KMU Top 60 Concepts

MOST REPEATED • QUESTION BANK ANALYSIS **KMU - FINAL YEAR MBBS**

ADULT CARDIOLOGY (1-15)

1. STEMI Diagnosis: ST Elevation in >2 contiguous leads. **Leads II, III, aVF = Inferior MI (RCA).** V1-V4 = Anterior MI (LAD).

2. STEMI Mgmt: Primary PCI (Angioplasty) is Gold Standard < 120 mins. If unavailable, Thrombolysis < 30 mins.

3. NSTEMI Rule: **NEVER Thrombolyse NSTEMI.** Treat with LMWH + Dual Antiplatelets.

4. Infective Endocarditis (IE): Duke Criteria. Major = Positive Blood Culture + Vegetation on ECHO.

5. IE Organisms: Native Valve = Strep Viridans. IV Drug User = Staph Aureus (Tricuspid). Prosthetic = Staph Epidermidis.

6. IE Prophylaxis: Only for High Risk (Prosthetic valve, previous IE) undergoing DENTAL procedures. Drug: Amoxicillin 2g PO.

7. Heart Failure Drugs (Mortality Benefit): ACE Inhibitors, Beta Blockers, Spironolactone, SGLT2 Inhibitors. (Digoxin/Lasix = Symptom relief only).

8. Acute LVF (Pulmonary Edema): LMNOP = Lasix, Morphine, Nitrates, Oxygen, Position (Upright).

9. Aortic Stenosis: Ejection Systolic Murmur radiating to Carotids. Triad: Angina, Syncope, Dyspnea.

10. Mitral Regurgitation: Pan-systolic murmur radiating to Axilla.

11. HOCM vs AS: HOCM murmur gets **LOUDER with Valsalva/Standing**. AS gets softer.

12. Pericarditis: Relieved by leaning forward. ECG: Diffuse ST Elevation + PR Depression.

13. Cardiac Tamponade: Beck's Triad (Hypotension, Muffled Sounds, JVP). Pulsus Paradoxus.

14. HTN Emergency: BP >180/120 + Organ Damage. Rx: IV Labetalol. Drop BP max 25% in 1st hour.

15. HTN in Pregnancy: Methyldopa, Labetalol, Nifedipine. **ACEi/ARBs are Teratogenic.**

ARRHYTHMIAS (16-25)

16. SVT Stable: Vagal Maneuvers -> Adenosine (6mg IV Push).

17. Unstable Tachycardia: Any rhythm with Shock/BP drop = **DC Cardioversion.**

18. Atrial Fibrillation: Irregularly Irregular. Risk of Stroke. Rx: Rate Control (Beta Blocker) + Anticoagulation.

19. Ventricular Tachycardia (VT): Wide QRS. Stable = Amiodarone. Unstable = Cardioversion. Pulseless = Defibrillation.

20. Torsades de Pointes: "Twisting of points". Rx: Magnesium Sulfate.

21. Hyperkalemia ECG: Tall Peaked T waves -> Wide QRS -> Sine Wave.

22. Complete Heart Block: Cannon "a" waves. Rx: Permanent Pacemaker.

23. WPW Syndrome: Delta Wave. Avoid Digoxin/Verapamil. Rx: Ablation.

24. 1st Degree Block: Prolonged PR interval. Benign. No treatment.

25. Bradycardia Symptomatic: Rx: Atropine.

ADULT PULMONOLOGY (26-40)

26. Asthma Acute: O2 + Salbutamol + Ipratropium + Steroids. If severe: MgSO4.

27. COPD O2 Target: **88-92%** (Prevent CO2 retention).

28. Type 2 Resp Failure: Low O2 + High CO2. Rx: NIV (BiPAP).

29. CAP Organism: Strep Pneumoniae (Rusty Sputum).

30. Atypical Pneumonia: Mycoplasma (Young, dry cough) or Legionella (AC/Water, low Na+).

31. TB Diagnosis: Gold Standard = Culture. Rapid = GeneXpert (Detects Rifampicin resistance).

32. TB Drugs SE: Rifampicin (Red urine), Isoniazid (Neuropathy-give B6), Pyrazinamide (Gout), Ethambutol (Eye/Color vision).

33. Pancoast Tumor: Apical Lung Cancer (Squamous). Causes Horner's Syndrome (Ptosis, Miosis, Anhidrosis).

34. Paraneoplastic: Small Cell = SIADH (Low Na) or Cushing's (ACTH). Squamous = Hypercalcemia (PTHrP).

35. PE Diagnosis: Low risk = D-Dimer. High risk = CTPA. Gold Standard = Angiography.

36. Tension Pneumothorax: **Do NOT wait for CXR.** Needle Decompression immediately.

37. Pleural Effusion: Light's Criteria. Exudate if Protein >0.5 ratio or LDH >0.6 ratio.

38. Empyema: pH < 7.2 or Glucose < 60. Requires Chest Tube.

39. Sarcoidosis: Bilateral Hilar Lymphadenopathy + High ACE + High Ca.

40. Lung Abscess: Foul smelling sputum. Air-fluid level on CXR. Rx: Clindamycin/Augmentin.

PEDIATRIC CARDIO & RESP (41-60)

41. Tetralogy of Fallot (TOF): Cyanotic. "Boot Shaped Heart". Ejection Systolic Murmur.

42. Tet Spell: Knee-Chest position, O2, Morphine.

43. Transposition (TGA): "Egg on String". Blue at birth. Rx: Prostaglandin E1 to keep PDA open.

44. TAPVR: "Snowman" or "Figure of 8" appearance on CXR.

45. VSD: Pan-systolic murmur at Lower Left Sternal Border. Most common CHD.

46. PDA: "Continuous Machinery Murmur". Rx: Indomethacin (Preterm) or Device (Term).

47. Coarctation of Aorta: Radio-Femoral Delay. HTN in arms, low BP in legs. Rib notching.

48. Rheumatic Fever: Jones Criteria (Joints, Carditis, Nodules, Erythema Marginatum, Chorea). Post-Strep.

49. Kawasaki Disease: Fever >5 days + CRASH (Conjunctivitis, Rash, Nodes, Strawberry tongue, Hands/feet). Rx: IVIG + Aspirin.

50. Croup: Barking Cough + Stridor. "Steeple Sign". Rx: Steroids + Nebulized Epinephrine.

51. Epiglottitis: Drooling + Tripod + High Fever. "Thumb Sign". **Do NOT examine throat.**

52. Bronchiolitis: RSV. Wheezing in < 2 years. Rx: Supportive/Oxygen.

53. Cystic Fibrosis: Meconium ileus, recurrent chest infections. Dx: Sweat Chloride > 60.

54. Foreign Body: Unilateral wheeze/hyperinflation. Rx: Rigid Bronchoscopy.

55. Kartagener Syndrome: Situs Inversus + Bronchiectasis + Sinusitis.

56. Still's Murmur: Innocent. Musical/Vibratory. Left Sternal edge. Systolic.

57. Down Syndrome Heart: AVSD (Endocardial Cushion Defect).

58. Turner Syndrome Heart: Coarctation of Aorta / Bicuspid Aortic Valve.

59. Rubella Heart: PDA + Pulmonary Stenosis.

60. Drug Rule: Indomethacin CLOSES duct. Prostaglandin E1 OPENS duct.

FINAL EXAM TIP: If the question mentions "Gold Standard Investigation" for Heart Failure, the answer is **ECHO**. If it asks for "Best Screening Test", the answer is **BNP**.

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