



A case of right lower lobe malignancy

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I. BACKGROUND AND INTRODUCTION:

Thoracoabdominal sign: A frontal chest radiograph sign that helps to localize a thoracic lesion is the thoracoabdominal sign, a version of the silhouette sign.

Because the posterior costophrenic sulcus is more caudal than the anterior lung, a thoracic lesion must be posterior if its caudal end can be seen below the diaphragm dome.

Furthermore, the convergence of the mass's inferolateral boundary towards the spine indicates that the mass is most likely fully intrathoracic (negative thoracoabdominal sign), whereas the absence of convergence or divergence implies a section silhouetted by the abdomen's soft tissue density (positive thoracoabdominal sign).

II. CASE REPORT

Patient information:

A 58-year-old female patient presented to the tertiary care hospital in Indore with chief complaints of right-sided chest pain, dry cough decreased appetite, and weight loss for the past 2 months. She was otherwise healthy and didn't have any significant past medical history.

Clinical findings:

Her routine investigations like Complete Blood Count (CBC) with peripheral smear and renal and liver profile was within normal limit. To aid the diagnosis a chest X-ray which was suggestive of the thoracoabdominal sign was performed. Later Contrast enhanced CT (CECT) was done which was followed by Ultrasound-guided fluid aspiration of the right side and a bronchoscopic biopsy of the left lesion.

Imaging findings:

The chest x-ray revealed a Thoracoabdominal sign on the right side as well as homogeneous opacity in the left upper lobe. Following that, a Contrast Enhanced CT chest was conducted, which revealed a well-defined peripherally enhancing thick wall lesion with core hypodensity and distal passive collapse of the segment in the right lower lobe. Another poorly defined peripherally enhancing lesion with a central

hypodensity lesion was discovered in the left lung's lingual. There was no evidence of lymphadenopathy in the mediastinum. A right-sided lesion was aspirated under ultrasound guidance which showed non-caseating granuloma-like characteristics. Following that, a bronchoscopic guided biopsy was performed on a left-sided lesion that was suggestive of a non-caseating granuloma.



Fig. 1

Fig. 1 Fig.1 Radiograph of chest posteroanterior view of, a 58 years old female, demonstrating a Thoracoabdominal sign on the right side.

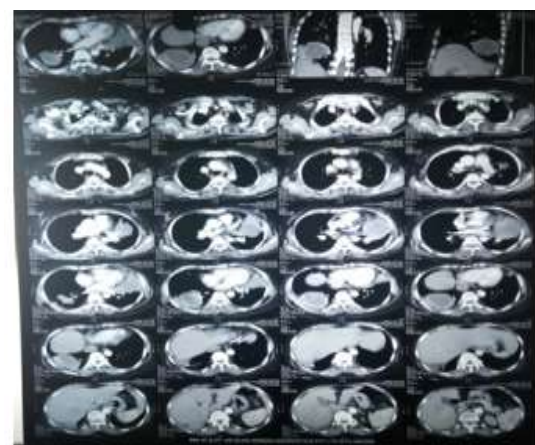


Fig.2



Fig.2 CT enhanced image,axial projection displaying peripherally enhancing lesion in right lower lobe and poorly defined lesion in the left upper lobe.

III. MANAGEMENT:

Based on clinical evidence Anti-tuberculosis (ATT) treatment was initiated. However, she showed no signs of improvement, and her symptoms worsened as a result. After one month, she returned to the hospital with complaints of right-sided chest pain. We took another sample from a lesion on the left side that was suggestive of Squamous cell carcinoma grade 2. This suggests that the cancer cells are moderately differentiated, which means they appear slightly abnormal but not as much as a high-grade tumor.

IV. CONCLUSION:

The thoracoabdominal sign is a valuable radiographic finding that can help with thoracic lesion localization. Its detection can lead to effective care and better patient outcomes.

REFERENCES

- [1]. George PP, Irodi A, NidugalaKeshava S et-al. 'Felson Signs' revisited. J Med Imaging RadiatOncol. 2014;58 (1): 64-74. doi:10.1111/1754-9485.12031 - Pubmed citation