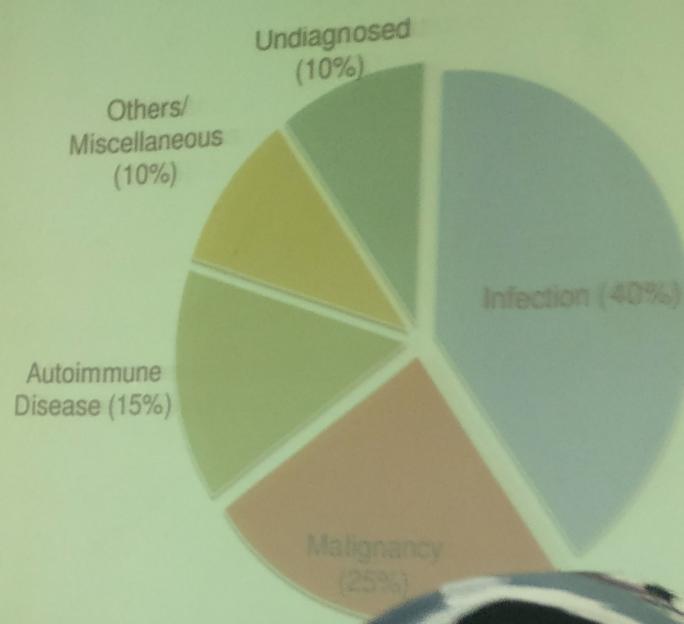


Learning objectives

- Define P.U.O.
- Enumerate causes/etiology of P.U.O.
- Describe investigations and management plan of P.U.O.





1. NEOPLASMS

- a. Lymphoma, leukaemia
- b. Solid tumours
- c. Primary – renal, lung, atrial myxoma, large bowel, pancreas, liver
- d. Secondary – metastatic disease (including melanoma, sarcoma)

2. INFECTIONS

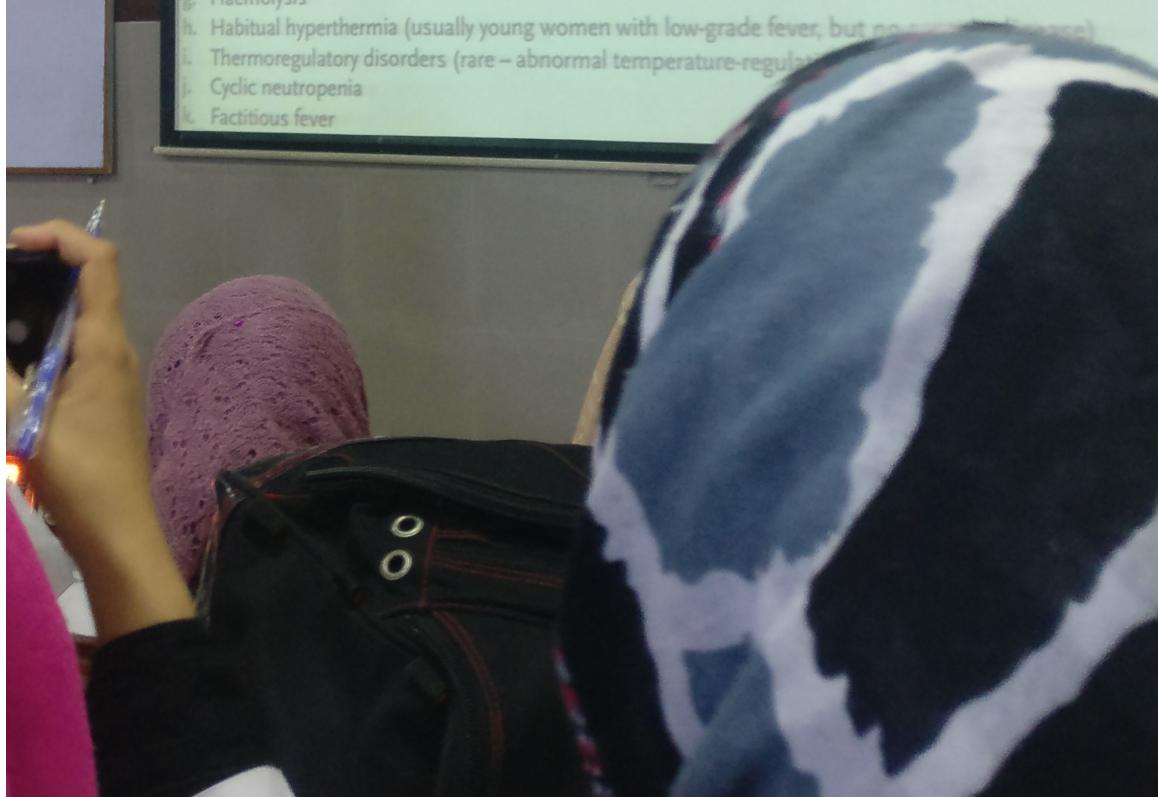
- a. Bacterial – tuberculosis, atypical mycobacteria, abscess (e.g. pelvic, abdominal, dental), brucellosis, endocarditis, pericarditis, osteomyelitis, cholangitis, pyelonephritis, leptospirosis
- b. Viral, rickettsial and chlamydial – hepatitis, HIV, cytomegalovirus, Q fever, psittacosis
- c. Parasitic – malaria, amoebiasis, trichinosis, toxoplasmosis

3. CONNECTIVE TISSUE DISEASES

- a. Rheumatoid arthritis, systemic lupus, rheumatic fever, adult Still's disease
- b. Vasculitis – polyarteritis nodosa, temporal arteritis, Wegener's granulomatosis

4. MISCELLANEOUS

- a. Drug fever e.g. NSAIDs, antibiotics, phenytoin, quinidine
- b. Inflammatory bowel disease, Whipple's disease
- c. Granulomatous disease – granulomatous hepatitis, sarcoidosis (uncommon)
- d. Multiple pulmonary emboli, intraluminal aortic dissection
- e. Thyroiditis
- f. Haematomas – retroperitoneal space (consider especially if on anticoagulants)
- g. Haemolysis
- h. Habitual hyperthermia (usually young women with low-grade fever, but no cause identified)
- i. Thermoregulatory disorders (rare – abnormal temperature-regulation)
- j. Cyclic neutropenia
- k. Factitious fever



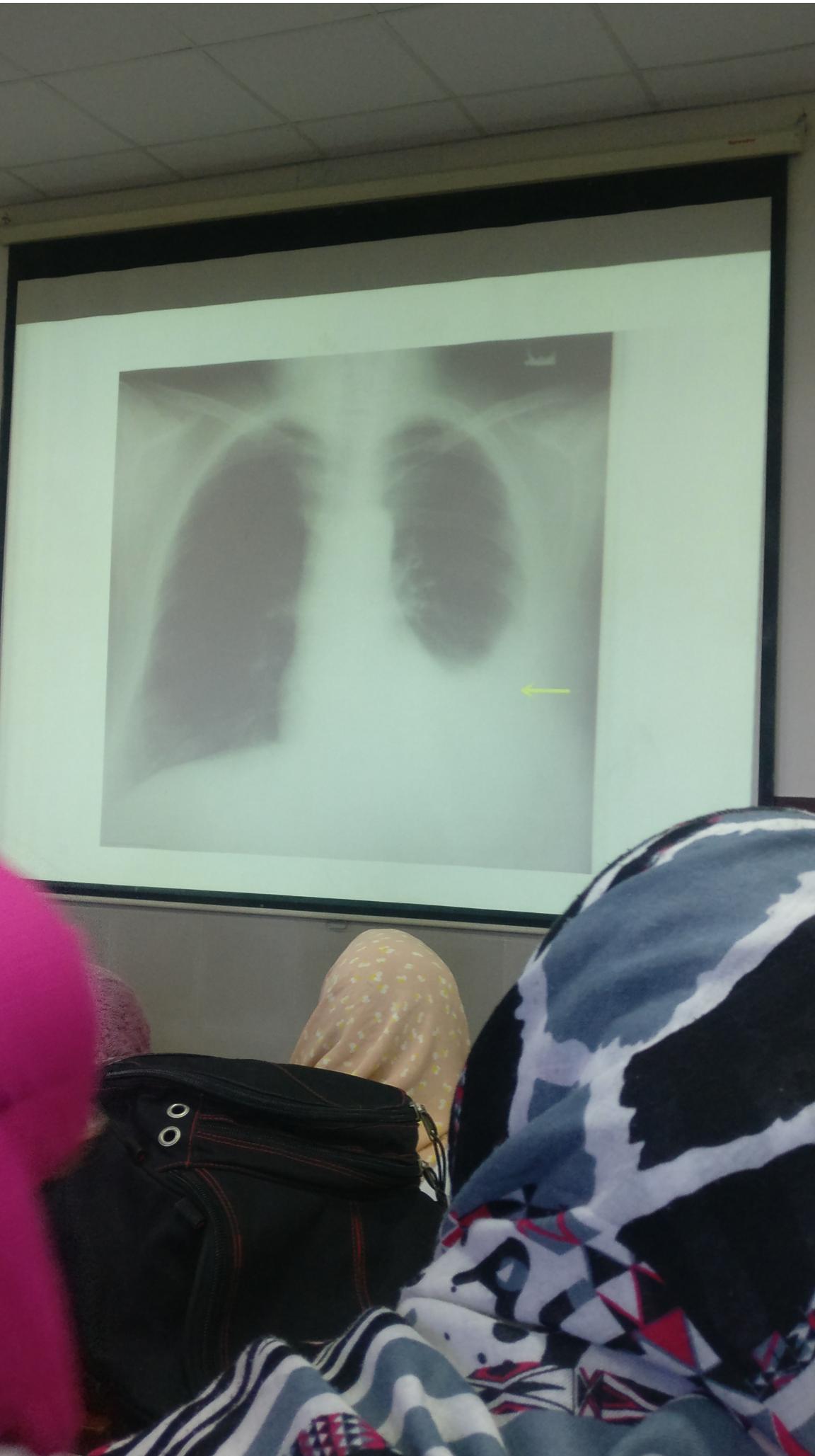
INVESTIGATIONS

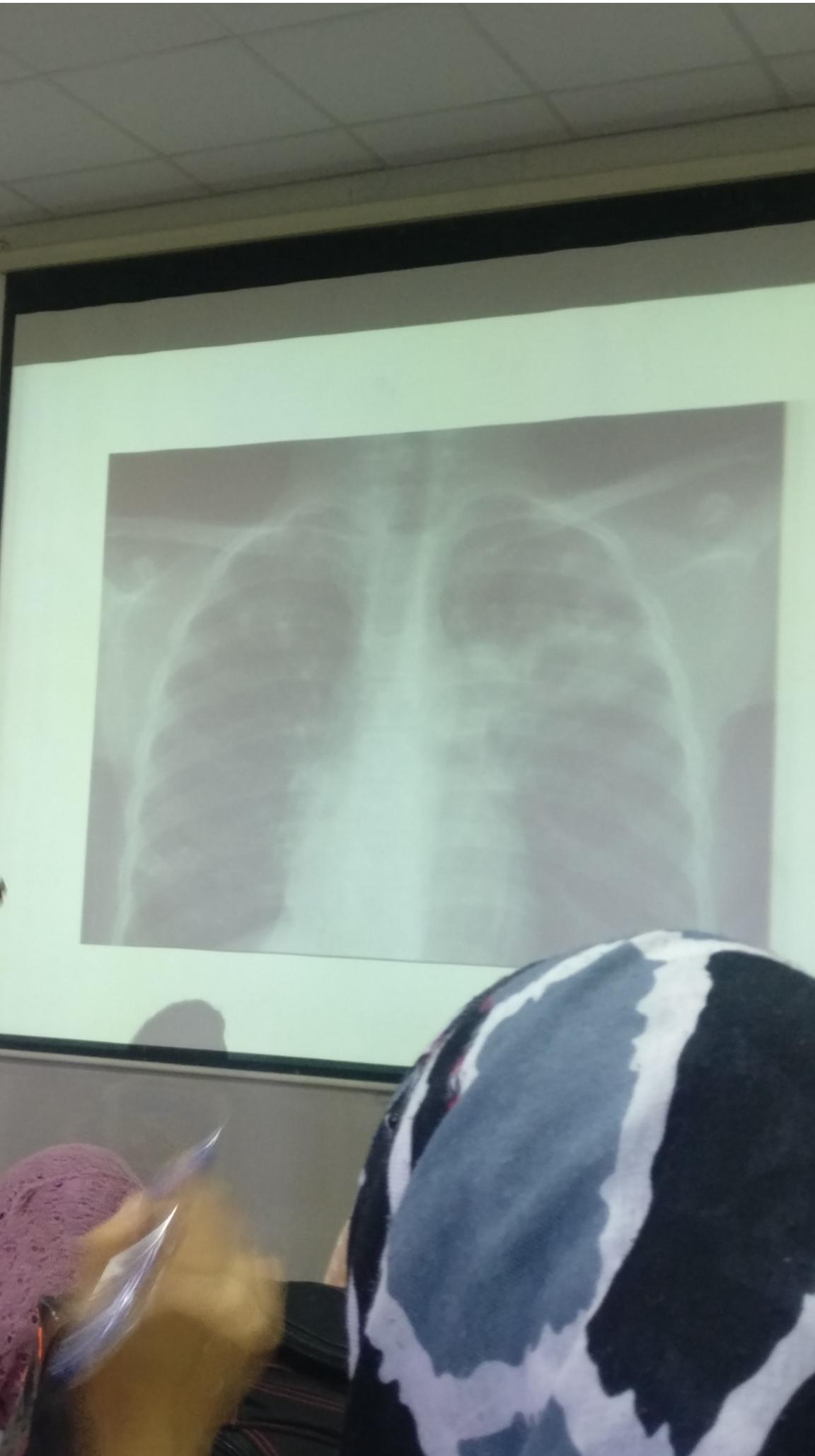
- Complete blood cell (CBC) count with white blood cell (WBC) differential
- Peripheral blood smear
- Complete metabolic panel (electrolytes, glucose, acid base, renal, liver, protein status)
- Erythrocyte sedimentation rate (ESR)
- Urinalysis
- Blood cultures
- HIV serology
- Tuberculosis screening tests (Mantoux test) or interferon gamma release assay (IGRA)

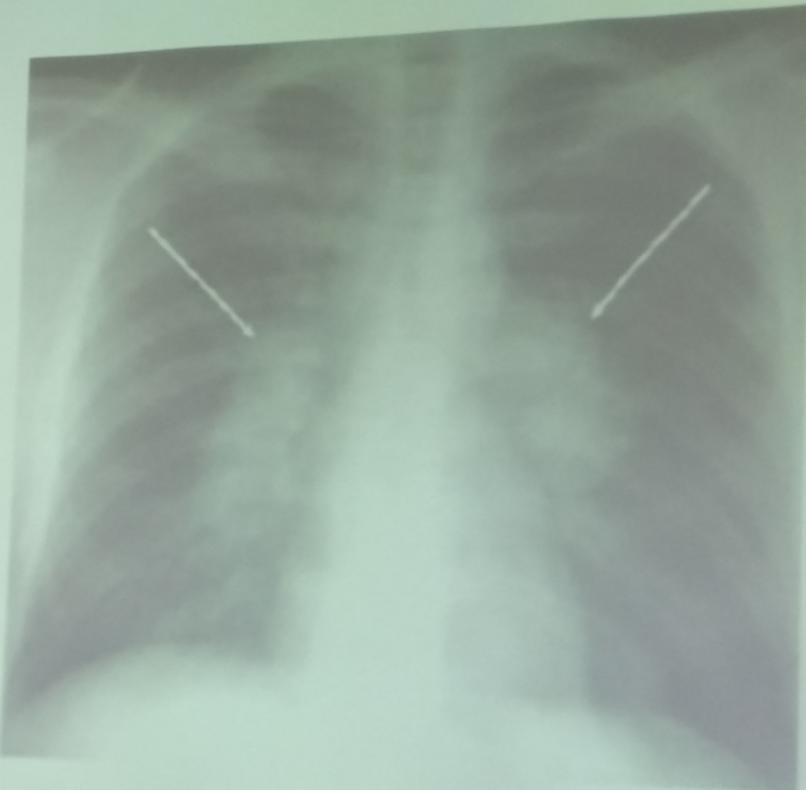
Imaging Studies

- Chest radiography
- Thoracic CT
- Echocardiography
- CT scanning of the abdomen and pelvis
- PET/CT whole-body scanning
- Radionucleotide studies
- Bone scanning

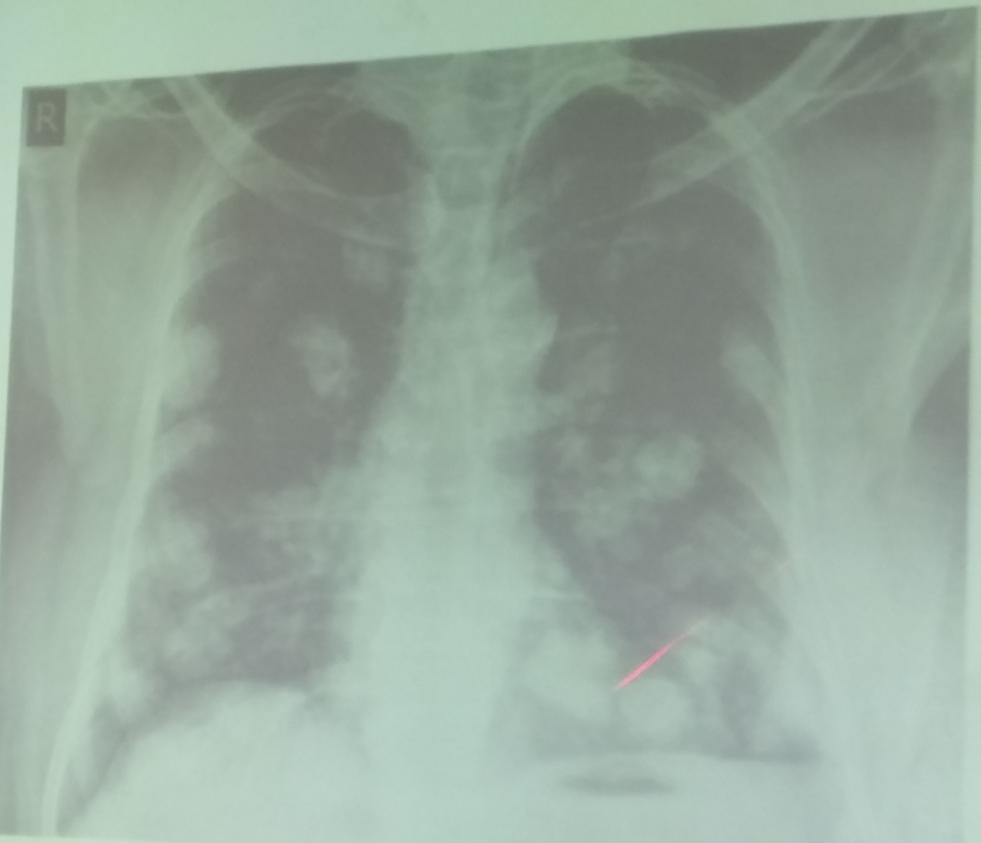




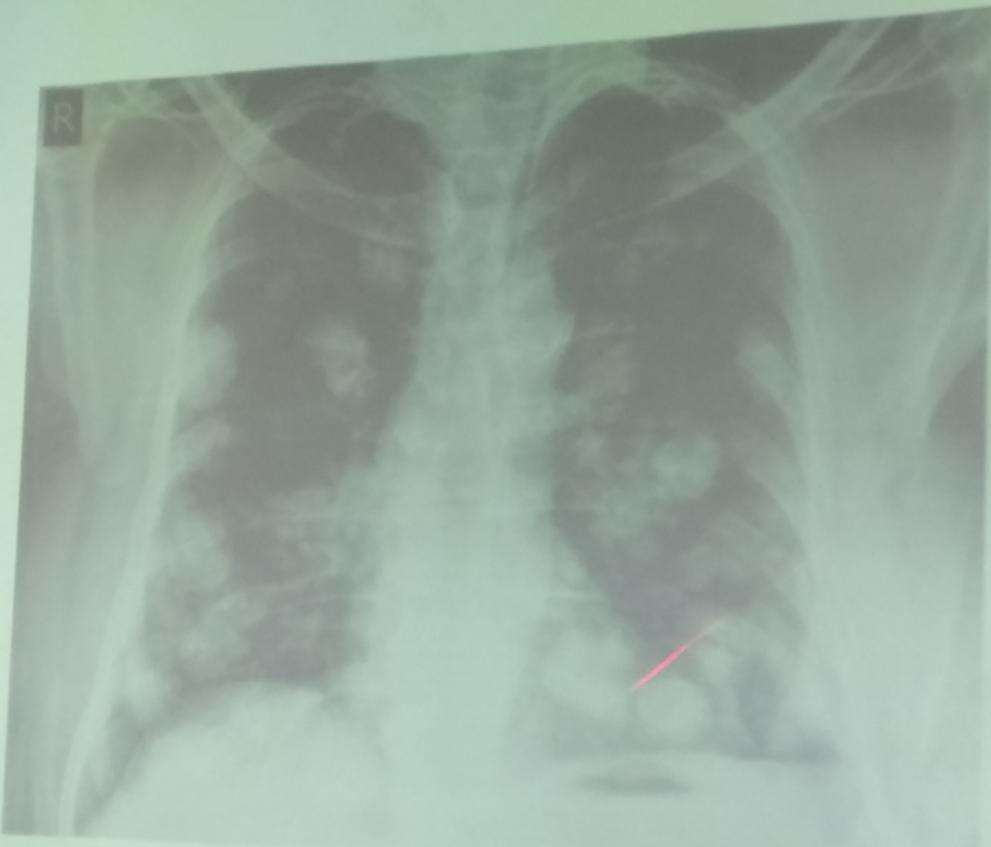


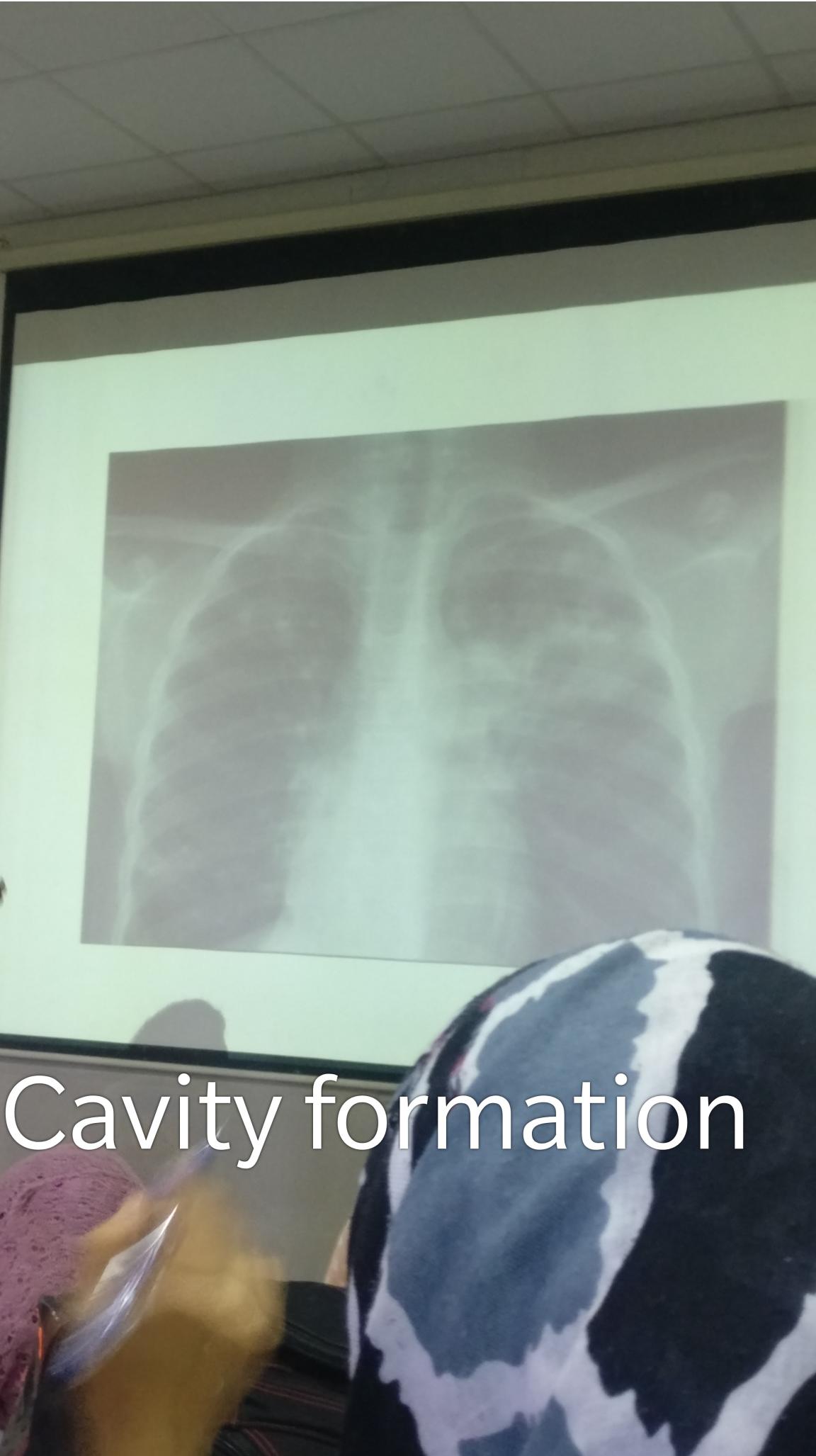


Bilateral hilar lymphadenopathy

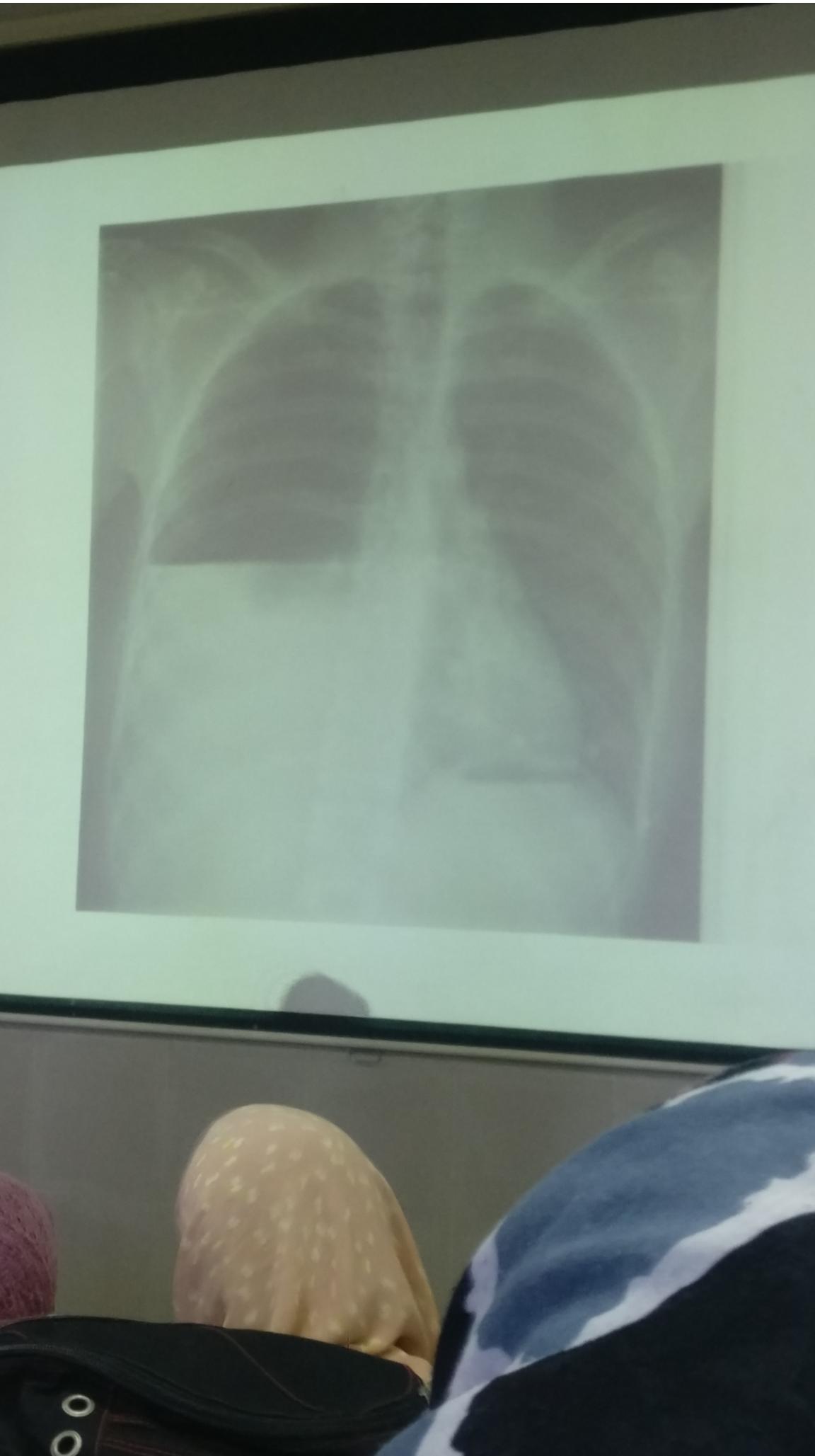


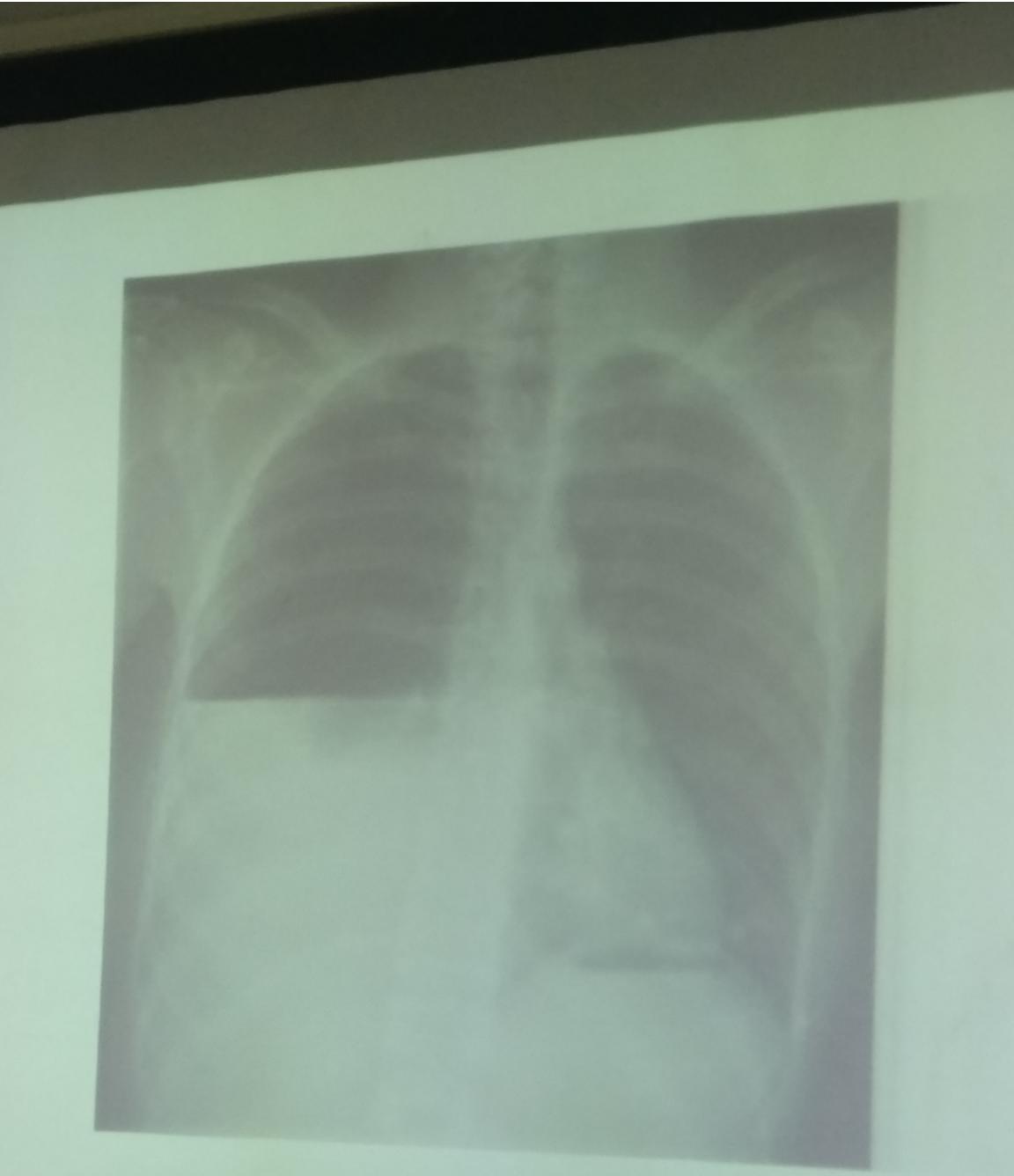
Canon balls



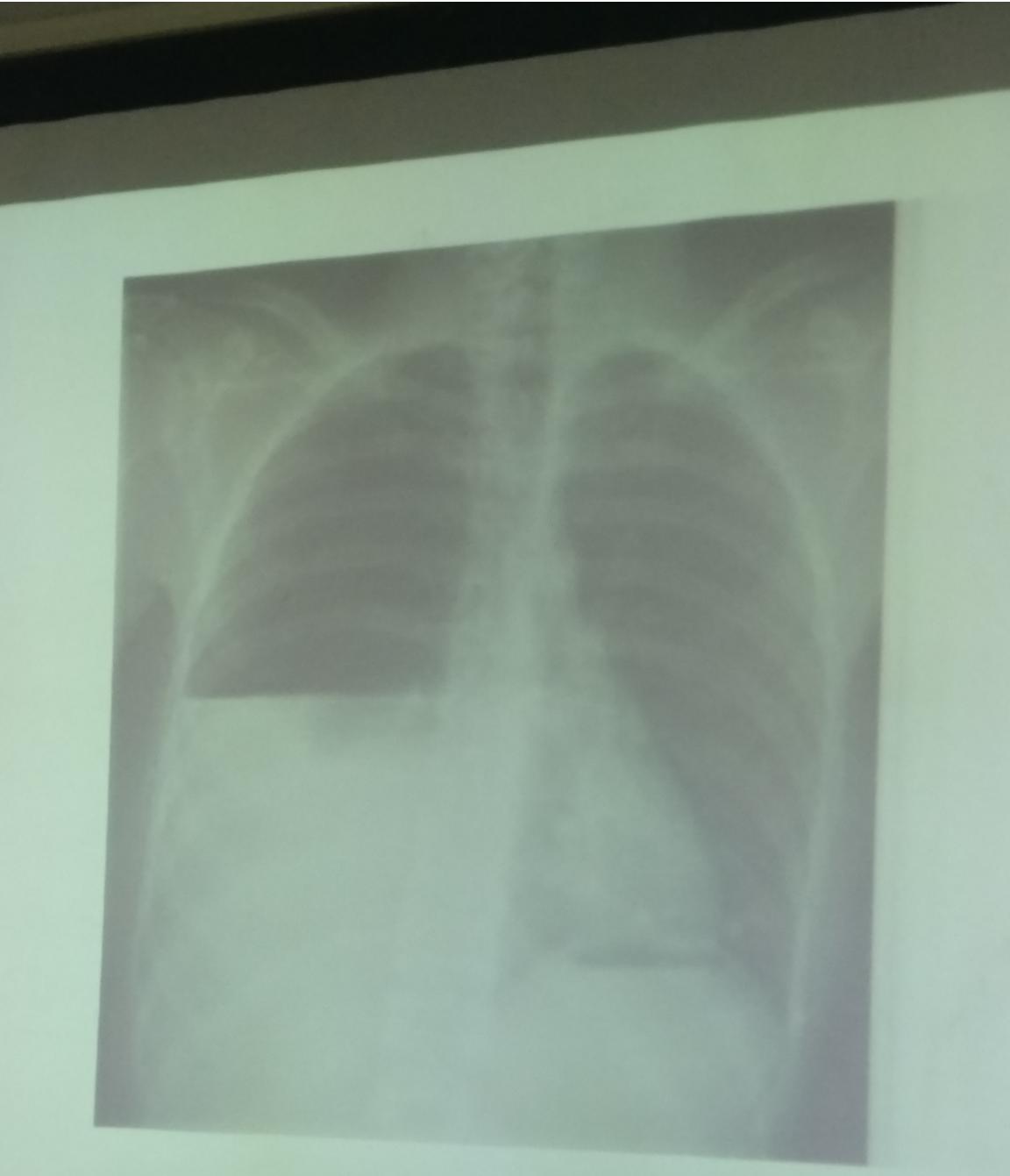


Cavity formation





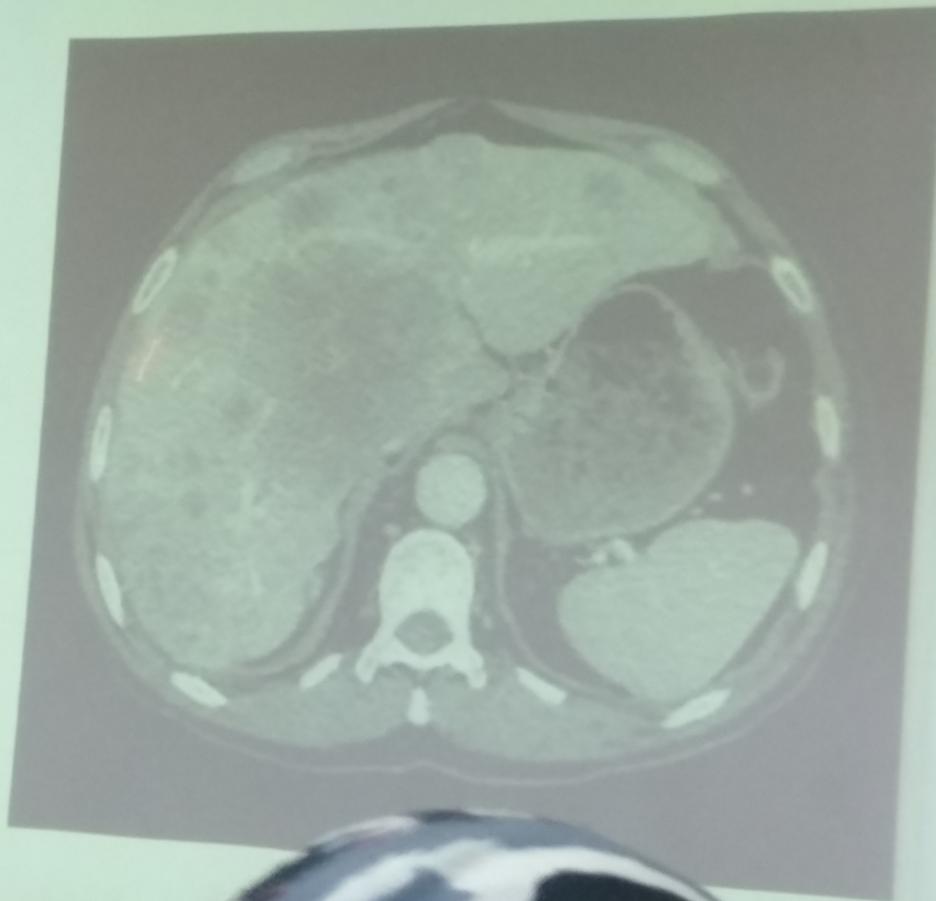
Hydropneumothorax



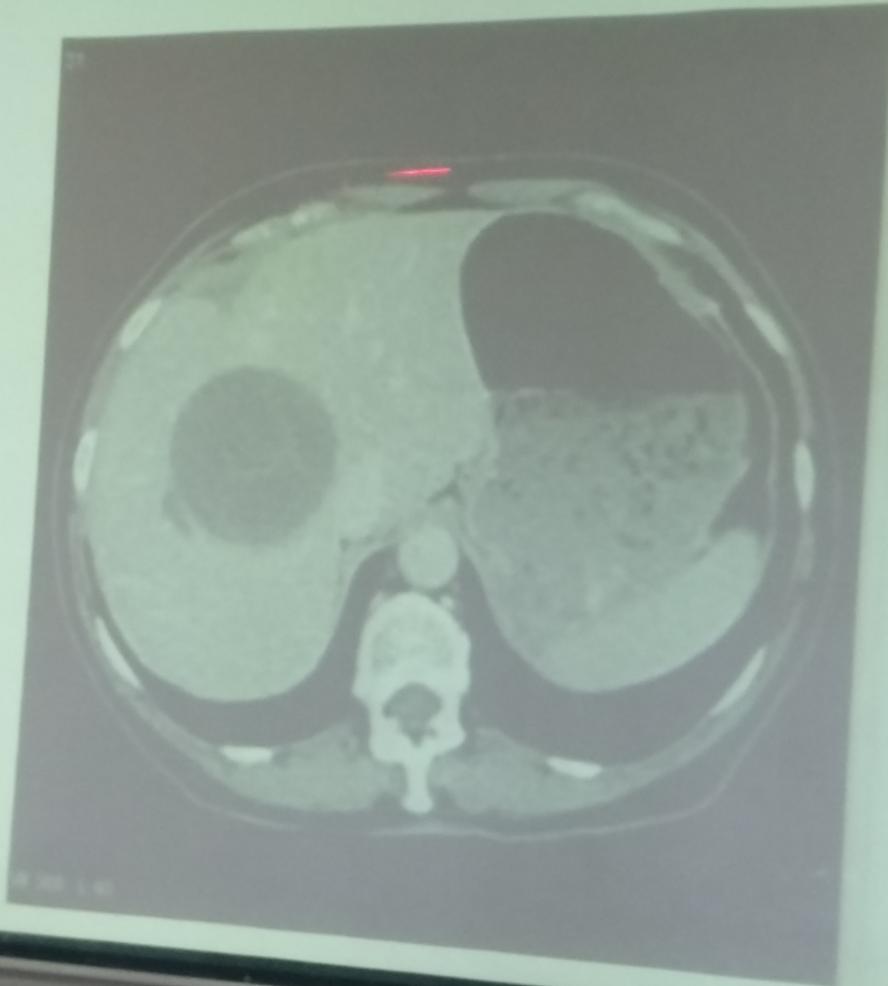
Loss of lung markings
Hydropneumothorax

Water below and air above.

Mets Liver

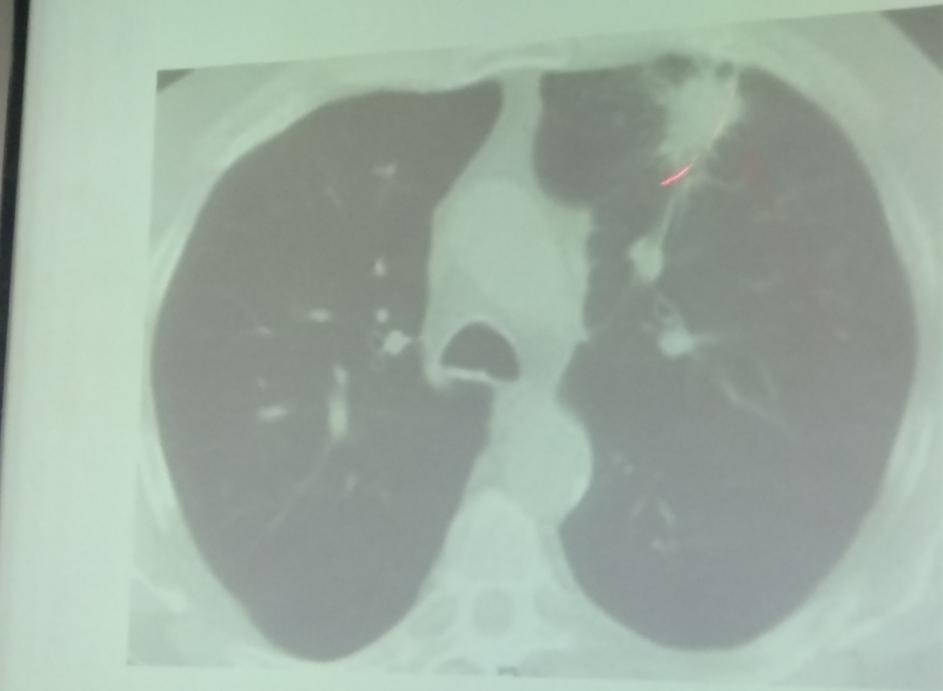


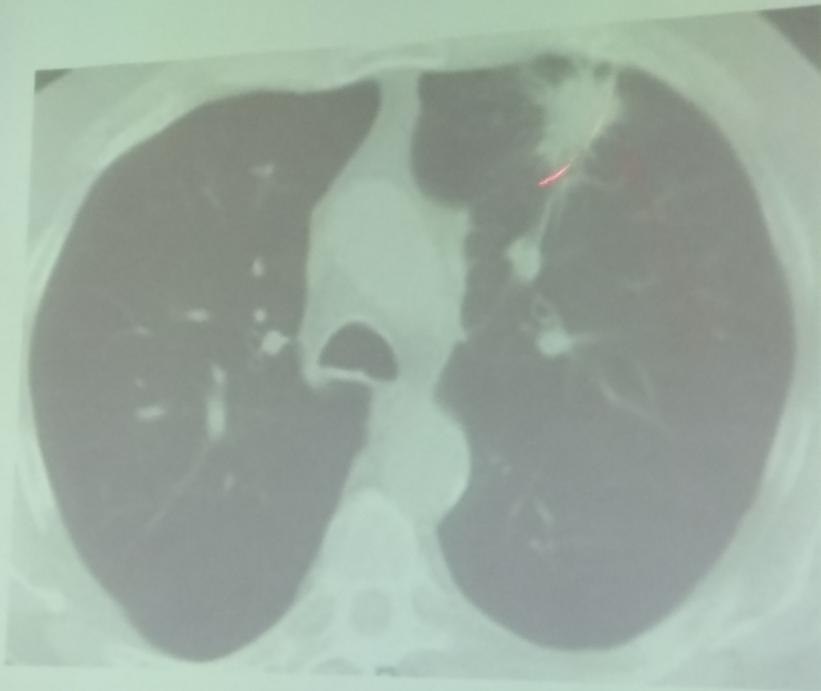
Liver Abcess



Hydatid Cyst

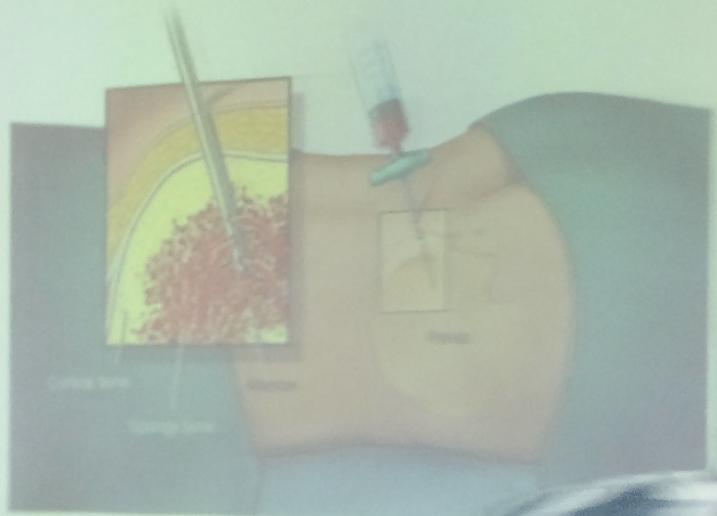




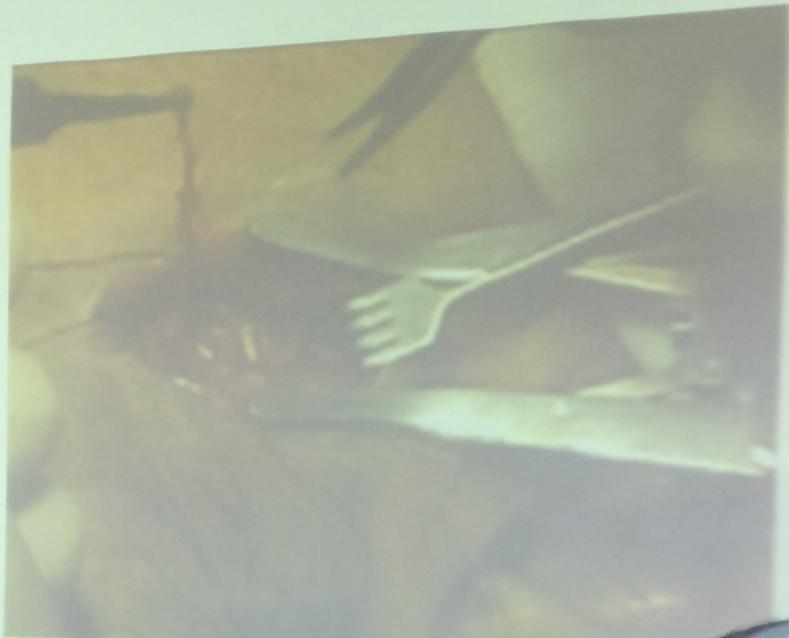


CA lung

Bone marrow biopsy



Arterial biopsy



Management

- Treatment should be directed toward the underlying cause, as needed, once a diagnosis is made.
- Surgery , Chemotherapy, Radiotherapy
- Antibiotics
- Immune modulation

