

KMU Top 60 Cardiology

ADULT & PAEDS CARDIO • REPEATED CONCEPTS

KMU - FINAL YEAR MBBS

ACS & ISCHEMIC HEART (1-12)

- 1. STEMI Definition:** ST Elevation in >2 contiguous leads OR New LBBB.
- 2. Inferior MI:** Leads II, III, aVF (RCA blocked). **Do NOT give Nitrates** (RV infarction needs preload).
- 3. STEMI Gold Standard:** Primary PCI within 120 mins.
- 4. Thrombolysis:** Use if PCI unavailable within 120 mins. Window < 12 hours. Streptokinase/tPA.
- 5. NSTEMI Management: NEVER Thrombolysed.** Rx: LMWH + Dual Antiplatelets + Angiography (24-72h).
- 6. Post-MI Drugs:** DABS (Dual Antiplatelets, ACEi, Beta Blocker, Statin). Life-long Aspirin.
- 7. Re-Infarction Marker:** CK-MB (returns to normal in 3 days). Troponin stays high for 2 weeks.
- 8. Dressler's Syndrome:** Autoimmune Pericarditis weeks after MI. Rx: Aspirin + Colchicine.
- 9. Stable Angina:** Chest pain on exertion, relieved by rest/GTN. Gold Std Dx: Angiography.
- 10. Prinzmetal Angina:** ST Elevation at rest (vasospasm). Clean arteries. Rx: CCBs (Verapamil).
- 11. Aspirin Mechanism:** Irreversible COX inhibition. Antiplatelet.
- 12. Complication Days:** Day 0-1 (Arrhythmia), Day 3-5 (Rupture/VSD), Weeks (Aneurysm/Dressler).

HEART FAILURE & HTN (13-25)

- 13. Acute LVF (Pulm Edema):** Pink frothy sputum. Rx: **LMNOP** (Lasix, Morphine, Nitrates, O2, Position).
- 14. Chronic HF Mortality:** Drugs that save lives: ACEi, Beta Blockers, Spironolactone, SGLT2i.
- 15. Drugs for Symptoms Only:** Digoxin and Furosemide (No mortality benefit).
- 16. Systolic vs Diastolic:** Systolic = Low EF (Pump fail). Diastolic = Normal EF (Filling fail/Stiff).
- 17. Investigation of Choice (HF):** Echocardiography (Ejection Fraction). Screening: BNP.
- 18. HTN Emergency:** BP >180/120 + Organ Damage (Eye/Kidney). Rx: IV Labetalol.
- 19. HTN Urgency:** High BP with NO damage. Rx: Oral meds (Amlodipine), lower over 24-48h.
- 20. HTN in Pregnancy:** Methyldopa, Labetalol, Nifedipine. **ACEi/ARBs are Teratogenic.**
- 21. Conn's Syndrome:** HTN + Hypokalemia. High Aldosterone, Low Renin.
- 22. Renal Artery Stenosis:** Young female (Fibromuscular) or Old male (Atheroma). Abdominal Bruit.
- 23. Beta Blocker Contraindication:** Acute Heart Failure, Asthma, Heart Block, Cocaine use.
- 24. Spironolactone SE:** Hyperkalemia + Gynecomastia.
- 25. Cor Pulmonale:** Right Heart Failure due to Lung Disease (COPD). Pitting edema + Raised JVP.

ARRHYTHMIAS (26-38)

- 26. SVT Stable:** Vagal Maneuvers -> Adenosine (6mg IV fast push).
- 27. Unstable Tachycardia:** Hypotension/Shock/Chest Pain -> **DC Cardioversion.**
- 28. Atrial Fibrillation:** "Irregularly Irregular". No P waves. Risk: Stroke. Rx: Beta Blocker + Anticoagulant.
- 29. Ventricular Tachycardia (VT):** Wide QRS. Stable: Amiodarone. Unstable: Cardioversion. Pulseless: Defib.
- 30. Torsades de Pointes:** Polymorphic VT. Rx: IV Magnesium Sulfate.
- 31. Complete Heart Block:** Bradycardia + AV dissociation + Cannon "a" waves. Rx: Pacemaker.
- 32. Hyperkalemia:** Tall T waves -> Wide QRS -> Sine Wave. Rx: Calcium Gluconate (Stabilize).
- 33. Bradycardia:** Symptomatic (Syncope). Rx: Atropine 0.5mg IV.
- 34. Digoxin Toxicity:** Yellow vision, Nausea, Arrhythmia. Precipitator: Hypokalemia.
- 35. WPW Syndrome:** Delta wave. Rx: Radiofrequency Ablation. **Avoid AV Blockers.**
- 36. Atrial Flutter:** "Sawtooth" waves. 300bpm atrial rate. Rx: Same as AFib.
- 37. Cardiac Arrest (Shockable):** VFib and Pulseless VT. Defibrillate immediately.
- 38. Cardiac Arrest (Non-Shockable):** Asystole / PEA. CPR + Adrenaline.

VALVULAR & STRUCTURAL (39-50)

- 39. Aortic Stenosis:** Ejection Systolic (Carotids). Triad: Syncope, Angina, Dyspnea. Slow rising pulse.
- 40. Mitral Regurgitation:** Pan-systolic (Axilla). Displaced Apex. Rx: Surgery if EF < 60%.
- 41. Mitral Stenosis:** Mid-diastolic Rumble + Opening Snap. Malar Flush. AFib risk.
- 42. Aortic Regurgitation:** Early Diastolic Murmur. Wide Pulse Pressure. Collapsing Pulse.
- 43. Infective Endocarditis:** Duke Major: Positive Blood Culture + Vegetation on Echo.
- 44. IE Organisms:** Native (Strep Viridans), IVDU (Staph Aureus), Prosthetic (Staph Epidermidis).
- 45. HOCM Murmur:** Ejection Systolic. **LOUDER with Valsalva/Standing.** Softer with Squatting.
- 46. Pericarditis:** Pleuritic pain, relieved leaning forward. Saddle-shaped ST elevation.
- 47. Cardiac Tamponade:** Beck's Triad (Hypotension, Muffled sounds, High JVP). Pulsus Paradoxus.
- 48. Rheumatic Fever:** Jones Criteria. Post-Strep Pharyngitis. Rx: Penicillin + Aspirin.
- 49. Myocarditis:** Viral (Coxsackie). Heart failure signs after flu. Troponin positive.
- 50. Aortic Dissection:** Tearing chest pain radiating to back. Widened Mediastinum. Rx: Beta Blockers (Type B) or Surgery (Type A).

PEDIATRIC CARDIOLOGY (51-60)

- 51. Tetralogy of Fallot:** "Boot Shaped Heart". Cyanosis on crying (Tet spell). Squatting helps.
- 52. Transposition (TGA):** "Egg on String". Blue at birth. Need PGE1 to keep ductus open.
- 53. VSD:** Most common CHD. Pan-systolic murmur LLSB. Large ones cause Failure.
- 54. PDA:** "Continuous Machinery Murmur". Bounding pulses. Rx: Indomethacin (Preterm).
- 55. Coarctation:** Radio-Femoral Delay. Upper body HTN. Rib Notching. Turner's Syndrome.
- 56. Kawasaki Disease:** Fever >5 days + CRASH. Risk: Coronary Aneurysm. Rx: IVIG + Aspirin.
- 57. Innocent Murmur:** Still's Murmur. Systolic, Soft, Musical. Changes with position.
- 58. Down Syndrome:** AVSD (Endocardial Cushion Defect).
- 59. Rubella Syndrome:** PDA + Pulmonary Stenosis + Cataracts + Deafness.
- 60. Eisenmenger:** Shunt reversal (L->R becomes R->L). Cyanosis appears late. Surgery Contraindicated.

FINAL EXAM TIP: Always check "**Hemodynamic Stability**" first. If BP is low (Shock) -> The answer is usually Electric Cardioversion, not drugs.