

2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

AN APPROACH TO MEDIASTINAL MASS

BY

DR CHRISTINA SHERLEY NS (RESIDENT)

CASE GUIDE: DR PALLAVI G (SENIOR RESIDENT)

DEPT OF RADIODIAGNOSIS.

SUBBAIAH MEDICAL COLLEGE, SHIMOGA.

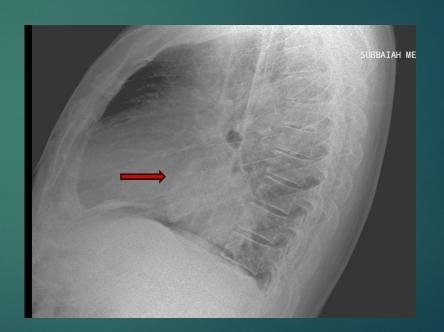
Chest X ray -Frontal view

- A Well defined, round, broad based homogenous opacity noted in right lower zone with no loss of cardiac silhouette
- Hilar vessels are not seen coursing through the lesion (hilum overlay)
- Mild displacement of right interlobar artery due to the mass effect of the lesion noted
- Ipsilateral tracheal deviation noted
- → The lesion is mostly likely in middle or posterior mediastinum



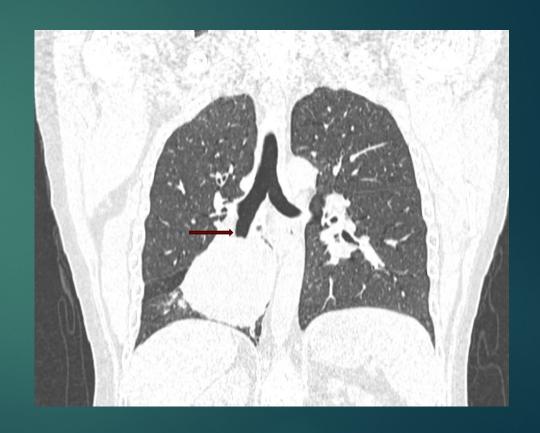
Chest x ray - Lateral

- Multicompartmental lesion with epicenter at middle mediastinum(ITMIG classification)
- ▶ No obvious calcifications.



HRCT THORAX

- A well-defined heterogeneous soft tissue density lesion in peri bronchial location at lower lobe of right lung.
- The lesion is causing complete cutoff of right lower lobe bronchus at the bifurcation of intermediate and middle lobe bronchus with no e/o distal lung collapse.



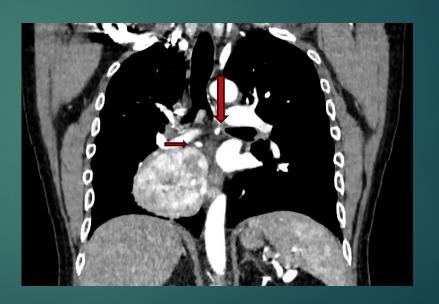
CECT THORAX – ARTERIAL

Vivid heterogeneous enhancement of mass noted



CECT THORAX – ARTERIAL

 Prominent bronchial arteries noted supplying the mass – likely endobronchial mass lesion



VENOUS PHASE

Progressive washout of contrast noted



DIAGNOSIS

- ▶ Well-defined vividly enhancing lesion in peribronchial location of lower lobe of right lung causing complete cut-off of right lower lobe bronchus with prominent bronchial arteries supplying the lesion
- Likely Mediastinal Carcinioid

CARCINOID TUMOR

TYPICAL CARCINOID

- ▶ 40-60Y F>M
- Not associated with smoking
- </=10cm</p>
- Presents most commonly with signs of bronchial obstruction
- ► Low grade malignancy
- Slow growing and locally invasive
- Paraneoplastic syndromes can be present

ATYPICAL CARCINOID

- ▶ Elderly M>F
- Associated with smoking
- >10cms
- Less common with signs of bronchial obstruction
- Low grade malignancy
- Aggressive tumour
- Commonly a/w paraneoplastic syndrome.

REFERENCES

- Detterbeck F. Clinical approach to mediastinal masses. In Kuzdal JML ,Muller M, Papagiannopoulos K, et al. (Eds.), ESTS Textbook of Thoracic Surgery. Exeter, UK: European Society of Thoracic Surgeons, 2014. Google Scholar
- 2. Carter BW, Tomiyama N, Bhora F, et al. A modern definition of mediastinal compartments. J Thorac Oncol 2014;9:S99–S103.
- 3. Petersdorf S. Mediastinal lymphomas. In Wood DE, Thomas CR Jr (Eds.), Mediastinal Tumors: Update 1995. New York: Springer-Verlag, 1995.

THANK YOU