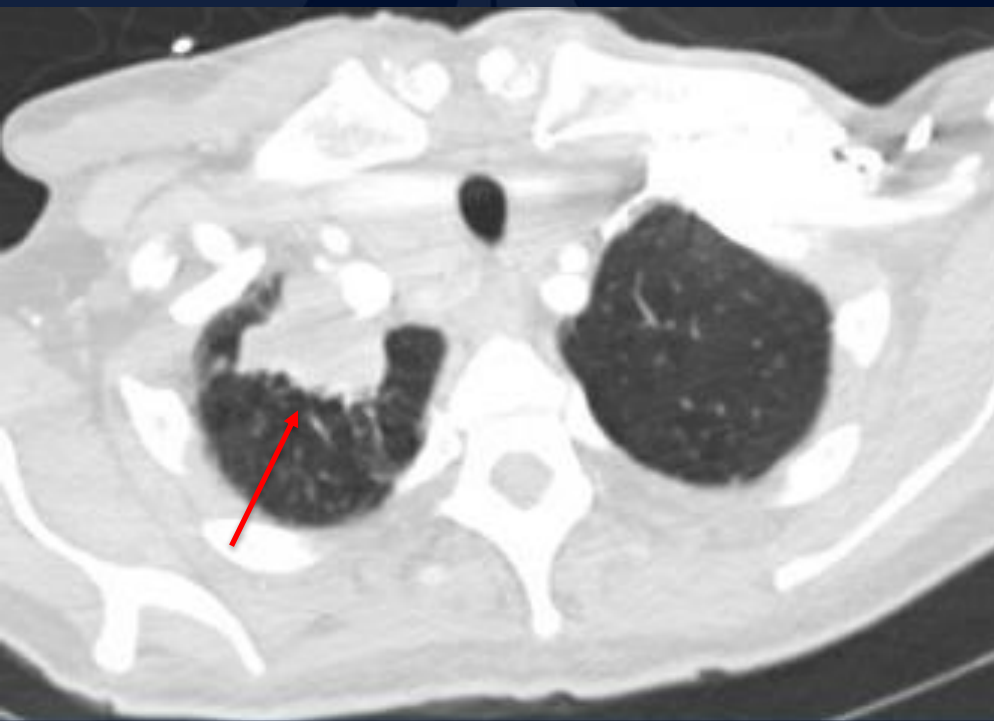
Lung Adenocarcinoma with Pleural Metastasis

Radiograph



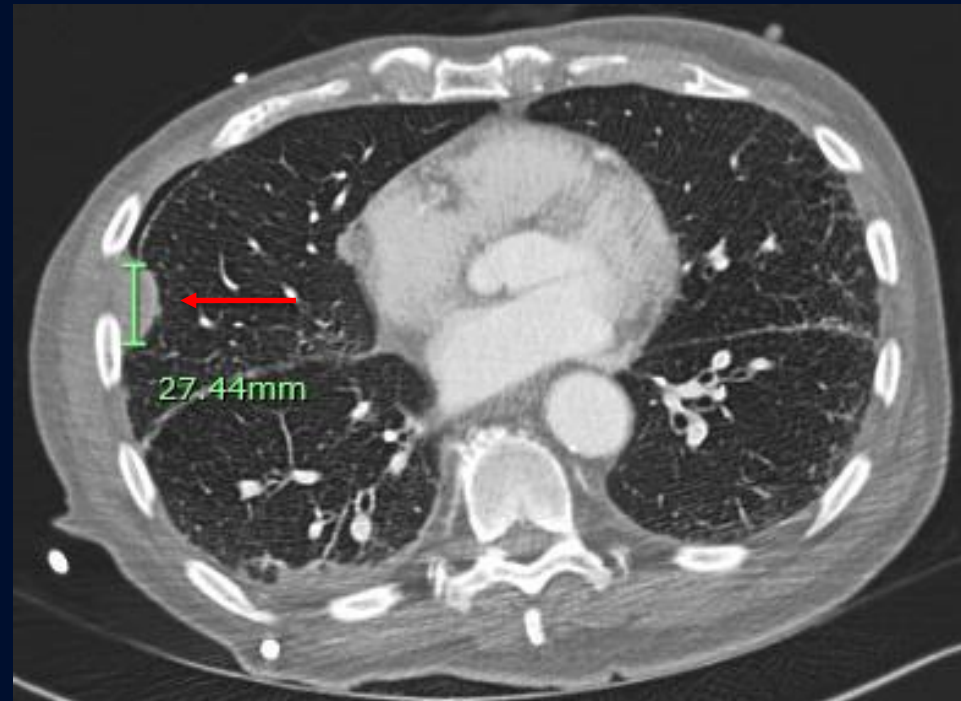
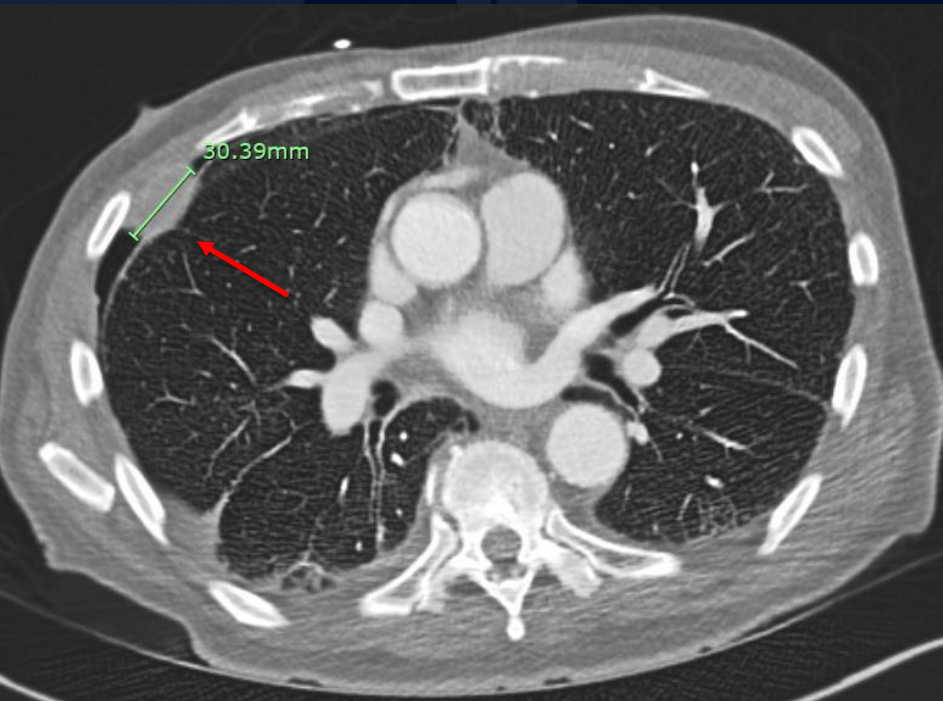
Right-sided pleural effusion

CT



4.0 cm right apical soft tissue mass

CT



Soft tissue nodules and masses in the pleural space in the right hemithorax, consistent with metastatic pleural implants

Trace associated pneumothorax

CT



Multiple enlarged mediastinal lymph nodes, consistent with metastatic mediastinal lymphadenopathy

Small bilateral pleural effusions

Imaging Findings Concerning for Lung Cancer

- Nodules with irregular/spiculated margins, upper lobe, thick-wall cavitation, nodules with solid and ground glass components
- New nodules/masses, especially if > 3 cm
- Measurable growth in any nodule or mass
- Pleural nodularity
- Asymmetric or significantly enlarged hilar or paratracheal nodes
- Endobronchial lesion
- Consolidation that fails to resolve with medical management
- Less specific findings
 - Pleural effusions
 - Non-dependent or substantial atelectasis
 - Pleural plaques indicating significant asbestos exposure

Malignant Pleural Effusions (MPEs)

- 15% of all patients with cancer develop malignant pleural effusions
 - Most commonly with lung and breast cancers
- Usually indicator of advanced stage cancer (median survival 4 months)
- Management focused on palliation
 - If symptomatic (dyspnea, discomfort, cough), drain with large volume thoracentesis or chest tube
 - >50% of MPEs recur (up to 2/3 of those recur rapidly within 1 month)
 - Tx symptomatic recurrence with repeat thoracentesis, long-term indwelling pleural catheter, pleuroperitoneal shunt

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- Ost DE, Niu J, Zhao H, Grosu HB, Giordano SH. Quality Gaps and Comparative Effectiveness of Management Strategies for Recurrent Malignant Pleural Effusions. *Chest*. 2018 Feb;153(2):438-452. doi: 10.1016/j.chest.2017.08.026. Epub 2017 Aug 31. PMID: 28864054; PMCID: PMC6743066.
- Thomas KW, Gould MK, Naeger D. Overview of the initial evaluation, diagnosis, and staging of patients with suspected lung cancer. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2023.
- Silvestri GA, Littenberg B, Colice GL. The clinical evaluation for detecting metastatic lung cancer. A meta-analysis. *Am J Respir Crit Care Med*. 1995 Jul;152(1):225-30. doi: 10.1164/ajrccm.152.1.7599828. PMID: 7599828.