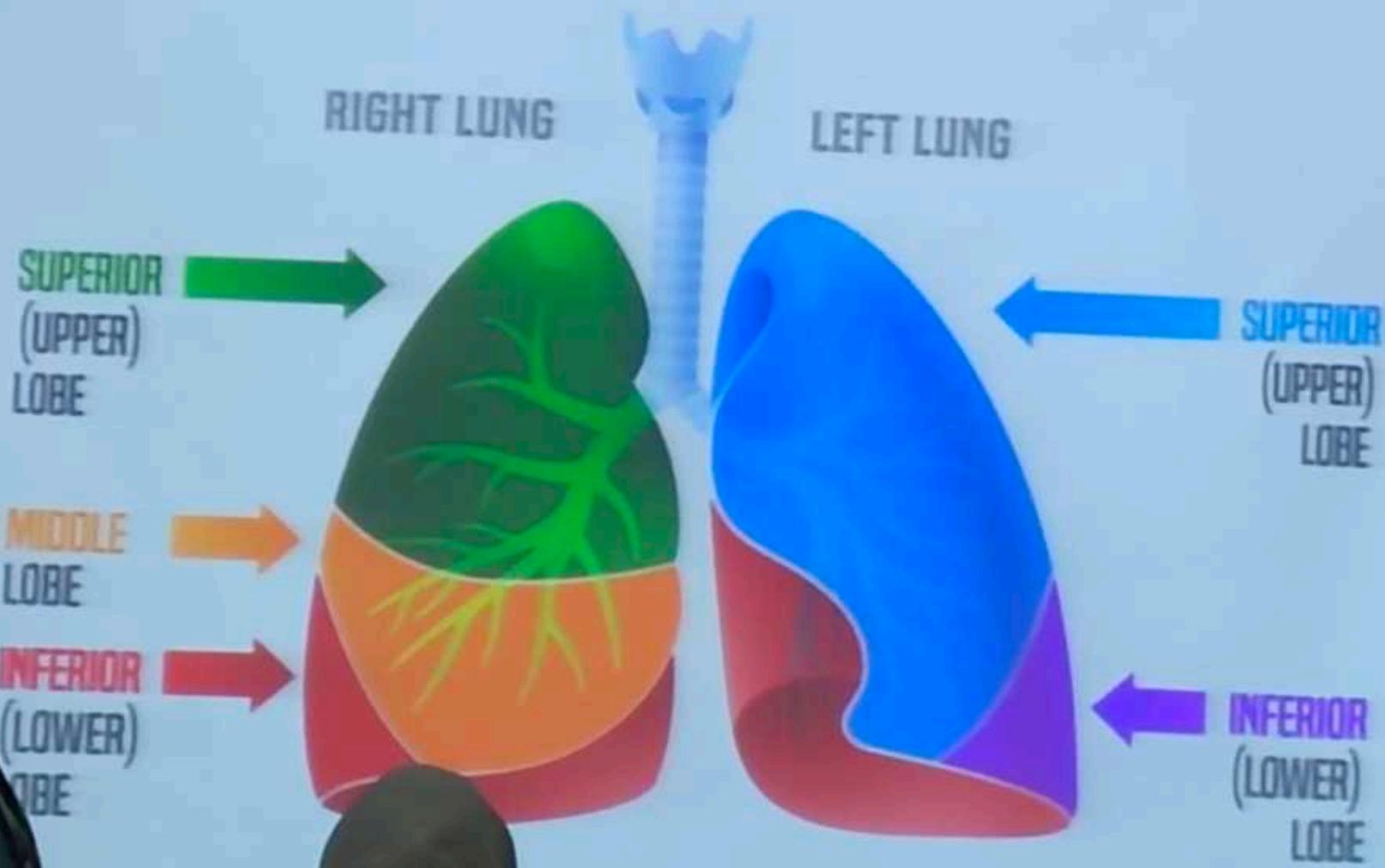
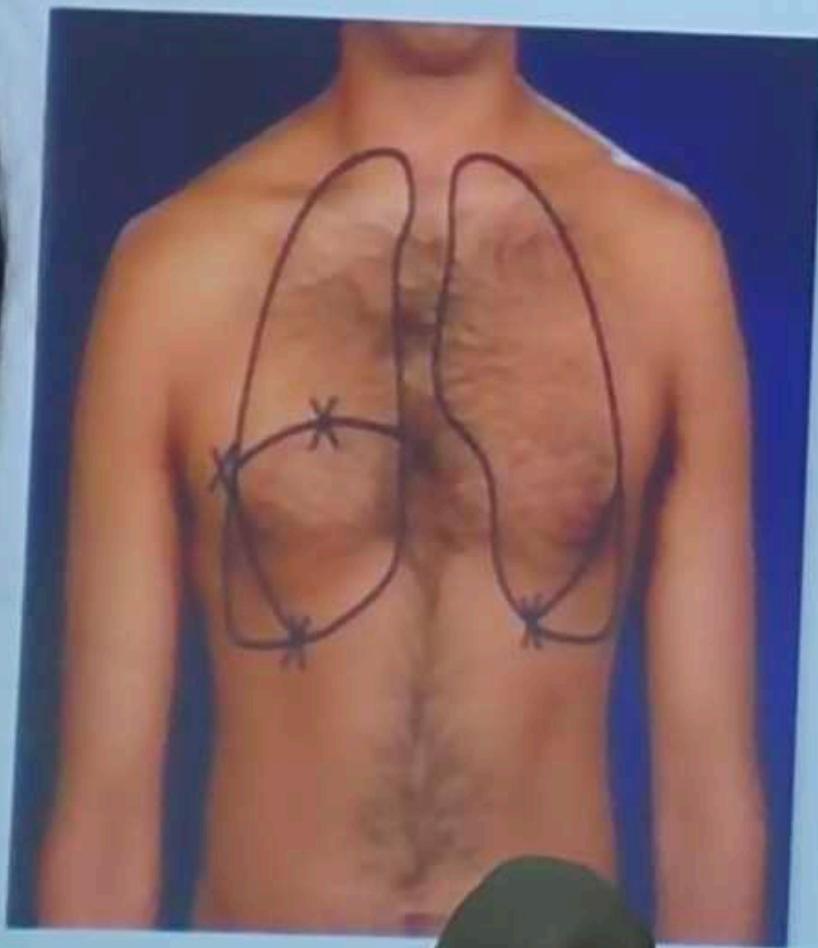


Introduction to Pulmonology

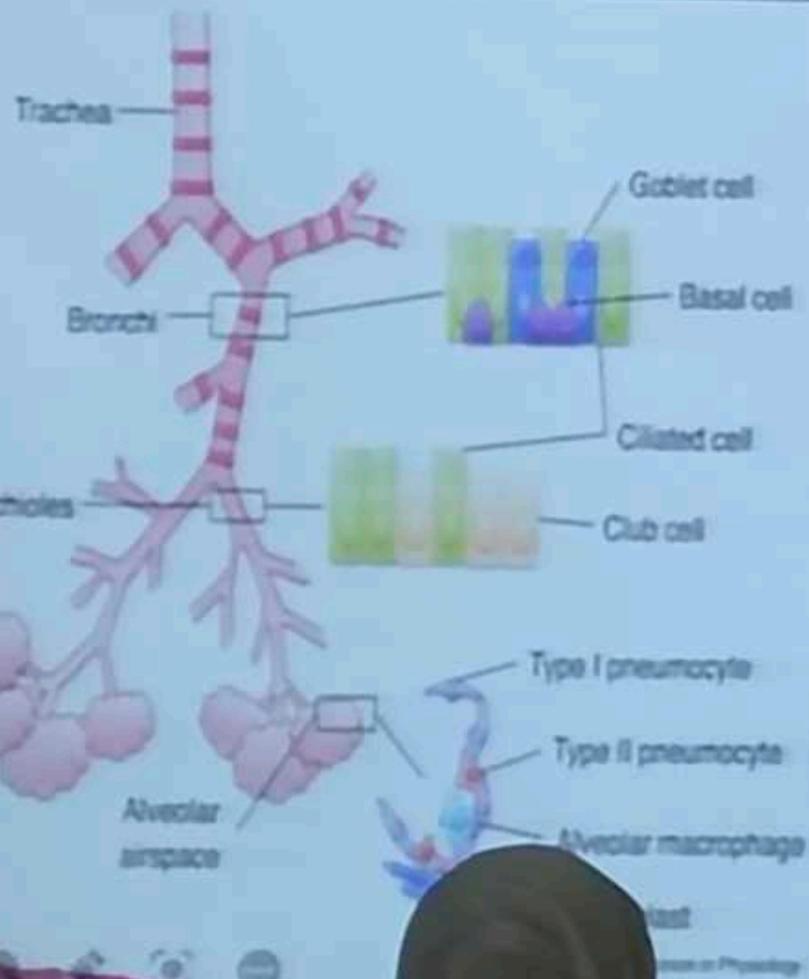
Dr Munaza Javed
Professor of Medicine
M.B.B.S, FCPS, CHPE, CHR

LUNG LOBES



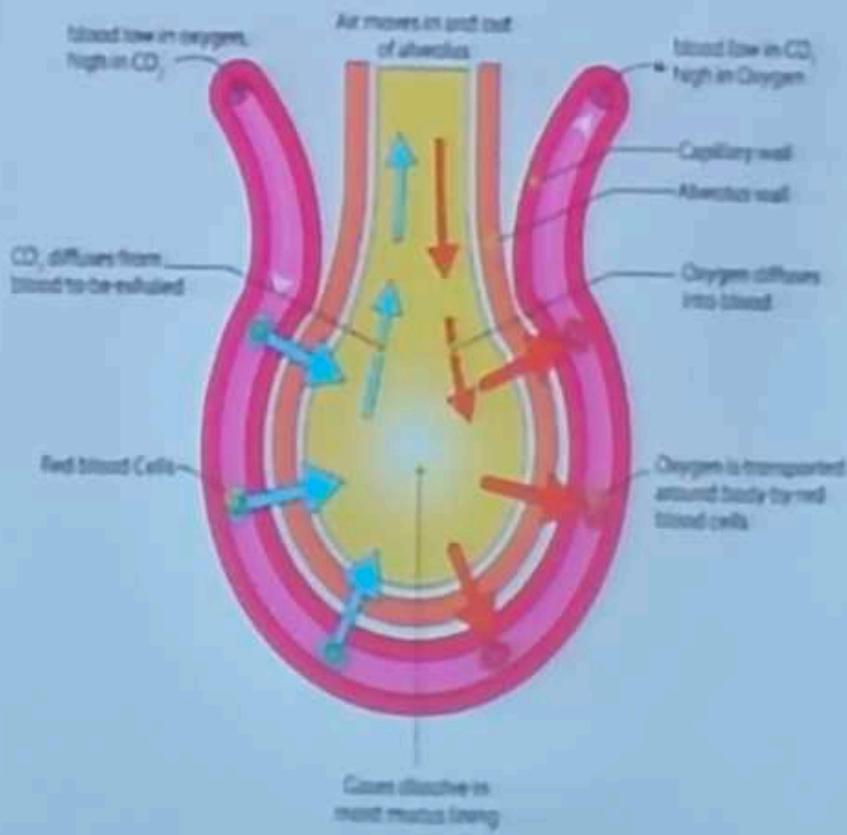


Physiology of Lungs



GAS EXCHANGE AT THE ALVEOLUS

BY US



Symptoms of Respiratory Diseases

■ Cardinal Symptoms

- Cough
- Sputum
- Hemoptysis
- Dyspnea
- Wheezes

Symptoms of Respiratory Diseases

■ Cardinal Symptoms

- Cough
- Sputum
- Hemoptysis
- Dyspnea
- Wheezes
- Chest pain

Symptoms of Respiratory Diseases

■ Other presenting symptoms

- Apnea
- Hoarseness
- Stridor
- Snoring
- Fever
- Night sweating
- Weight loss

Sudden explosive expulsion of air from the lungs to atmosphere through the epiglottis

- 1 Acute (< 3 wks)
- 2 Subacute (3-8 wks)
- 3 Chronic (>8 wks)

Symptoms of Respiratory Diseases

■ Acute cough

- Acute bronchitis
- Pneumonia
- Pulmonary Embolism
- Left ventricular failure

Common causes of chronic cough usually with **a normal CXR**:

1. Upper airway cough syndrome (it is related to allergic, non-allergic or vasomotor rhinitis, naso-pharyngitis, & sinusitis. i.e postnasal drip «PND»)

Symptoms of Respiratory Diseases

■ Sputum

- Bronchiectasis (yellow, green, large amount, more in the morning)
- Lung abscess (Foul smelling, more on lying on the other side of lesion)
- Pneumonia (yellowish, rusty symptoms streaks of blood)
- Pulmonary edema (Pink frothy)



Dyspnoea:

Exertional / at rest

Paroxysmal dyspnea

Bronchial asthma (wheezes, no crackles)

Left ventricular failure (crackles, cardiomegaly)

Orthopnea

Nocturnal dyspnea

Symptoms of Respiratory Diseases

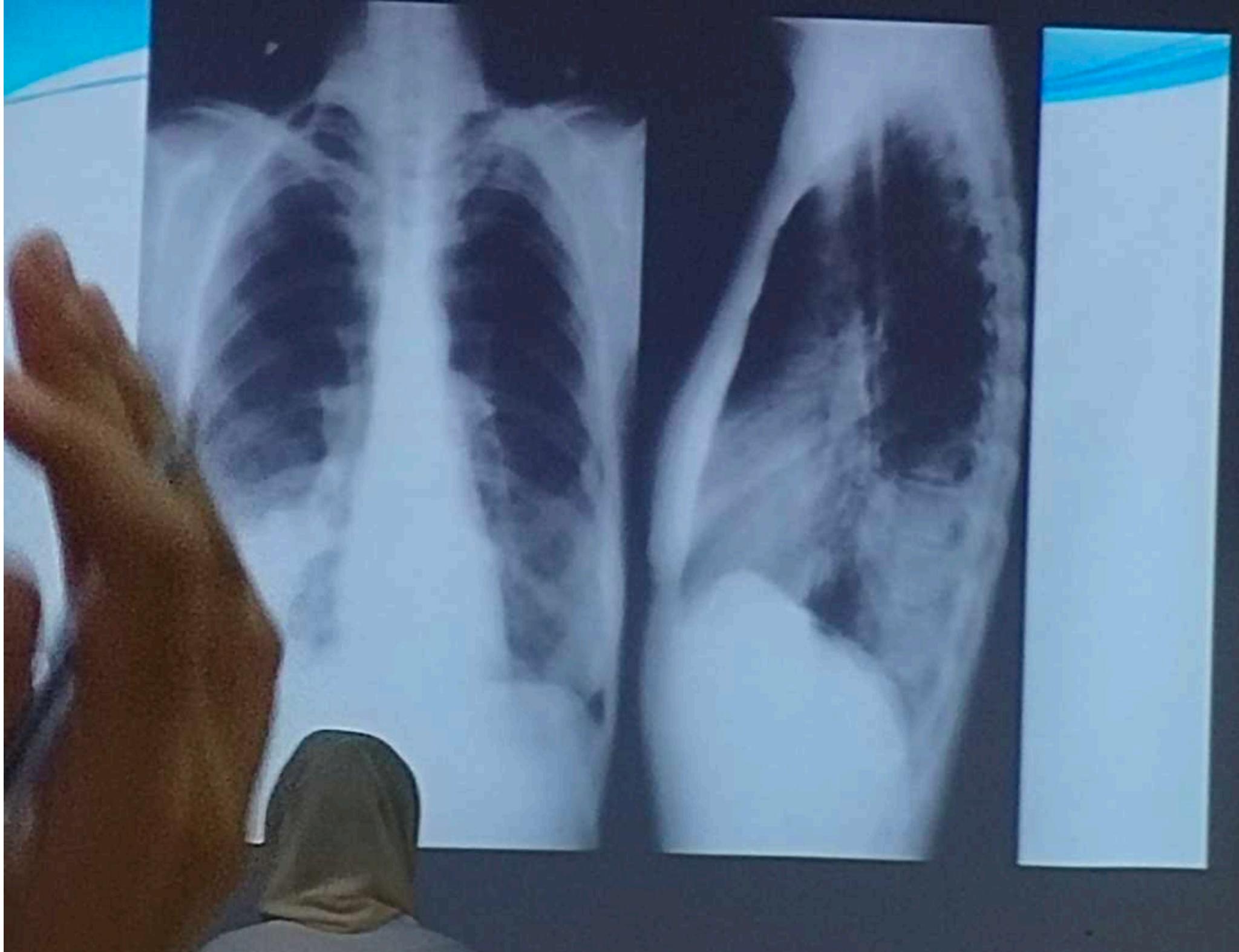
- Acute Sudden (seconds)

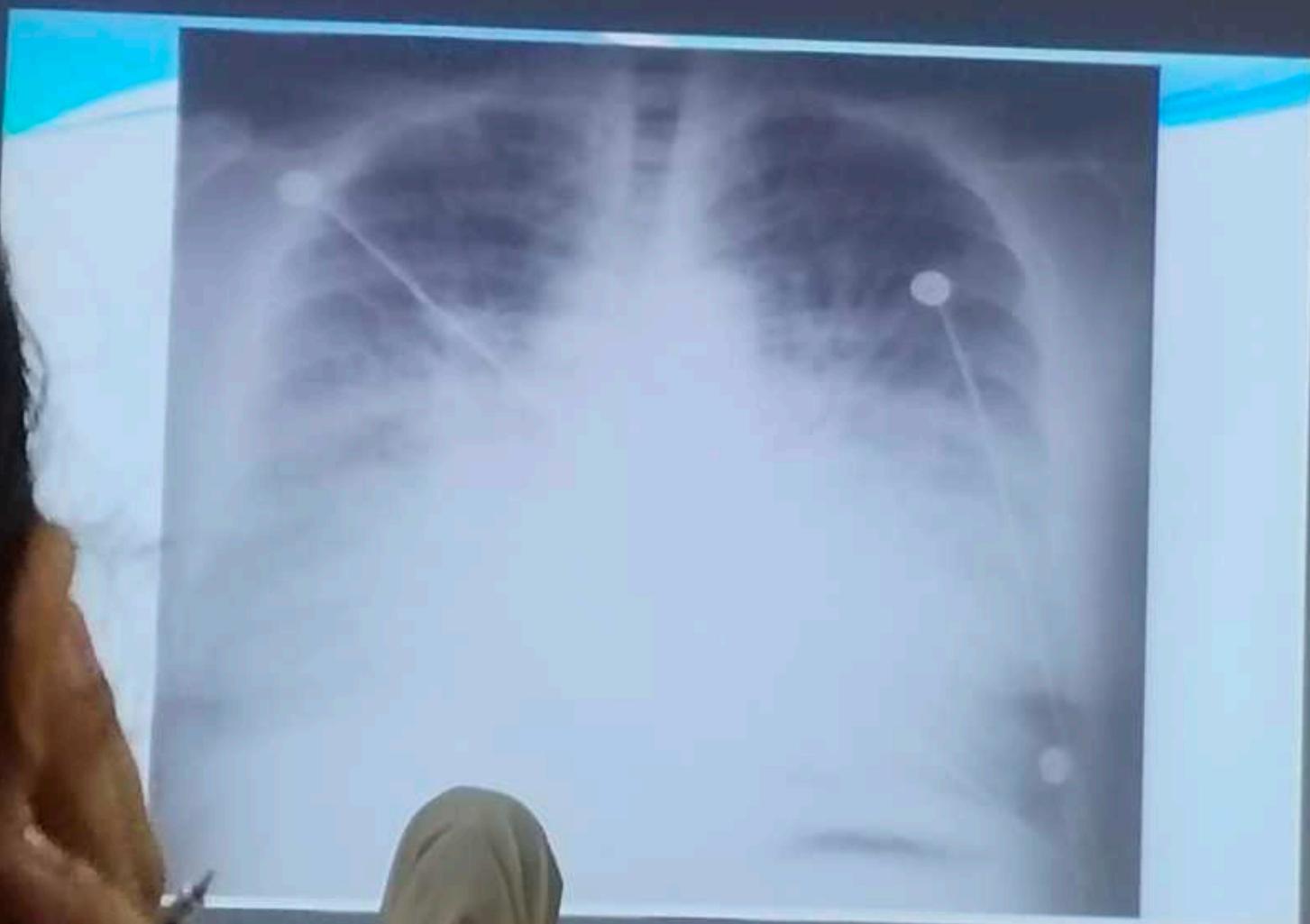
- Pneumothorax (Male, COPD, or Tall, thin)
- Pulmonary embolism (Female, Pills)

Signs and Symptoms of Respiratory Diseases

- **Sub acute Dyspnea** (hours to days)

- Bronchial asthma
- Pneumonia
- Massive pleural effusion
- Pulmonary edema (LVF, MS)





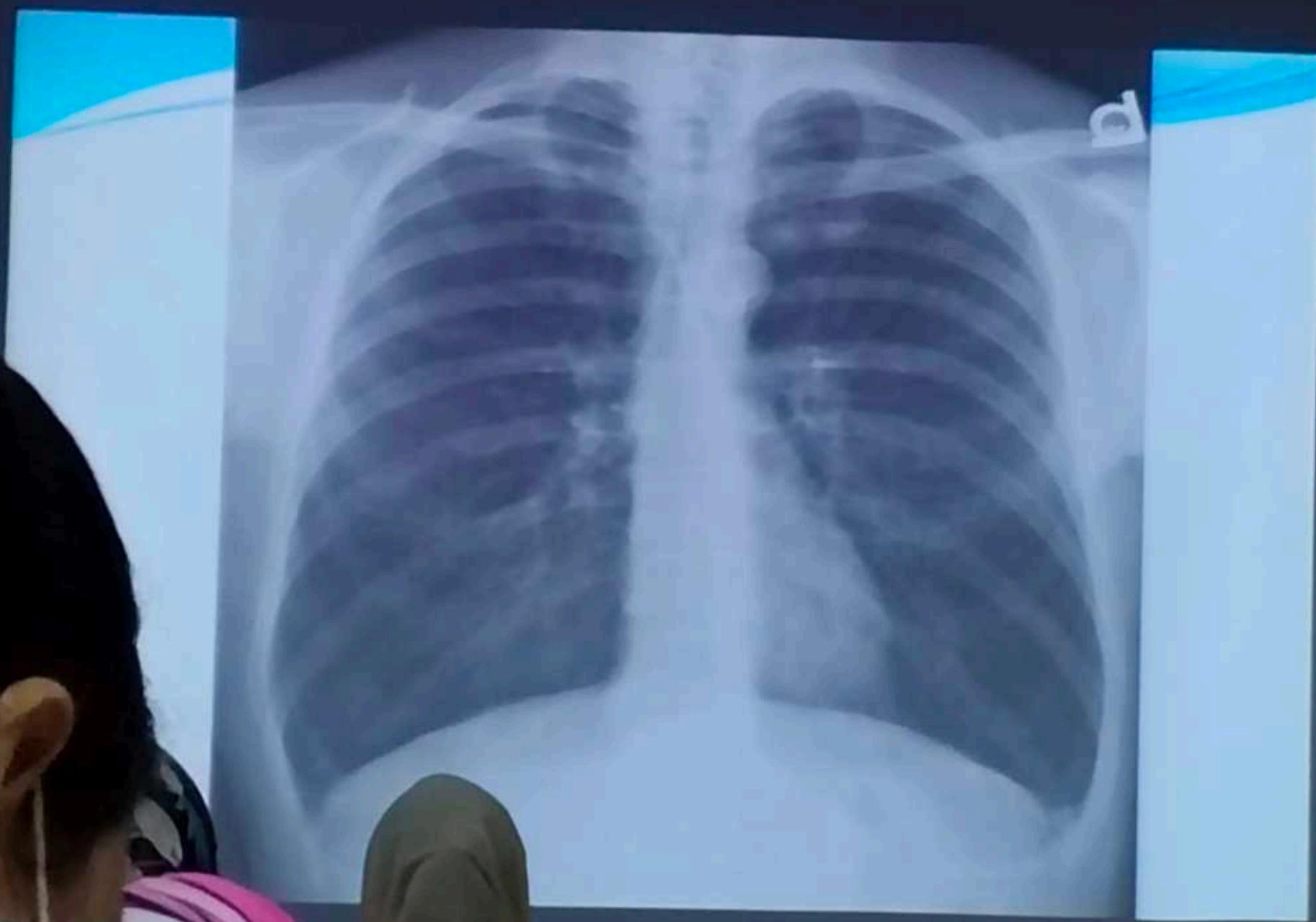
A person with long dark hair, wearing a pink top, is visible on the left side of the frame, looking towards the X-ray image. Another person with light-colored hair, wearing a grey top, is also visible, looking at the same image. The background is a dark room, suggesting a medical or educational setting.

Signs and Symptoms of Respiratory Diseases

- **Chronic dyspnea** (months to Years)

- Chronic bronchitis
- Emphysema
- Pulmonary fibrosis
- Chronic thromboembolism

d



Signs and Symptoms of Respiratory Disease

■ Hemoptysis

- Massive >200 ml/episode
- Frank (fresh, bright red, no sputum)
- Causes
 - Lung cancer
 - Tuberculosis, Bronchiectasis
 - Pulmonary infarction
 - Pneumonia
 - A/V malformation

Wheeze

Musical, high pitched ,whisteling sounds, continuous

- air flow limitation
- infection, atopy, physical obstruction

☞ Expiratory

☞ Pan inspiratory

☞ Mono phonic

Polyphonic

Signs and Symptoms of Respiratory Diseases

■ Wheezes (Rhonchi)

- Bronchial asthma
- COPD
- Pulmonary embolism
- Lung cancer
- Bronchiectasis
- LVF - cardiac asthma

Signs and Symptoms of Respiratory Disease

■ Chest pain (pleuritic)

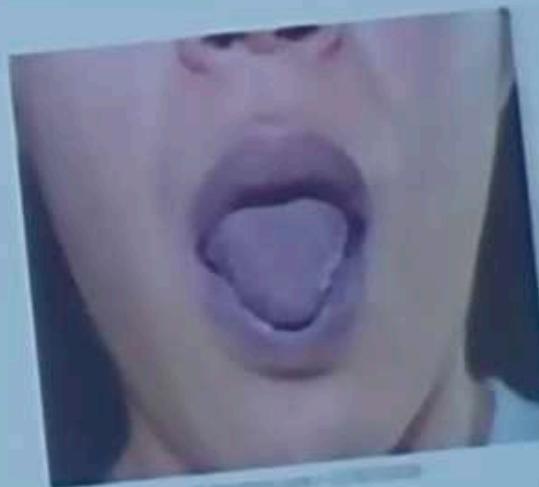
Unilateral chest pain increasing on respiration

- Pulmonary infarction
- Pneumonia
- Acute pleurisy
- Angina pectoris

Signs and Symptoms of Respiratory Diseases

- Central Cyanosis

- COPD, Asthma
- Pulmonary fibrosis
- Pneumonia, PE
- A/V malformation
- Cardiac Rt to Lt shunts



- Peripheral cyanosis

- Cold weather
- Low COP



Signs and Symptoms of Respiratory Diseases

■ Clubbing of the fingers and toes

- Bronchiectasis
- Ca lung
- Lung abscess
- Pulmonary fibrosis
- Asbestosis
- Cystic fibrosis



Signs and Symptoms of Respiratory Diseases

Hands examination

- Hypertrophic pulmonary osteoarthropathy Ca Lung
- Rheumatoid hand
 - Rheumatoid arthritis
- Tremors
 - Fine
 - Flapping



B2 agonist
CO₂ retention



Signs and Symptoms of Respiratory Diseases

Face

- Horner's syndrome
 - Ptosis
 - Enophthalmos
 - Miosis
 - Anhydrosis
- Malar rash



Signs and Symptoms of Respiratory Diseases

- Head and Neck
- JVP
 - CHF (Pulsatile)
 - SVO (Non pulsatile)

