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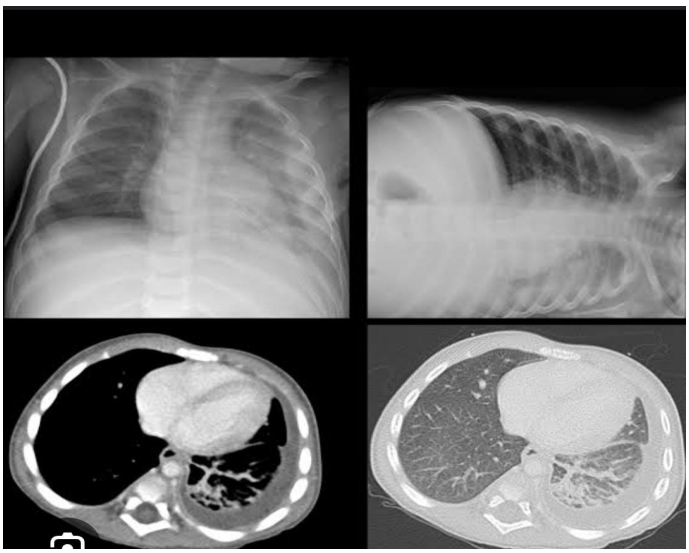
STATION 1 

Chest X ray of a 6 year old who has has history of low grade fever and weight loss for last three months .

POST TUBERCULOUS PLEURAL EFFUSION

Q-1 what are the x ray findings?
-Blunting of costophrenic angle\MENISCUS SIGN
-pleural thickening
-calcified pleural plaques
-fibrotic bands or atelectasis
-mediastinal shift in severe cases

Q-2 what investigations will you do ?
CT SCAN \ULTRASOUND OF CHEST
THORACOCENTESIS
PFTS

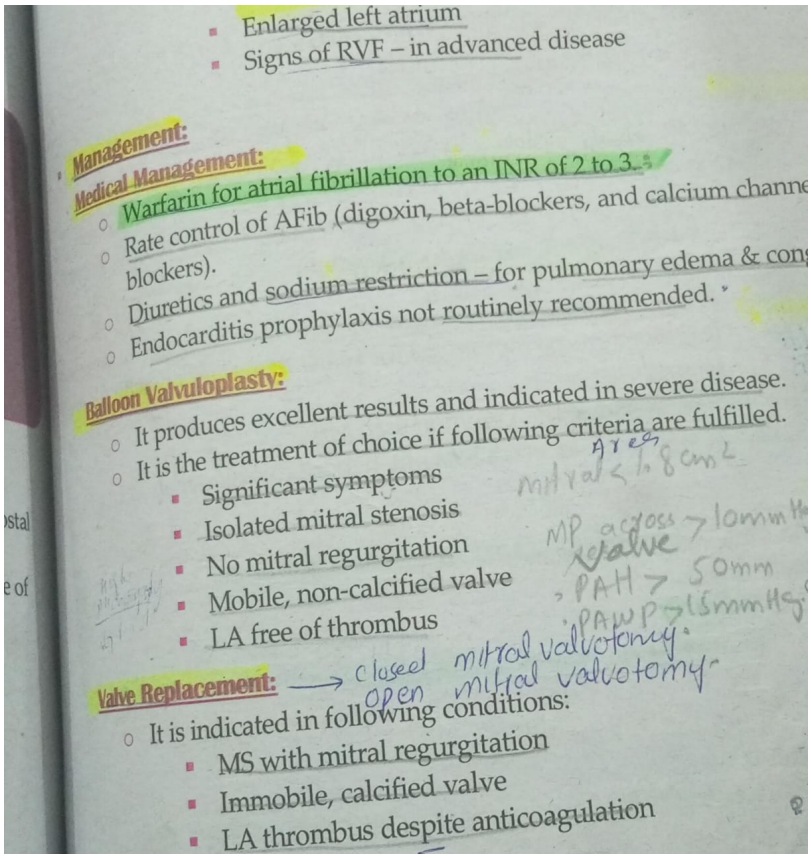
Q-3what is the treatment?
-Treat the underlying cause
-ATT
-Anti inflammatory NSAIDS AND STEROIDS
-Diuretics if having cardiac or renal condition
-INTERVENTION-thoracocentesis,chest tube drainage,intra pleural inj of thrombolytics
-RECURRENT-pleurodesis
-REHABILITATION

STATION 2

INTERACTIVE STATION

Pulmonary artery wedge pressure = 30 mm hg
Left ventricular pressure = 5 mm hg

1) Diagnosis MITRAL STENOSIS
2) Treatment



- Enlarged left atrium
- Signs of RVF – in advanced disease

Management:

Medical Management:

- Warfarin for atrial fibrillation to an INR of 2 to 3.
- Rate control of AFib (digoxin, beta-blockers, and calcium channe blockers).
- Diuretics and sodium restriction – for pulmonary edema & cong
- Endocarditis prophylaxis not routinely recommended.

Balloon Valvuloplasty:

- It produces excellent results and indicated in severe disease.
- It is the treatment of choice if following criteria are fulfilled.
  - Significant symptoms
  - Isolated mitral stenosis
  - No mitral regurgitation
  - Mobile, non-calcified valve
  - LA free of thrombus

Valve Replacement: → closed mitral valvotomy, open mitral valvotomy

- It is indicated in following conditions:
  - MS with mitral regurgitation
  - Immobile, calcified valve
  - LA thrombus despite anticoagulation

STATION 3

SPLINTER HEMORRHAGE 

1) Write two signs shown in picture
   Splinter hemorrhage
   Clubbing
   Beaus lines

2) Write two causes
   INFECTIVE ENDOCARDITIS
   SLE
   VASCULITIS
   TRAUMA OR INJURY

STATION 4

Patient presented with sob and chest pain since last one hour . ECG shows ST elevation in lead 2,3 and aVF .

1) What is ur diagnosis?
   MYCORDIAL INFARCTION
2) How will u manage this patient ?
   Treatment of Myocardial Infarction (MI) – Bullet Points

   1. Immediate (MONA Protocol)
   ✅ Morphine
   ✅ Oxygen (if SpO_2 <90%)
   ✅ Nitroglycerin (Avoid if hypotensive/RV MI)
   ✅ Aspirin 300 mg

   2. Reperfusion Therapy
   ✅ Primary PCI (Preferred, within 90 min)

✅ Thrombolysis (If PCI unavailable, Alteplase/Tenecteplase/Streptokinase)

3. Antiplatelet & Anticoagulation
   ✅ Aspirin + Clopidogrel/Ticagrelor (DAPT)
✅ Heparin/Enoxaparin

4. Additional Medications
   ✅ Beta-Blockers
✅ ACE Inhibitors
✅ Statins

5. Monitoring & Long-Term Care
   ✅ ECG, Troponins, Echo
✅ BP & Glucose Control
✅ Lifestyle Changes & Cardiac Rehab

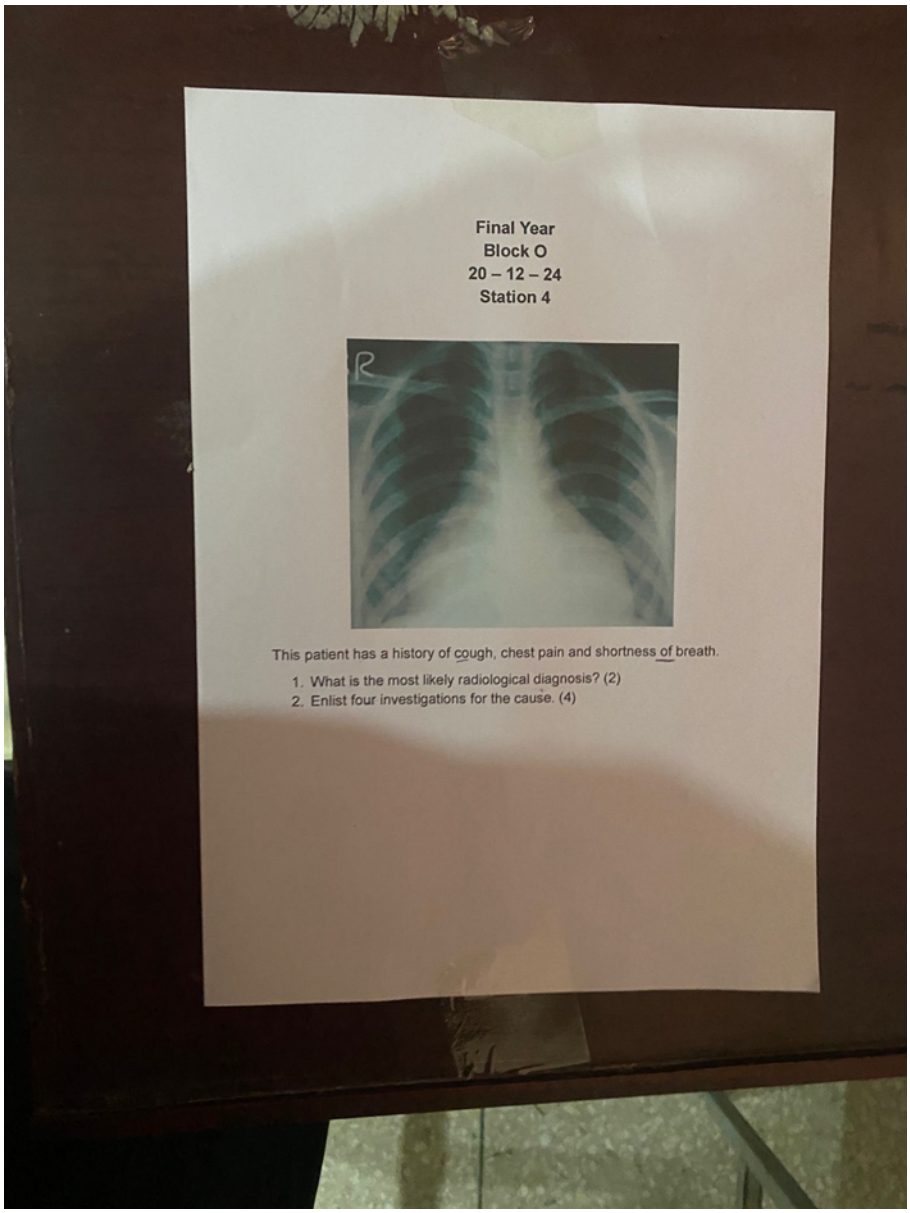
STATION 5

ECG of ACUTE PERICARDITIS [SCENARIO WITH INFECTION]

1) Write diagnosis
   acute pericarditis
2) What will be the management ?
   ✅ Rest & activity restriction
   ✅ NSAIDs – Ibuprofen/Aspirin
   ✅ Colchicine
   ✅ Corticosteroids (if refractory/autoimmune)
   ✅ Antibiotics (if infectious cause)
   ✅ Pericardiocentesis (if large effusion/tamponade)
   ✅ Pericardiectomy (if recurrent constriction)
3) Write investigations?
   ✅ ECG – ST elevation, PR depression
   ✅ Echocardiography – Effusion, tamponade
   ✅ Chest X-ray – Enlarged cardiac silhouette (if effusion)
   ✅ Cardiac MRI/CT – Inflammation, constriction
   ✅ Troponins – To assess myocarditis involvement
   ✅ CBC, ESR, CRP – Inflammatory markers
   ✅ Blood Cultures – If infectious cause suspected
   ✅ Autoimmune Panel – ANA, RF (if autoimmune suspected)
   ✅ TB Testing – Mantoux, IGRA, sputum AFB (if TB suspected)

STATION 6

X-ray of PLEURAL EFFUSION



1. Causes
✅ Transudative: CHF, nephrotic syndrome, cirrhosis
✅ Exudative: TB, pneumonia, malignancy, PE, pancreatitis

2. Symptoms
✅ Dyspnea, chest pain, cough

3. Investigations
✅ Chest X-ray – Blunted costophrenic angle
✅ USG Thorax – Detects small effusions
✅ CT Chest – Identifies cause
✅ Thoracentesis – Fluid analysis (protein, LDH, glucose, pH, cytology)

4. Management
✅ Treat underlying cause

✅ Thoracentesis – Symptomatic relief
✅ Chest tube drainage – If large/empyema
✅ Pleurodesis – Recurrent effusions
✅ Decortication – Fibrothorax/constricted lung

STATION 7
MITRAL REGURGITATION

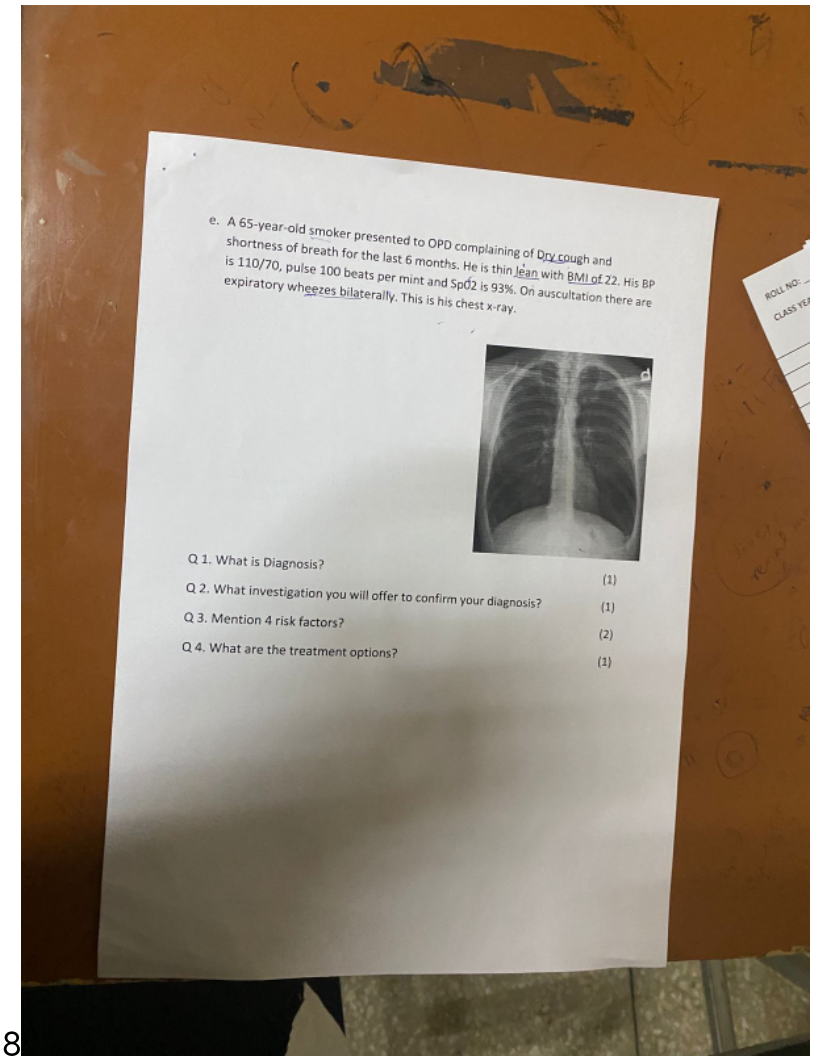
1. Causes
✅ Acute: Endocarditis, papillary muscle rupture, chordae rupture
✅ Chronic: MVP, rheumatic heart disease, cardiomyopathy

2. Symptoms
✅ Dyspnea, fatigue, palpitations, orthopnea

3. Signs
✅ Pan-systolic murmur (Apex, radiates to axilla)
✅ S3 gallop (if severe)
wide splitting of S2

4. Investigations
✅ Echocardiography – Confirms diagnosis, severity
✅ ECG – LA enlargement, AF(p mitrale)
✅ Chest X-ray – Pulmonary congestion, cardiomegaly
Cardiac catheterization[most accurate]

5. Management
✅ Medical: Diuretics, ACE inhibitors, beta-blockers
✅ Surgical: Valve repair/replacement (if severe)
Ejection fraction less than 60%
LVSED is greater than 40mm of Hg



STATION 8
INTERACTIVE STATION ABOUT PNEUMOTHORAX
1. Types
✅ Spontaneous: Primary (no lung disease), Secondary (COPD, TB, lung disease)
✅ Traumatic: Injury-related (rib fracture, stab wound)
✅ Tension: Life-threatening, mediastinal shift

Other classification
spontaneous, traumatic, iatrogenic, and tension
open nd closed pneumothorax

2. Symptoms
✅ Sudden dyspnea, pleuritic chest pain

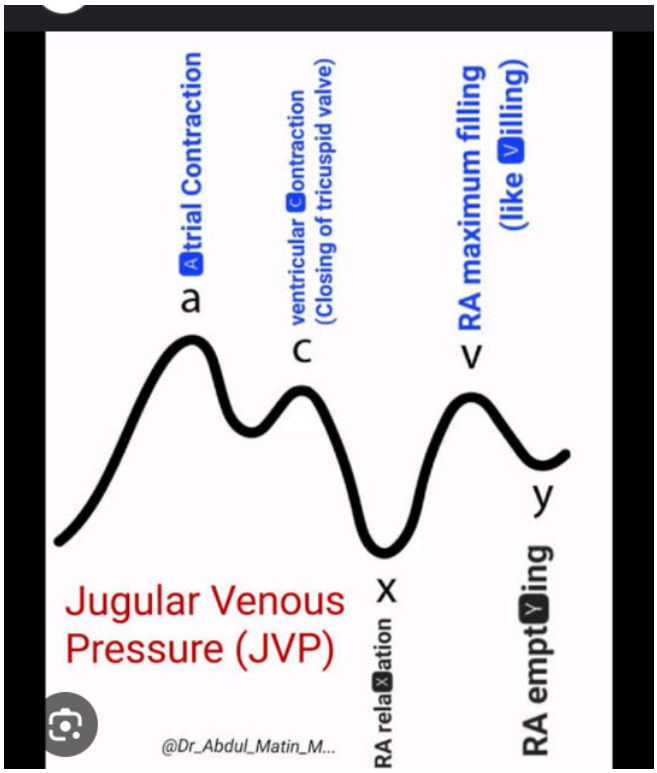
3. Signs
✅ Decreased breath sounds, hyperresonance, tracheal deviation (if tension)

4. Investigations
✅ Chest X-ray – Visible pleural line, no lung markings,deep sulcus sign
✅ CT Chest – If unclear or small pneumothorax

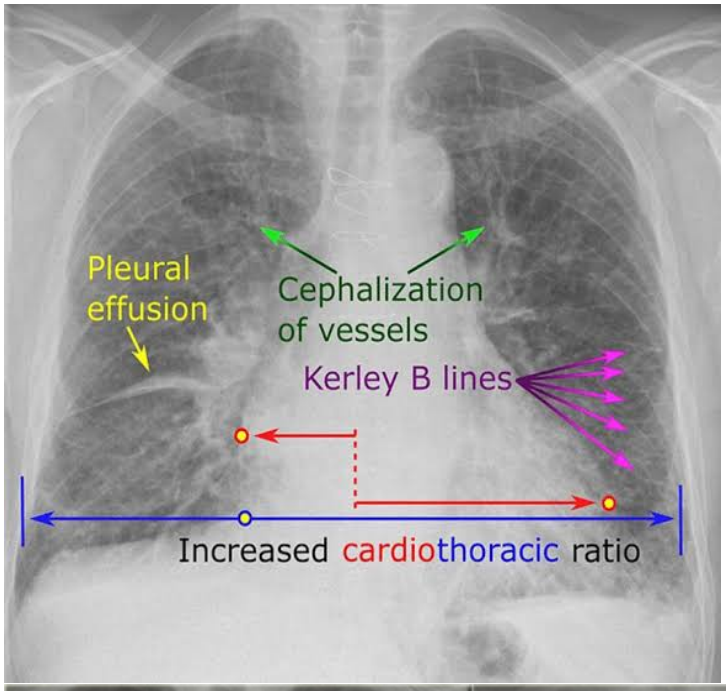
5. Management
✅ Small & stable: Observation, oxygen therapy
✅ Large or symptomatic: Needle aspiration, chest tube drainage(5th ICS anterior axillary line)
✅ Tension pneumothorax: Immediate needle decompression (2nd ICS, midclavicular) followed by chest tube intubation.if persists surgery in 7 days

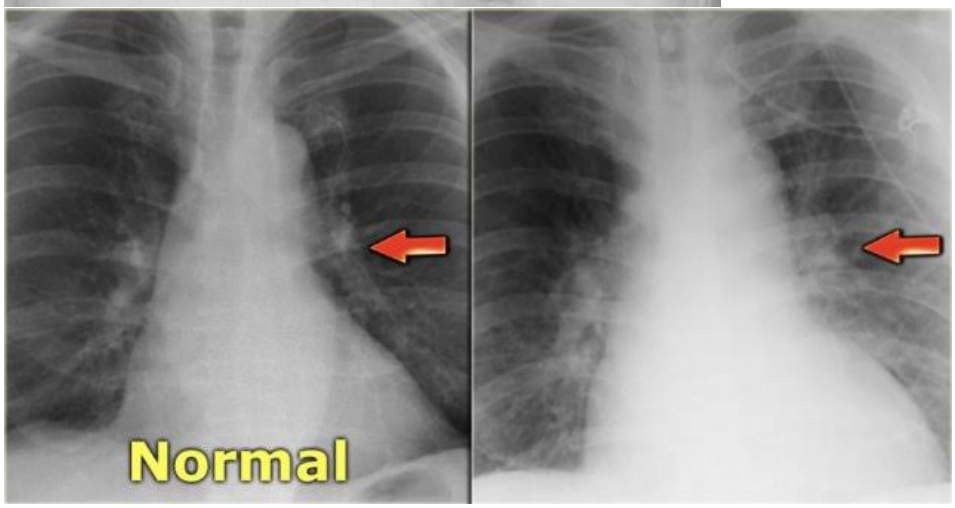
STATION 13

CALCULATE JVP



STATION 14
XRAY OF CCF





CT ratio was increased and there was pleural effusion

1) What are two x ray findings
   Chest X-ray Findings in Congestive Cardiac Failure (CCF)

   Cardiomegaly
   Cardiothoracic ratio >50% (on PA view)

   Pulmonary Congestion
   Upper lobe diversion (cephalization of pulmonary vessels)ANTLER SIGN
   Kerley B lines (interstitial edema)
   Peribronchial cuffing (fluid around bronchi)
   Bat-wing (butterfly) pulmonary edema (bilateral perihilar opacities)

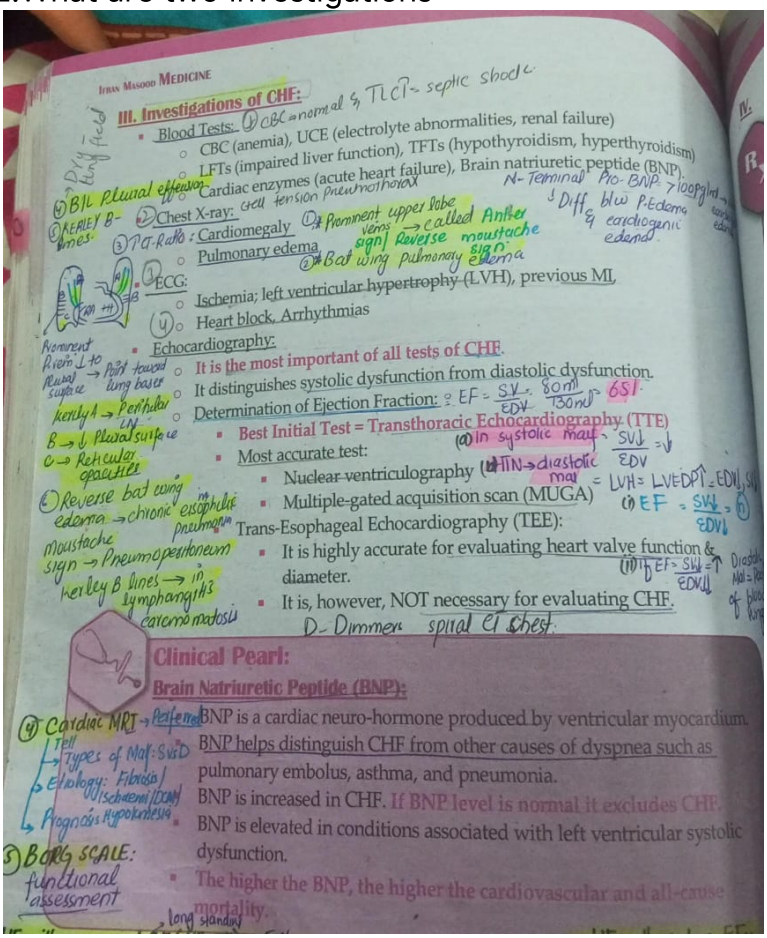
   Pleural Effusion
   Blunting of costophrenic angles (often bilateral)

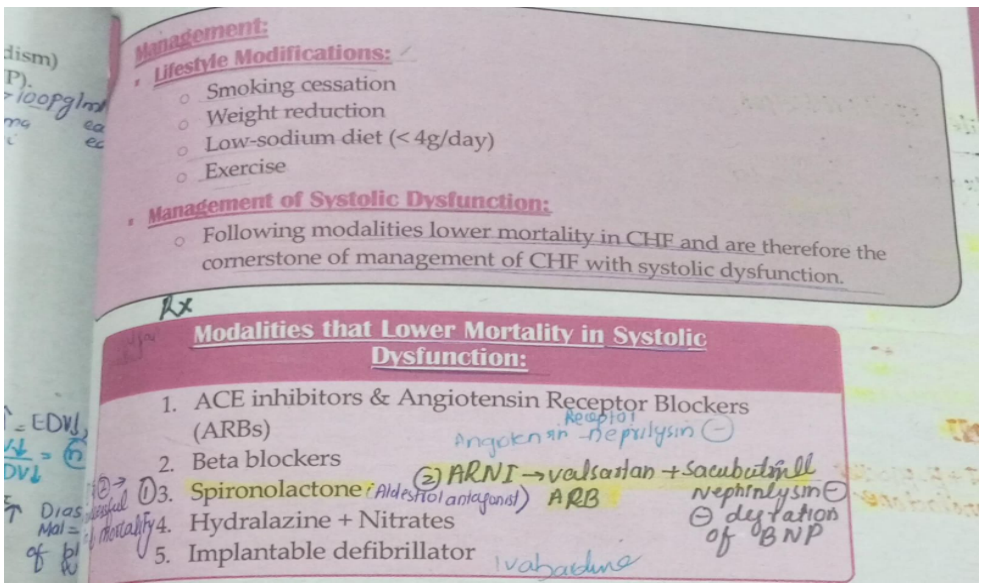
   Pulmonary Edema

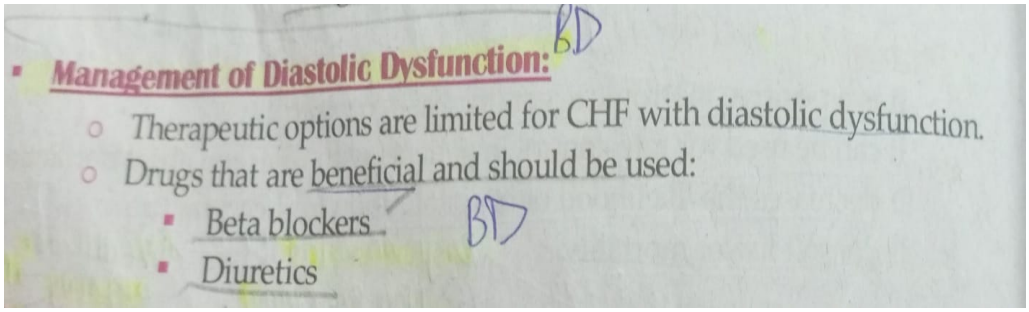
Patchy, fluffy alveolar opacities with air bronchograms

Prominent Pulmonary Arteries
Suggestive of pulmonary hypertension

2.What are two investigations







STATION 15

SVT
Supraventricular Tachycardia (SVT)
1. Causes
✅ AVNRT, AVRT (WPW syndrome), atrial tachycardia
✅ Triggers: Stress, caffeine, alcohol, electrolyte imbalance

2. Symptoms
✅ Palpitations, dizziness, chest discomfort, syncope

3. ECG Findings
✅ Narrow QRS, regular tachycardia (>150 bpm)
✅ No visible P waves or retrograde P waves

4. Management
✅ Stable: Vagal maneuvers → Adenosine 6mg IV → β-blockers/CCB
✅ Unstable: Synchronized cardioversion
✅ Recurrent: Catheter ablation

STATION 16
CROUP
AGE-3 MTH TO 5 YR

CAUSE-PARA INFLUENZA VIRUS

TRIAD
INSPIRATORY STRIDOR ,BARKING COUGH,HORSENESS
LOW GRADE FEVER

DIAGNOSIS-clinical features
X RAY LATERAL VIEW-steeple sign
WBC COUNT NORMAL
MANAGEMENT;
MIST THERAPY
O2
NEBULIZED RACEMIC EPINEPHRINE
DEXAMETHASONE
IF SUSPICIOUS OF BACTERIAL INF THEN ANTIBIOTIC

CONTRAINDICATION;sedative,expectorants,anti histamine,bronchodilator

STATION 17
BRONCHIACTESIS
Cause;cystic fibrosis[m/c],recurrent infection,primary ciliary dyskinesia,autoimmune

CLINICAL FEATURE;chronic cough with large amount of foul smelling mucopurulent sputum
Dyspnea,hemoptysis,clubbing,cyanosis

SIGNS;crepts,ronchi

DIAGNOSIS;
HRCT[signet ring]
PFTS
XRAY[INITIALLY NORMAL THEN TRAM TRACK APPEARANCE]
BRONCHOSCOPY
SPUTUM CULTURE

MANAGEMENT;
ACUTE; Antibiotic
Hydration-hypertonic saline or mannitol
Chest physiotherapy
Bronchodilator
Mucolytics
Vaccination
Gamma globulins