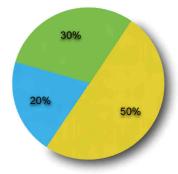
## Chest Roentogram Interpretation

History: This chest x-ray is from a patient who has presented with shortness of breath.

Task: Demonstrate how to interpret this chest x-ray using a systematic approach

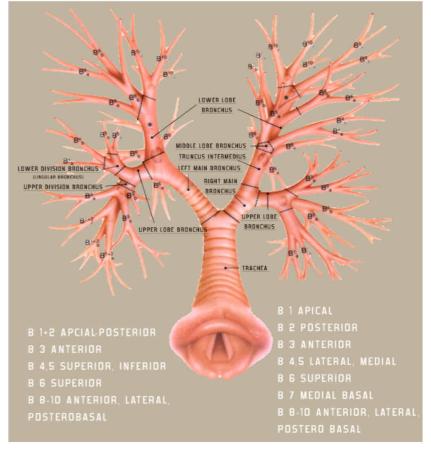


communication	clinical	procedure
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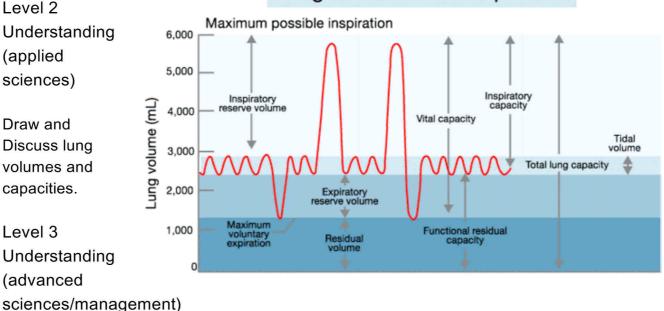
Marking criteria	Not Completed	Partially Completed	Completed
Familiarises self with equipment, setting, lighting etc.	^		
Determines name of patient, date of film, age of patient.			
Asks for a brief history of presentation			
Uses an initial overall review			
Looks for obvious and expected findings			
Adequacy: comments on the following			
Borders: entire lung fields visible			
Penetration: thoracic vertebrae seen behind heart border			
Rotation: clavicular heads to spinous process distance			
Inspiration: posterior right 10th/11th ribs visible			
Bones: identifies ribs, shoulders and vertebral column			
May use finger to trace each bone			
Soft tissues: Heart (cardiothoracic ratio), mediastinum, hila,			
diaphragm			
Lungs: uses left to right symmetry, compares interthoracic			
markings at each intercostal space with that of the other side			
Uses a systematic approach while working through CXR			
Able to classify different patterns of increased pulmonary			
opacifications			
Focal Airspace Disease: pneumonia, PE, neoplasm			
Diffuse/multifocal: pulmonary oedema, pneumonia,			
haemorrhage, neoplasm			
Fine reticular pattern: Acute: interstitial pulmonary oedema,			
interstitial pneumonitis; Chronic: lymphangitic metastatic,			
sarcoid, collegen vascular disease, fibrosing alveolitis,			
resolving pneumonia			
Coarse reticular pattern: Honeycomb lung (endstage			
pulmonary fibrosis), CCF or pneumonia with underlying COPD			
Reticulonodular pattern: same as reticular			
Miliary pattern: TB, fungal, Varicella, Silicosis, Sarcoid, Coal			
workers lung, Eosinophilic granuloma			
Nodular pattern: (>3cm), neoplasm, fungal or parasitic, septic			
emboli, Rheumatoid nodules, Wegener's granulomatosis			
Able to form a differential diagnosis based on the			
history of presentation, age and findings			
Overall			

## Chest Rotenterogram Interpretation

Level 1 Understanding (basic sciences) What are the lobes of the lungs and the segments of each lobe? The Right Lung: Right upper lobe: apical, posterior and anterior Right middle lobe: lateral and medial Right lower lobe: apical, anterior basal, medial basal, lateral basal, posterior basal The Left Lung: Left upper lobe: apico-posterior, anterior Lingual: superior, inferior Left lower lobe: apical, anteromedial basal, lateral basal, posterior basal



## Lung Volumes and Capacities



What are the respiratory causes of clubbing?

Lung cancer, mainly large-cell (35% of all cases), not seen frequently in small cell lung cancer, Interstitial lung disease, Tuberculosis, Suppurative lung disease (lung abscess, empyema, bronchiectasis, cystic fibrosis), Mesothelioma