

2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

PNEUMOTHORAX X RAY FINDINGS

BY

DR CHRISTINA SHERLEY NS (RESIDENT)

CASE GUIDE: DR RAGAVENDRA C R (SENIOR RESIDENT)

DEPT OF RADIODIAGNOSIS.

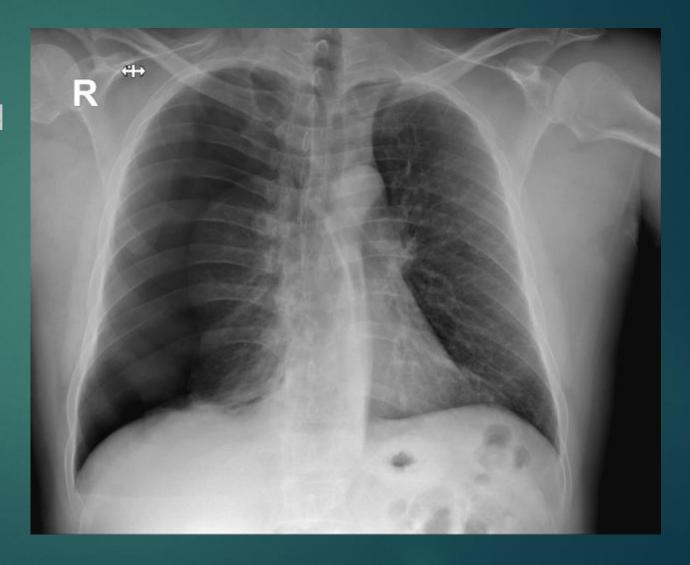
SUBBAIAH MEDICAL COLLEGE, SHIMOGA.

CLINICAL HISTORY

Middle aged man with sudden onset of right chest pain without a history of trauma

X RAY FINDINGS

The right hemithorax appears hyperlucent and shows a medial deviation of the visceral pleural edge, with no lung markings peripherally indicating collapsed right lung - pneumothorax.



RADIOGRAPHIC FEATURES

On Plain radiograph:

Pneumothorax typically demonstrates:

Visible visceral pleural edge is seen as a very thin, sharp opaque line

No vascular markings are seen peripheral to this line

Peripheral space is radiolucent compared to the adjacent lung.

Described methods for estimating the percentage volume of pneumothorax from an erect PA radiograph include:

Collins method

$$% = 4.2 + 4.7 (A + B + C)$$

the distances are measured in centimeters

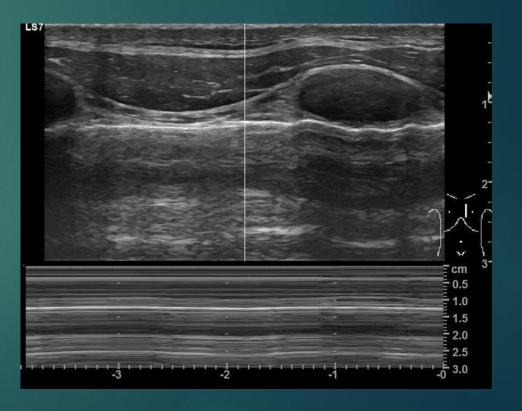
A is the maximum apical interpleural distance

B is the interpleural distance at midpoint of upper half of lung

C is the interpleural distance at midpoint of lower half of lung

USG

- ▶ USG:On <u>M mode</u>, classical signs for the <u>gray scale</u> imaging are seen
- seashore sign: normal lung sliding
- barcode/stratosphere sign: pneumothorax



thank you