BLOCK O PREPROFFS 2023

1. MED-CARDIOLOGY

1. KGMC 2024

1. Which of the following is a major Duke criterion for the diagnosis of infective endocarditis?

a. Splinter hemorrhages
b. Roth spots
c. Osler nodes
d. Jane way lesions
e. New Valvular Regurgitation

2. 45 years old women with history of rheumatic heart disease with palpitations and worsening dyspnea on exertion. She reports frequent episodes of orthopnea. Which physical examination finding is most likely to be associated with chronic mitral regurgitation?

a. Loud opening snap.
b. Mid diastolic murmur
c. Displaced apex beat
d. Loud p2
e. Paradoxical splitting of s2

3. A 6 years old child with recurrent history of respiratory tract infections poor weight gain and has para systolic murmur at left lower sternal border. What is the diagnosis?

a. ASD
b. VSD
c. Aortic stenosis
d. Coarctation of aorta
e. PDA

4. A 13 years old boy presented with fever joint pain, skin rash. His lab test show raised ESR, CRP. Consider the suspicion of Rheumatic fever, which of the following echo findings would most likely be present?

a. Mitral regurgitation
b. Bicuspid aortic valve
c. Left ventricular hypertrophy
d. Pulmonary HTN e. Tricuspid regurgitation.

5. 70 years old with history of mitral valve prolapse with fever and fatigue. Blood culture reveal strep viridian. Which additional finding on echo would be associated with diagnosis of IE?

a. Mitral valve prolapse and regurgitation.
b. Mild aortic regurgitation.
c. Valve calcification.
d. Perivalvular abscess.
e. Left atrial enlargement. f. Aortic

6. A 70 years old male with mitral valve prolapse present with fever and fatigue. Blood culture reveal Staph Viridans. Which of the following additional finding on ECG would most likely associated with infective endocarditis.

a. Left atrial enlargement
b. Aortic valve calcification
c. Perivalvular abscess.
d. Mild aortic regurgitation,
e. Mitral valve prolapse without regurgitation

7. 60yr old man having stable angina, started sublingual nitroglycerin find relief of chest pain. What is the mechanism by which it alleviates the symptoms?

a. Reducing overload by vasoconstriction

b. Decreasing preload and myocardial oxygen demand
c. Cinch coronary blood flow directly
d. Dilating coronary arteries to reduce arteriosclerosis

8. Which of the following is a major duke criterion for the diagnosis of infective endocarditis?
a. Osler nodes b. Roth spots
c. Splinter Hemorrhages
d. New valvular regurgitation e. Jane way lesions

9. Which of the following is major duke criteria?
a. Roth spots b. Jane way lesions.
c. New valvular regurgitation
d. Osler nodes e. Splinter hemorrhage

10. A 72 year old man presents with chest pain and shortness of breath. His physical examination. Is consistent with aortic stenosis. Which of the following investigation confirms the severity of Condition?
a. Electrocardiogram b. Echocardiography
c. Cardiac MRI d. Coronary angiography
e. Chest X-ray

11. A 50 year old female diagnosed with infective endocarditis presented with dyspnea palpitations high pitched decrescendo diastolic murmur at left sternal border. Which of the following symptom is least likely with chronic aortic regurgitation?
a. Palpitation b. Dyspnea c. Hemoptysis
d. Orthopnea e. Nocturnal angina

12. A 50 year old woman with a known diagnosis of mitral stenosis present with worsening dyspnea and ECG is performed to assess the severity her mitral valve disease which of the Following echocardiographic finding suggest mitral valve stenosis?
a. Mitral valve area of 2.5 cm^3
b. Mitral valve area of 1.0 cm^2
c. Left atrial diameter of 40 m
d. Mean pressure gradient across mitral wall of 6 mm Hg e. Tricuspid regurgitation

13. 75 years old woman with severe mitral regurgitation presented with heart failure symptoms. Despite optimal medical therapy which of the following is most appropriate management?
a. Cardiac desynchronisation therapy
b. Percutaneous coronary intervention
c. Closed valvotomy
d. Mitral balloon valvuloplasty
e. Mitral valve replacement

14. Which of the following is least associated with infective endocarditis?
a. Pulsus paradoxus b. Clubbing
c. Petechiae. d. Roth spots
e. Jane way lesions

15. Which is the initial investigation to assess severity of aortic regurgitation?
a. Echo b. Ecg c. Valve surface area
d. Cardiac MRI e. CT angiography

16. 60 year old man with hypertension for the last 10 years. Which of the following would be best to determine if there is end organ damage present?
a. Chest X-ray b. Fundoscopy
c. Holter monitoring
d. Serum creatinine+Urinalysis

17. A 65 year old woman known case of aortic stenosis presents for routine follow up. Her echo cardiogram shows a peak gradient of 75 mm of hg across the aortic valve. Which of the findings of 8 the echocardiograph are in consistent with aortic stenosis?
a. Left ventricular ejection fraction of 70%
b. Left atrial enlargement
c. Peak systolic velocity of 2m/s
d. Aortic valve area<1m2
e. Aortic valve area>2m2

18. A 32 week presents with systolic murmur and widened Pulse pressure. Which congenital anomaly:

a. Patent ductus arteriosis
b. Tetralogy of fallot
c. Ventricular septal defect
d. Atrial septal defect.
e. Transposition of great arteries

19. A 75 years old women with severe mitral regurgitation develops heart failure despite optimal medical therapy. What is appropriate next step in management of MR

a. CRT b. PCI c. Mitral valve replacement
d. Mitral valve baloon valvuloplasty

20. A 50 years old male hypertensive presented to OPD for routine medical check up, BP 180/110. Which one of the following will indicate end organ damage?

a. Loud S1 b. Loud S2 c. Anemia

21. 20 yr old came to emergency department after being hit by car 50 minutes ago. He is in distress, pale ,cold clammy periphery and in air hunger. HR 148/min, B/P 84/47, respiratory rate 36/min. Air entry is present bilaterally with engorged neck vein &large bruise on front of Central and right chest. On needle aspiration there is no free air. What is the diagnosis?

a. Cardiac tamponade b. Diaphragm rupture
c. Thoracic aorta rupture d. Tension pneumothorax
e. Compression asphyxia

22. A patient with severe mitral regurgitation and having heart failure, despite medical therapy what is the next step in management?

a. Balloon valvuloplasty b. Valve replacement
c. CRT d. PCI e. Close valvotomy

23. . 72 year old man with chest pain, SOB on exertion. On physical examination patient has aortic stenosis. Which investigation to confirm severity?

a. X-ray chest b. Coronary angiography
c. Ecg d. Echo e. Cardiac MRI

24. Which of following findings on echo is more consistent with severe mitral regurgitation?

a. Left atrial enlargement
b. Regurgigant jet >30% of left atrium volume
c. Regurgigant volume >60mlper beat
d. Mild pulmonary htn
e. Ejection fraction>60%

2. RMC 2024

1. A 60 year old lady presented to clinic with shortness of breath on lying flat. She is diabetic and has history of MI 3 years back. He admitted that she had stop taking a medication for few weeks. On examination she is having a regular pulse of 84 beats/min with blood pressure of 130/90. She has a pedal edema, raised JVP and bilateral basal crepitation in chest. Which investigations you would like to confirm your diagnosis?

a. ECG b. ECHO c. Chest X-ray
d. TSH e. None of the above

2. All of the following medicines are used for heart failure except:

a. Metoprolol b. Ramipril
c. Spironolactone d. Nifedipine
e. Valsartan

3. All of the following are precipitating factor for heart failure except:

a. Ischemia b. Poor drug compliance
c. Smoking d. Infection e. Myocardial infarction

4. All of the following are risk factors for coronary artery disease except:

a. Smoking
b. Hyperlipidemia
c. Fasting
d. Hypertension
e. Diabetes

5. A 58 years old diabetic patient presented with severe central chest pain for the last 4 hours. ECG showed ST Elevation in V1, V2, V3, and V4. What is the best treatment option?

a. Morphine b. Angiography
c. Streptokinase d. Metoprolol
e. Oxygen

6. A 65 years old patient having history of Ischemic heart disease presented with palpitation and drowsiness. On examination he has tachycardia and having BP of 70/50. ECG showed atrial fibrillation with fast ventricular rate. What is the best treatment option?

a. DC Cardio version b. Metoprolol
c. Amiodarone d. Diltiazem
e. Digi toxin

7. A 23 years old prim gravida presented with palpitation in clinic. She is hemodynamically stable with heart rate of 168beats/min. ECG done showing supraventricular tachycardia. What is the first line treatment?

a. Metoprolol b. Amiodarone
c. Adenosine d. Verapamil
e. Amiodarone

8. A 23 years female presented with shortness of breath. She is married and given birth to a male baby 2 months ago. On examination she has a weak pulse with BP of 100/70. She has generalized swelling, raise JVP and bilateral crepitation up to mid zone of chest. What is the most likely diagnosis?

a. Acute exacerbation of asthma
b. Core Pulmonale
c. Pulmonary embolism
d. Peri-partum cardiomyopathy e. Pneumonia

9. A 70 years old Diabetic, Post CABG patient came to Heart Failure clinic for follow-up. According to him he perform his daily activities comfortably but feels breathlessness whenever he do exertion more than ordinary activities. His medical record showed that he has LV ejection fraction of 36%. What is the functional class of this patient according to NYHA classification?

a. NYHA I b. NYHA II c. NYHA III
d. NYHA IV e. None of the above

10. What is not a major criteria according to modified jones criteria for acute rheumatic fever?

a. Migratory polyarthritis b. Fever
c. Cholera d. Subcutaneous nodules
e. Carditis

11. Normal PR interval in Electrocardiogram?

a. 100-120 msec
b. Less than 120 msec c. 180-220 msec
d. Less than 200 msec e. None of the above

12. Standard calibration (setting) for electrocardiogram is?

a. Speed 15 mm/sec voltage 05 mm/mV
b. Speed 20 mm/sec voltage 10 mm/mV
c. Speed 25 mm/sec voltage 10 mm/mV
d. Speed 25 mm/sec voltage 05 mm/mV
e. Speed 15 mm/sec voltage 10 mm/mV

13. The diagnostic investigation of choice for Acute Rheumatic fever is?

a. RA factor level b. Anti CCP
c. CSR d. None of the above e. All of the above

14. All of the following are complications of uncontrolled blood pressure except:

a. Cerebrovascular accident b. Encephalopathy
c. Meningitis d. Intracerebral bleed
e. All of the above

15. Target blood pressure for a coronary artery disease patient?

a. 120/80 b. 130/80
c. 140/90 d. 150/90
e. None of the above

16. Drug of choice for uncontrolled blood pressure during pregnancy is:
a. Nifedipine b. Methyl dopa c. Labetalol
d. Valsartan e. None of the above

17. A 40 years old diabetic patient presented with severe central chest pain in emergency. ECG done showing ST depression in inferior leads. Lab investigations showed raised troponin levels. What is the diagnosis?
a. ST elevation MI (STEMI)
b. Non-ST elevation MI (NSTEMI)
c. Unstable Angina
d. All of the above

18. Which is true regarding causes of severe chest pain?
a. Anterior wall MI
b. Aortic dissection
c. Pulmonary infarction
d. Stable Angina
e. All of the above

19. All of the following are the causes of pericardial effusion except:
a. Tuberculosis b. Brucellosis
c. Dressler syndrome d. Malignant tumors
e. Systemic lupus erythematosus

20. All of the following are common complication of myocardial infarction except:
a. Ventricular septal defect
b. Mitral regurgitation
c. Heart block
d. Aortic regurgitation
e. Ventricular free wall rupture

21. Which of the following form the major criteria for diagnosis of Acute Rheumatic Fever?
a. Arthralgia b. Previous history of RT
c. Increased ESR/CRP d. Fever
e. None of the above

22. Incidence of arthritis in Acute Rheumatic Fever:
a. 60-80% b. 24-40% c. 20-30%
d. 5-10% e. 10-20%

23. All are true about erythema margination in Rheumatic Fever except:
a. Bathing suit distribution b. Early manifestation
c. Pruritic lesion d. Seen rarely
e. Major criteria for diagnosing RF

24. Best drug for prophylaxis for Rheumatic Fever:
a. Benzedrine penicillin b. Erythromycin
c. Gentamycin d. Dexamethasone
e. Omeprazole

25. All are true for Arthritis in Acute Rheumatic Fever except:
a. Non-deforming
b. Associated with raised ASO titer
c. Lasts for 3-6 weeks in untreated cases
d. Small joint in involvement is usual
e. Migratory arthritis

26. All of the following are true for cholera in Rheumatic Fever except:
a. Emotional lability is usually present
b. Self-limiting
c. Cranial nerve palsy, sensory changes may be present
d. Treated with haloperidol
e. Major criteria for diagnosing RF

27. All of the following drugs have mortality benefit in heart failure patients except:
a. Metoprolol b. Enalapril c. Spironolactone
d. Verapamil e. Bisoprolol

28. All of the following investigations are done in patient presented with chest pain except:
a. ECG b. Troponin levels
c. Chest X-ray
d. TSH e. CK-MB

29. All of the following are signs of heart failure except:
a. Dyspnea b. Swelling of feet
c. Raised JVP d. Clubbing of nails
e. Gallop Rhythm of Auscultation

30. Which of the following is the sign of infective endocarditis:
a. Arthralgia b. Erythema marginatum
c. Cyanosis d. Jane way lesions
e. Wheezy Chest

31. All of the following are the common signs of infective endocarditis except:
a. Splinter hemorrhages
b. Splenomegaly
c. Migratory Arthritis
d. Carditis e. Erythema marginatum

32. All of the following are common signs of Rheumatic Fever except:
a. Cholera b. Splenomegaly
c. Migratory Arthritis d. Carditis
e. Erythema marginatum

33. Target blood pressure for a Chronic Kidney disease patient?
a. 120/80 b. 130/80 c. 140/90
d. 140/80 e. None of the above

34. A 40 years old Diabetic patient presented with severe central chest pain for the last 6 hours in emergency. ECG is normal. Which investigation you would like to do:
a. Repeat ECG after 30 minutes b. ECHO
c. Troponin I d. Angiography
e. None of above

35. Which is true regarding causes of Heart Failure?
a. Coronary artery disease b. Diabetes
c. Old age d. Only a is true
e. Both a and b are true

36. Metoprolol can be in a heart failure patient except:
a. Patient is diabetic
b. Patient is having heart rate more than 70/min
c. Patient is having NYHA-4 symptoms
d. Patient is having CKD
e. Patient is having Hyperlipidemia

37. Spironolactone should not be used in a heart failure patient if:
a. Patient is diabetic
b. Patient is having heart rate more than 70/min
c. Patient is having systolic blood pressure less than 120mm of Hg
d. Serum potassium level is more than 5.5 mEq/L
e. Age more than 75 years

38. A 48 years old diabetic patient presented with severe central chest pain in emergency. ECG done showing ST elevation in leads II, III, and avF. What is the diagnosis?
a. Acute inferior STEMI
b. NSTEMI
c. Acute Anterior STEMI
d. Acute Posterior STEMI e. Acute lateral STEMI

39. All of the following investigations are done routinely in patient presented with symptoms of heart failure except:
a. BNP b. ECG c. Chest X-ray
d. TSH e. ECHO

40. All of the following are the side effects of Ramipril except:
a. Cough b. Angioedema
c. Hyperkalemia d. Bradycardia
e. Hypotension

41. All of the following are the side effects of Metoprolol except,
a. Dizziness b. Angioedema c. Hypotension
d. Bradycardia e. Bronchoconstriction

42. All of the following are causes of chest pain except:

a. Pulmonary edema b. Pulmonary embolism
c. Pneumothorax d. Aortic dissection
e. Myocardial Infarction

43. A 45 years old diabetic patient presented with severe central chest pain for the last 3 hours in emergency. ECG done showing ST elevation in leads II, III, and avF. What is the best treatment option?

a. I/V streptokinase
b. I/V enoxaparin
c. I/V heparin
d. Angiography followed by PCI
e. Hyperthyroidism

44. All of the following conditions are the recognized causes of secondary hypertension except:

a. Coarctation of aorta
b. Pheochromocytoma
c. Diabetes
d. Conn syndrome
e. Hyperthyroidism

45. All of the following are the risk factors of Coronary Artery Disease except:

a. Hypertension b. Hyperlipidemia
c. Smoking d. Hyperkalemia
e. Diabetes

3. GMC 2024

1. A 45 years-old man had recently started taking antihypertensive therapy 6 months later his rbs is 252 mg/dl. Which single drug is most likely to have caused this?

a. Amlodipine b. Bendroflumethiazide
c. Doxazosin d. Losastein
e. B blockers

2. A 56 years old man was recently put on ant-hypertensive medication and recent biochemistry on 02 occasions showed Na+ 132mmol, K+ 7.6mmol, urea 26.3mg/dl, cr= 1.12mg/dl. Which of the following drug is responsible for this result?

a. Amlodipine b. Atenolol c. Doxasocin
d. Bendroflumethiazide e. Ramipril

3. A man who had dental extraction and blood transfusion a few days ago presented with pyrexia of unknown origin. He has got some murmur on physical examination along with splinter hemorrhages on examination what is the likely diagnosis?

a. Myocardial infarction
b. Infective endocarditis
c. Heart failure
d. Aortic dissection
e. Coarctation of aorta

4. A 56 years old man who is hypertensive recently underwent change in medicine few days ago. Now He Has wheezing. Previously he has no history of copd. Which drug can cause this?

a.Atenolol b. Ramipril
c. Velsartan d. Furosemide
e. Spironolactone

5. A 71 years old man is admitted to cardiology word with suspected infective endocarditis. On admission his investigations were done and infective endocarditis was confirmed by blood culture and echocardiography. Which one of the following is most likely indication for surgical intervention?

a. Splinter hemorrhages
b. Persistent fever after 48 hours
c. Lengthening of pr interval in ecg
d. Shortness of breath with exertion
e. Staph aureus isolate on blood culture

6. A patient was diagnosed with infective endocarditis caused by daggered staph aureus but the patient became red….red petechiae throughout his body which of the following antibiotics can cause red man syndrome?

a. Ceftriaxone b. Cefotaxime
c. Vancomycin d. Tobramycin
e. Moxifloxacin

7. A 60-year-old male patient with a history of hypertension and coronary artery disease presents with shortness of breath and fatigue. What is the most likely diagnosis?
a. Chronic heart failure
b. Acute coronary syndrome
c. Chronic obstructive pulmonary disease
d. Pneumonia
e. Septic shock

8. You are sitting in an outpatient dept. A 65 years old male patient known diabetic came with complaints of shortness of breath while lying in supine position. He had myocardial infarction last 6 months back but with poor compliance with medications. He has diagnosed by your senior after taking proper history, examination and relevant investigations as a case of heart failure. What is heart failure?
a. A condition in which the heart stops beating
b. A condition in which the heart cannot pump enough blood to meet the body's needs.
c. A heart attack
d. A condition in which the patient experiences chest pain
e. Myocardial infarction

9. A 70-year-old male patient with a history of heart failure and chronic kidney disease presents with worsening shortness of breath and fatigue. His creatinine level is 4.5 mg/dl. There is no response to medical treatment. What is the next step in treatment?
a. Increase diuretic dose
b. Add ace inhibitor
c. Refer for hemodialysis
d. Order echocardiogram
e. Add digoxin

10. A 65-year-old male patient with a history of heart failure presents with worsening shortness of breath, nyha class iv despite optimal medical therapy.. His echocardiogram shows left ventricular ejection fraction of 30%. What is the most appropriate treatment?
a. Increase diuretic dose
b. Add beta blocker
c. Add ace inhibitor
d. Refer for cardiac resynchronization therapy
e. Add digoxin

11. A 45-year-old female patient with a history of dilated cardiomyopathy presents with worsening shortness of breath and fatigue. She is on guide Ine directd medical therapy her ejection fraction is 15%. The patient is well up and can afford any cost of treatment. What is the most appropriate treatment?
a. diuretic dose
b. Add beta blocker.
c. Refer for heart transplantation
d. Order implantable cardioverter (icd)
e. Add digoxin

12. A 65-year-old male patient with a history of heart failure presents with worsening shortness of breath and fatigue. His echocardiogram shows left ventricular ejection fraction of 30%. He is currently taking furosemide and carvedilol. He is in american college of cardiology acc (class iii) heart failure. What is the most appropriate addition to his treatment?
a. Increase furosemide dose
b. Add ace inhibitor
c. Add spironolactone
d. Refer for cardiac resynchronization therapy
e. Add nitrates

13. A 50-year-old female patient with a history of heart failure presents with worsening shortness of breath and fatigue. Her blood pressure is 110/80

mmhg. She is currently taking furosemide and metoprolol. What is the most appropriate next step in her treatment?

a. Increase furosemide dose
b. Add vasopressor
c. Add inotrope
d. Order echocardiogram e. Add arb

14. A 66-year-old male patient with a history of heart failure presents with worsening shortness of breath and fatigue. His oxygen saturation is 85% on room air. What is the most appropriate next step in his treatment?

a. Increase diuretic dose
b. Add oxygen therapy
c. Refer for pulmonary rehabilitation
d. Order echocardiogram
e. Add digoxin

15. A 50-year-old male patient with a history of heart failure presents with worsening shortness of breath and fatigue. His blood pressure is 110/80 mmhg. He is currently taking furosemide and metoprolol. What is the most appropriate treatment to relieve his shortness of breath?

a. Increase furosemide dose
b. Add vasopressor
c. Add inotrope
d. Order echocardiogram
e. Add ace inhibitor

16. You are sitting in a well-established setup and receives a 75-year-old female patient with a history of heart failure and chronic obstructive pulmonary disease (copd) presents with worsening shortness of breath. Her arterial blood gas shows ph 7.3, paco2 60 mmhg, and pao2 50 mmhg. What is the most appropriate treatment?

a. Increase diuretic dose
b. Add oxygen therapy
c. Order echocardiogram
d. Beta blocker
e. Refer for non-invasive positive pressure ventilation

17. A 70-year-old male patient with a history of heart failure and hypertension presents with worsening shortness of breath and fatigue and chest pain. His blood pressure is 180/100 mmhg. On cv examination s3 is audible. Basal crackles on both lung fields. What is the most appropriate treatment?

a. Increase diuretic dose
b. Add ace inhibitor
c. Add beta blocker
d. Add nitrate (infusion isokit)
e. Add oxygen therapy

18. A 56-year-old male patient with a history of heart failure presents with worsening shortness of breath and fatigue. His echocardiogram shows left ventricular ejection fraction of 30%. What will be the most appropriate treatment option in this case?

a. Increase diuretic dose
b. Add beta blocker
c. Add ace inhibitor
d. Refer for cardiac resynchronization therapy
e. Add oxygen therapy

19. A 33 years old male presented with palpitations. On ECG there was SVT as noted by emergency physician. Patient is BP less what is immediate treatment in hospital?

a. Dc cardioversion b. Primary pci
c. Iv normal saline d. Pacemaker
e. Thrombolytic therapy

20. An 80-year-old woman is known case of hypothyroidism now presented with dizziness. ECG showed complete heart block what will you do the next?

a. Add a beta-agonist
b. Add an ace inhibitor
c. Iv atropine and followed by tpm if needed
d. Give shock e. Iv amiodarone

21. What is the most common form of aortic stenosis?

a. Valvular aortic stenosis
b. Subvalvular aortic stenosis
c. Supravalvular aortic stenosis
d. Bicuspid aortic valve
e. Critical aortic stenosis

22. Which of the following is the most common cause of acute rheumatic fever?

a. Streptococcus pyogenes infection.
b. Influenza virus infection
c. Staphylococcus aureus infection
d. Human Immunodeficiency virus (HIV)
e. Hepatitis B virus (HBV) infection

23. Which of the following is a common symptom of aortic stenosis?

a. Chest pain b. Shortness of breath
c. Palpitations d. Hypertension
e. None of the above

24. Which of the following is a diagnostic test used to evaluate heart function?

a. Echocardiography
b. Computed tomography (CT) scan
c. Magnetic resonance imaging (MRI)
d. Positron emission tomography (PET) scan
e. None of the above

25. Which of the following is a common symptom of mitral valve prolapse?

a.Chest pain b.Palpitations
c. Shortness of breath d. Syncope
e. All of above

26. Which of the following is a potential complication of untreated infective endocarditis?

a.Heart failure b. Stroke
c. Aortic aneurysm d. Pulmonary embolism
e. All of above

27. A 55yr woman with a persistent cough and hx of smoking develops left sided chest pain exacerbated by deep breathing with fever and localized crackles. What is the single most appropriate dx?

a. Dissecting aneurysm b. Pericarditis
c. Pneumonia d. Pneumothorax
e. Pulmonary embolism

28. An 80-year-old woman presents to the emergency department with palpitations, dizziness, and shortness of breath. In the past, similar episodes have terminated spontaneously or with a valsalvamaneuver. Apart from increased cholesterol level and hypertension, which are both under good control, her health is other-wise excellent. When seen, she is mildly distressed but fully conscious and alert. You note that an electrocardiogram obtained in the past, when she was asymptomatic, was entirely normal. Which of the following is most likely?

a. Sinus tachycardia
b. Supraventricular tachycardia due to atrioventricular nodereentry
c. Atrial fibrillation d. Ventricular tachycardia
e. Pacemaker-mediated tachycardia

29. A 48-year-old man is admitted to the coronary careunit with an acute inferior myocardial infarction. Two Hours after admission, his blood pressure is 86/52 mmhg; his heart rate is 40 beats per minute with sinus rhythm. Which of the following would be the most appropriateinitial therapy?

a. Immediate insertion of a temporary transvenouspacemaker.
b. Intravenous administration of atropine sulfate, 0.6 mg
c. Administration of normal saline, 300 ml over15 min.
d. Intravenous administration of dobutamine,0.35 mg/min
e. Intravenous administration of isoproterenol, 5.0_g/min

30. A 63-year-old woman is in your office for evaluation of an abnormal stress test that Shows an area of reversible ischemia. She has no risk factors for cad. What is the Most accurate diagnostic test, or what is the best next step in further management?

a. Troponin level b. Angiography
c. Coronary bypass. d. Echocardiogram
e. Nuclear ventriculogram (muga scan)

31. 60 years female presented with dyspnea and chest pain. Echocardiography shows large pericardial effusion. All of the following can cause pericardial effusion except.

a. Malignancy b. Hypothyroidism
c. Renal failure d. Gastritis e. None

32. 37 years female with history of high grade fver due to malaria was brought to ccu with c/o dympia and palpitation. She had a pulse of 110 bpm and b.p 110/70. Ecg shows regular narrow comlexees with hr of 110bpm and p waves followed by qrs. What is the diagnosis?

a. Svt b. Mat c. Sinus tachycardia
d. Af e. Vt

33. 28 years female diagnosed case of scleroderima was admitted in ccu with c/o sharp cp that increased with lying and relieved with sitting. She also had dyspnea on minimal exertion. On auscultation other than normal heart sounds added scratchy sound was audible. What is the diagnosis

a. Acute mi b. Ventricular septal
c. Pericarditis d. Pulmonary embolism
e. Anxiety

34. 30 years male come to a doctor with b.p 150/100 on two occasion. He was advised to check b.p at home. Regularly. His home bp was 110/70. Which type of hypertension is this?

a. Labile hypertension. b. Stage ii hypertension
c. White coat hypertension d. Office hypertension
e. Masked hypertension.

35. 40 year male was admitted in ccu with diagnosis of atrial fibrillation due to rheumatic heart disease. Which drug shall be given to prevent thromboembolic phenomenon

a. Warfarin b. Metoprolol c. Lanoxin
d. Amiodarone e. Disprin

36. 58 yaer old male presented to cardiology opd with complaints of headeach this b.p on three consecutive occasions was raised. At what b.p level patient shall be labelled as hypertensive?

a. >120/80 b. >130/90 c. >140/100
d. 150/100 e. 160/100

37. 55 year old male admitted in a periphery hospital with acute mi and was thrombolysed due to non-availability of p-pci facility near by. All of following indicate successful thrombolyism except?

a. Painfree
b. St elevation resolved by 50%
c. Accelerated idioventricular rhythum
d. Atrial fibrillation e. Vt

38. 80year old female p/w chest pain synope and dyspnia. Ecg shows vt what is the first management step to take?

a. Direct current cardioversion
b. Carrotid sinus management
c. Iv beta blockers
d. Iv calcium channel blockers e. Iv heparin

39. Major criteria for infective endocarditus include positive blood cultures and

a. Fever
b. Esr>30
c. Vegetation on echocardiography
d. Hx of any predisposing factor e. Arthralgia

40. 60 years old male p/w loc followed by severe cp.ecg shows broad complexes, regular rhythm110bpm and absent p-wave. What is diagnosis?

a. Normal sinus rhythm b. Vf
c. Vt d. Svt e. Afib

41. 40 year male with hr of right femur fracture followed by deep vein thrombosis p/w c/o temporary sudden loss of consciousness, severe chest pain and dysnea o/e sp 02 70% pulse 110bpm b.p 100/60,silent chest and $1+s2 available what is the diagnosis?

a. Acute mi b. Pneumonia
c. Pulmonary embolism
d. Acute severe arthmia e. Anemia

42. A 74 years old woman who is known to have type-2 diabetes mellitus. Her blood pressure has border line for a number of weeks but now you have decided, that she would start medical treatment. Her latest blood pressure is 146/88 mmhg.hba1c is 7.5x and her bmi is 25 kg/m². What is most appropriate drug to start?

a. Bisoprolol…..b blocker
b. Bendroflumethiazide thiazide diuretic
c. Amlodipine…..ca channel blocker
d. Ramipril…….ace inhibitor
e. Orlistate.weight reduction

43. 67 year old man with type 2 diabetes mellitus visits diabetic clinic. His blood pressure is currently 150/86 mmhg.his diabetes is well controlled and there is no end organ damage. What should his target blood pressure?

a. <140/80 mmhg
b. <120/80 mmhg
c. <140/90 mmhg
d. <130/80 mmhg
e. <150/70 mmhg

44. A 57 years "women who are suffering from hypotension presented recurrently to the hospital with recurrent fall when she go to bed or getting up from sitting. She is on antihypertensive medication with no other medical problem. What is the cause of her falls?

a. CCB b. Vestibobasilar insufficiency
c. Thiazide d. Hypoglycemia e. Infection

45. A 65 years old man with hypertension develops gingival hyperplasia. What is single most likely cause?

a. Ace inhibitor b. Beta blockers
c. Crohns disease d. Nifedipine
e. Sarcoidosis

46. A 46 years-old african black man is found to have bp-160/90, on 3- separate occasions. What is the best initial treatment?

a. Acei b. Beta-blockers
c. Arbs d. None e. Ccb

4. WMC 2024

1. Which biomarker is most specific for the diagnosis of myocardial infarction?

a. C-reactive protein (CRP) b. Creatine kinase (CK)
c. Troponin d. Myoglobin
e. Lactate dehydrogenase (LDH)

2. Which of the following is NOT a common complication of myocardial infarction?

a. Heart failure b. Cardiac arrhythmias
c. Valvular heart disease d. Pericarditis
e. Renal failure

3. Which of the following is a risk factor for the development of ischemic heart disease?

a. Low LDL cholesterol
b. High HDL cholesterol
c. Physical inactivity
d. Low blood pressure
e. Young age

4. Which of the following is the most common cause of ischemic heart disease?

a. Hypertension
b. Diabetes Mellitus
c. Coronary Artery Atherosclerosis
d. Valvular heart disease

e. Cardiomyopathy

5. Which medication is often used to relieve symptoms of acute decompensated heart failure by reducing preload?

a. Digoxin b. Furosemide
c. Metoprolol d. lisinopril
e. Spironolactone

6. Which of the following conditions is commonly associated with high-output heart failure?

a. Anemia
b. Myocardial infarction
c. Hypertension
d. Diabetes mellitus
e. Chronic obstructive pulmonary disease (COPD)

7.Which biomarker is most commonly used to diagnose and monitor heart failure?

a. Troponin
b. C-reactive protein (CRP)
c. Brain natriuretic peptide (BNP)
d. D-dimer e. Myoglobin

8. Which of the following is NOT common symptom of heart failure?

a. Dyspnea b. Fatigue c. Chest pain
d. Weight gain e. Palpitations

9. Which of the following classes of drugs is considered first-line therapy in the management of chronic heart failure?

a. Aspirin b. Calcium channel blockers
c. Diuretics d. ACE inhibitors
e. Digoxin

10.Which of the following findings is commonly seen in a patient with right-sided heart faliure?

a. Orthopnea
b. Paroxysmal nocturnal dyspnea
c. Hepatomegaly
d. Pulmonary edema, e. Rales

11. Which of the following symptoms is most characteristic of left-sided heart failure?

a. Peripheral edema
b. Jugular venous distension
c. Ascites d. Pulmonary congestion
e. Hepatomegaly

12. Which of the following is the most common cause of heart failure in developed countries?

a. Hypertension b. Valvular heart disease
c. Coronary artery disease d. Diabetes Mellitus
e. Cardiomyopathy

13. In which type of atrioventricular (AV) block does the PR interval progressively lengthen until a beat is dropped?

a. First-degree AV block
b. Second-degree A V block, Mobitz Type I (Wenckebach)
c. Second-degree AV block, Mobitz type II
d. Third-degree AV block
e. Bundle branch block

14.Which of the following is the first-line treatment for symptomatic sinus bradycardia?

a. Beta-blockers b. Calcium channel blockers
c. Atropine d. Amiodarone e. Adenosine

15. Which of the following conditions is least likely to cause bradyarrhythmias?

a. Acute myocardial infarction
b. Increased intracranial pressure
c. Hypokalemia
d. Hypothyroidism e. Sleep apnea

16. Which of the following is a distinguishing feature of sick sinus syndrome

a. Persistent tachycardia
b. Intermittent episodes of bradycardia and tachycardia
c. Constant bradycardia
d. Absence ofP waves e. Regular R-R intervals

17. Which of the following is a common cause of bradyarrhythmias in athletes?

a. Dehydration b. Overtraining
c. Enhanced vagal tone d. Electrolyte imbalance

e. Anemia

18. Which of the following is true regarding third-degree (complete) heart block?

a. There is a constant PR interval

b. There is no association between P waves and QRS complexes

c. The QRS complexes are always narrow

d. It is always symptomatic

e. It is the same as Mobitz type 11 block

19. Which of the following conditions is most likely to cause ventricular tachycardia?

a. Hyperthyroidism

b. Myocardial infarction

c. Pulmonary embolism

d. Anemia e. Hypothermia

20. Which medication is commonly used for the acute management of supraventricular tachycardia (SVT)?

a. 6-Metoprolol b. Amiodarone

c. Digoxin

d. Adenosine e. Furosemide

21.Which of the following is a distinguishing feature of ventricular fibrillation?

a. Regular QRS complex

b. Regular rhythm

c. Absence of p waves

d. Narrow QRS complexes

e. Organized atrial activity

22. Which lifestyle modification is recommended for patients with Tachyarrhythmias?

a. High caffeine intake

b. Smoking cessation

c. Increased alcohol consumption

d. 30 min walk 5 days a week

e. High-sodium diet

23.Which of the following, is a distinguishing feature of pericardial effusion on physical examination?

a. Loud S1 and S2 heart sounds

b. Pulsus paradoxus

c. Decreased breath sounds

d. Rales

e. Bradycardia

24. Which of the following conditions is a potential cause of constrictive pericarditis?

a. Rheumatic fever b. Tuberculosis

c. Sarcoidosis d. Hypertension

e. Hypercholesterolemia

25. Which of the following is NOT a typical symptom of cardiac tamponade?

a. Hypotension b. Muffled heart sounds

c. Distended neck veins d. Hypertension

e. Tachycardia

26. Which of the following is the most appropriate management for recurrent pericarditis?

a. Long-term antibiotic therapy

b. Increased physical activity

c. NSAIDs and colchicine

d. Beta-blockers and ACE inhibitors

e. Immediate surgical intervention

27. Which of the following is the most common ECG finding in acute pericarditis?

a. Concave ST-segment elevation in all leads with PR depression.

b. Convex ST-segment elevation in all leads with PR depression

c. T wave inversion in leads I and A VL

d. Prolonged PR interval

e. Concave ST-segment elevation in all leads with PR elevation

28. Which of the following interventions is recommended for patients with recurrent DVT despite adequate anticoagulation?

a. Discontinuation of anticoagulation

b. Placement of an inferior vena cava (IVC) filter

c. Decreasing dietary sodium intake

d. Long-term use of beta-blockers

e. Routine use of diuretics

29. Which laboratory test is often used to rule out DVT in patients with a a low clinical probability?

a. complete blood count (CBC)
b. Erythrocyte sedimentation rate (ESR)
c. D-dimer test
d. Serum electrolytes
e. Liver function tests

30. Which of the following is a long-term complication of DVT?
a. Chronic obstructive pulmonary disease (COPD)
b. Post-thrombotic syndrome
c. Myocardial infarction
d. Hypertensive emergency e. Endocarditis

31. Which of the following is NOT a common risk factor for developing DVT?
a. Prolonged immobility b. Recent surgery
c. Pregnancy d. Hypertension
e. Oral contraceptive use

32. Which diagnostic test is considered the gold standard for confirming the diagnosis of DVT?
a. D- dimer test b. Duplex ultrasonography
c. Venography
d. CT scan e. MRI

33. Which medication is commonly used for initial anticoagulation in patients with DVT?
a. Warfarin b. Aspirin c. Heparin
d. Clopidogrel e. Dabigatran

34. Which of the following conditions is associated with an increased risk of DVT?
a. Hyperthyroidism
b. Hypothyroidism
c. Factor V Leiden mutation
d. Addison's disease
e. Pheochromocytoma

35. Which of the following is a common finding on an ECG in a patient with severe aortic stenosis?
a. Left ventricular hypertrophy
b. Right atrial enlargement
c. Prolonged PR interval
d. ST-segment elevation
e. Wide QRS complex

36. Which of the following is a characteristic physical examination finding in aortic stenosis?
a. Holosystolic murmur at the apex
b. Diastolic murmur at the left sternal border
c. Ejection Systolic murmur at the right upper sternal border
d. Continuous murmur over the clavicle
e. Early diastolic murmur at the left lower sternal border

37. Which physical sign is associated with mitral stenosis?
a. ulsus paradoxus
b. Pulsus bisferiens
c. Pulsus alternans
d. Loud S3 heart sound
e. Diastolic rumble at the apex

38. Which of the following is the most common cause of aortic stenosis in the elderly?
a. Bicuspid aortic valve
b. Rheumatic fever
c. Senile calcific degeneration
d. Infective endocarditis
e. Marfan syndrome

39. Which physical examination finding is characteristic of mitral stenosis?
a. Systolic ejection murmur at the right upper sternal border
b. Mid-systolic click
c. High-pitched blowing holosystolic murmur at the apex
d. Loud S1 and opening snap with mid diastolic rumble
e. Pulsus paradoxus

40. Which of the following is the most common cause of chronic aortic regurgitation in developed countries?
a. Rheumatic fever
b. Bicuspid aortic valve

c. Infective endocarditis
d. Aortic dissection
e. Marfan syndrome

41. Which physical examination finding is characteristic of chronic severe aortic regurgitation?
a. Systolic ejection murmur at the right upper sternal border
b. Mid-systolic click
c. High pitched blowing diastolic murmur at the left sternal border
d. Pulsus paradoxus
e. Pericardial friction rub

42. Which of the following conditions is a common cause of acute aortic regurgitation?
a. Aortic dissection
b. Bicuspid aortic valve
c. MME Rheumatic fever
d. Myocardial infarction
e. Congenital heart defects

43. Which physical sign is associated with chronic severe aortic regurgitation?
a. Fixed splitting of the second heart sound
b. Pulsus paradoxus
c. Pulsus bisferiens
d. Loud S3 heart: sound
e. Water-hammer pulse

44. Which physical examination finding is characteristic of chronic severe mitral regurgitation?
a. Systolic ejection murmur at the right upper sternal border
b. Mid-systolic click
c. High-pitched blowing holosystolic murmur at the apex
d. Pulsus paradoxus
e. S4 heart sound

45. Which of the following is the most common cause of mitral stenosis worldwide?
a. rheumatic fever
b. Congenital mitral valve anomaly
c. Infective endocarditis
d. Marfan syndrome
e. Coronary artery disease

5. KIMS 2024

1. A 55-year-old male presents to the emergency department with chest pain that started suddenly while he was walking in cold weather. He describes the pain as a squeezing and burning sensation in the center of his chest. It was relieved within 5 minutes after he stopped walking. He has a history of hypertension and hyperlipidemia. Based on the characteristics of the chest pain, which of the following is the most likely diagnosis?
a. Decubitus angina
b. Musculoskeletal chest pain
c. Myocardial ischemia
d. Pericarditis
e. Pleurisy

2. A 40-year-old female presents to the clinic with a sharp chest pain that worsens when she takes a deep breath or coughs. The pain is localized to the left side of her chest and does not radiate. She recently recovered from a viral respiratory infection. On examination, she has a normal heart rate and no significant findings on auscultation. Based on the characteristics of the chest pain, which of the following is the most likely diagnosis?
a. Angina pectoris
b. Musculoskeletal chest pain
c. Myocardial ischemia
d. Myocarditis
e. Pleurisy

3. A 41-year-old male presents to the emergency department with chest pain and difficulty in breathing. He reports that the pain started suddenly after a heated argument with his colleague. The pain is accompanied by throat tightness and a tingling sensation around his mouth. His vitals are stable, and there are no signs of hypoxemia. Which of the following is the most likely diagnosis?

a. Anxiety and Hyperventilation Syndrome
b. Panic attack with anxiety-induced chest pain
c. Da Costas syndrome
d. Pulmonary embolism

4. A 65-year-old male presents with retrosternal oppression, hypotension, oliguria, and raised jugular venous pressure. On examination, heart sounds are quieter, and there is no audible friction rub. These findings suggest a large pericardial effusion. What additional clinical sign would be most indicative of cardiac tamponade?

a. Corrigan's pulse
b. Duroziez's sign
c. Kussmaul's sign
d. Pulsus paradoxus

5. A 60-year-old male with a history of metastatic lung cancer presents with progressive dyspnea, chest discomfort, and fatigue. On examination, he is hypotensive, tachycardic, and has a raised jugular venous pressure with distant heart sounds. An ECG shows low-voltage QRS complexes and electrical alternans. Echocardiography confirms a large pericardial effusion with diastolic collapse of the right atrium, consistent with cardiac tamponade. Despite fluid resuscitation, his blood pressure remains low. What is the most appropriate next step in his management?

a. Emergency percutaneous pericardiocentesis
b. High-dose corticosteroids for inflammatory control
c. Immediate intravenous inotropes and observation
d. Surgical pericardial window due to underlying malignancy

6. A 68-year-old female with chronic heart failure presents with sudden-onset shortness of breath and chest pain. She has a history of atrial fibrillation and is currently on anticoagulant therapy. Physical examination reveals unilateral leg swelling and warmth. What is the most likely explanation for her symptoms?

a. Acute pulmonary embolism resulting from a deep vein thrombosis
b. Atrial fibrillation leading to thromboembolism and acute myocardial infarction
c. Acute exacerbation of heart failure causing right-sided heart strain and peripheral edema
d. Fluid overload from heart failure exacerbated by inappropriate diuretic use

7. A 64-year-old patient with advanced heart failure (NYHA class I) and atrial fibrillation is being managed to improve symptoms and prevent hospitalization. The patient is currently on diuretics and ACE inhibitors. Considering the addition of digoxin or amiodarone to the treatment regimen, which of the following statements accurately reflects the clinical role of these medications?

a. Amiodarone can improve long-term survival in heart failure patients by controlling atrial fibrillation
b. Amiodarone should be used as the first-line therapy for rate control in heart failure patients with atrial fibrillation
c. Digoxin can provide rate control and reduce hospitalization rates in heart failure patients with atrial fibrillation, but does not improve long-term survival
d. Digoxin improves both symptoms and long-term survival in heart failure patients with atrial fibrillation

8. A 70-year-old patient with paroxysmal atrial fibrillation and a CHA2DS2-VASc score of 3 is evaluated for stroke prevention. Which of the following best describes the current recommendations for anticoagulant therapy in this patient?

a. DOACs like rivaroxaban and apixaban are preferred over warfarin for their ease of use and lower risk of interactions.
b. DOACS have a higher bleeding risk compared to warfarin, especially in patients with peptic ulcer disease.
c. Warfarin is the first-line treatment due to its long-term efficacy and ability to be reversed with vitamin K

d. Idarucizumab and andexanet alfa are used to reverse the effects of warfarin in case of major bleeding

9. A 62-year-old female with a history of systemic lupus erythematosus (SLE) presents with progressive fatigue, shortness of breath, and chest pain. Physical examination reveals a friction rub. Electrocardiography reveals diffuse ST-segment elevations. Which of the following cardiovascular complications is most likely related to her systemic disease?

a. Aortic dissection
b. Libman-Sacks endocarditis
c. Myocardial infarction d. Pericarditis

10. A 65-year-old male is being investigated for suspected infective endocarditis after presenting with fever and a new murmur. Blood cultures are obtained, and echocardiography is performed. Which of the following is the most accurate diagnostic approach for confirming infective endocarditis?

a. Collecting two sets of blood cultures from a central line at intervals of 26 hours
b. Collecting three to six sets of blood cultures from peripheral sites at intervals of 26 hours
c. Performing transthoracic echocardiography alone to detect vegetation
d. Waiting for the patient to develop pyrexia before collecting blood cultures

11. A 62-year-old male with cardiogenic shock following an acute myocardial infarction (MI) is being considered for immediate percutaneous coronary intervention (PCI). During his initial assessment, it is noted that the myocardium surrounding the infarcted area is contracting poorly. This phenomenon, which indicates that the myocardium may eventually recover, is referred to as:

a. Myocardial remodeling
b. Myocardial stunning
c. Myocardial hibernation
d. Myocardial necrosis

12. A 54-year-old male presents with a history of chronic chest pain and an abnormal electrocardiogram showing changes. Imaging studies reveal a pattern of myocardial damage consistent with ischemia. Despite the absence of recent symptoms, these findings suggest a previously unrecognized myocardial infarction. Which of the following sets of criteria is most appropriate for diagnosis?

a. Persistent ST-segment elevation, patho-anatomical findings of recent MI, and absence of non-ischemic causes
b. Abnormal Q waves with/without symptoms, imaging evidence of loss of viable myocardium, & patho-anatomical findings of prior MI
c. Elevated cardiac biomarkers, transient ST-segment changes, and evidence of recent ischemic events
d. Normal Q waves, imaging evidence of acute myocardial damage, and clinical symptoms consistent with ischemia

13. A 65-year-old male patient with a history of stable angina is scheduled for coronary angiography. This procedure will selectively image the left and right coronary arteries to provide detailed information about the extent and severity of coronary stenosis, thrombus, and calcification. Which of the following additional assessments can be used during coronary angiography to more precisely define plaque characteristics and severity?

a. Echocardiography and Doppler ultrasound tomography
b. Intravascular ultrasound and optical coherence
d. Magnetic resonance imaging and computed tomography
e. Electrocardiography and Holter monitoring

14. A 2S-year-old female presents to the emergency department with palpitations, dizziness, and

shortness of breath. Her ECG shows a narrow ORS complex tachycardia with a heart rate of 180 beats per minute. She has a history of recurrent supraventricular tachycardia (SVT). After initial stabilization, she is diagnosed with Atrioventricular Nodal Re-entrant Tachycardia (AVNRT). Which of the following is the most appropriate e long-term management strategy for this patient?

a. Oral B-blocker therapy
b. Oral verapamil therapy
c. Catheter ablation
d. Oral flecainide therapy
e. Implantable cardioverter-defibrillator (ICD)

15. A 6O-year-old male with a history of ischemic heart disease presents to the emergency department with palpitations, chest pain, and dizziness. His blood pressure is 85/60 mmHg, and his ECG shows a wide QRS complex tachycardia at a rate of 160 beats per minute. Which of the following is the most appropriate initial management step for this patient?

a. Correction of hypokalemia and hypomagnesaemia
b. Intravenous amiodarone bolus followed by continuous infusion
c. Intravenous lidocaine
d. Synchronized DC cardioversion
e. Intravenous beta-blocker therapy

16. A 60-year-old woman is admitted to the hospital after ingesting a large quantity of beta-blockers in a suicide attempt. She presents with severe bradycardia (heart rate of 30 bpm), hypotension (BP 80/50 mmHg), and signs of decreased consciousness. An ECG reveals a third-degree atrioventricular (AV) block. Which of the following is the most appropriate immediate n for this patient?

a. Administer intravenous calcium gluconate
b. Administer intravenous glucagon
c. Initiate temporary Trans venous cardiac pacing
d. Prepare for permanent pacemaker insertion

17. A 55-year-old male with a history of hypertension and hyperlipidemia presents to the clinic with chest discomfort. He describes the discomfort as a constricting sensation in the center of his chest that radiates to his neck and left arm. The discomfort occurs during his morning walks and is relieved within 5 minutes by rest. Which of the following features most strongly supports a diagnosis of typical angina?

a. Discomfort is associated with palpitations and sweating
b. Discomfort is not related to physical exertion
c. Discomfort is relieved by rest or glyceryl trinitrate (GTN) within 5 minutes
d. Discomfort is sharp and localized to the left side of the chest minutes
e. Discomfort occurs at rest and lasts for more than 20

18. Tension pneumothorax and cardiac tamponade are examples of which of the following?

a. Cardiogenic shock
b. Distributive shock
c. Hemorrhagic shock
d. Obstructive shock
e. Neurogenic shock

19. A two years old child is brought to ER with cyanosis and dyspnea of one hour duration. He had recurrent such episodes for the past half an year. O/E patient is deeply cyanosed, extremely irritable and tachypniec with finger clubbing. There is an ejection systolic murmur at pulmonary area. What is the most likely diagnosis?

a. Recurrent SVT(supraventricular tachycardia)
b. Aortic stenosis
c. Paroxysmal hyper cyanotic spells
d. Ebstein anomaly
e. Transposition of great arteries

6. AMC 2024

Q1.This is a rhythm strip from a 53-year-old showed shortness of breath. What is the diagnosis?

a. Atrial Flutter
b. Atrial Ectopics
c. Atrial Fibrillation
d. Sinus Tachycardia
e. SVT

Q2. A 38-Year-Old Woman presents with shortness of breath. Examination reveals a Blood Pressure of 150/50 mm of Hg. Pulse rate of 102 beats/min. Her JVP is not raised. There is no ankle edema. She has a Pan systolic Murmur best heard at the Apex. She has mild bilateral Basal Crackles. What is the diagnosis?

a. Aortic Stenosis.
b. Mitral Stenosis.
c. Tricuspid Regurgitation
d. Mitral Regurgitation
e. Aortic Regurgitation.

Q3. This is a Rhythm strip from a 78-year-old man with recurrent attacks of Syncope. What is the ECG diagnosis?

a. AtrialEctopics
b. 3rd DEGREE Heart Block
c. 1st DEGREE Heart Block
d. Mobitz II 2nd Degree Heart Block
e. Mobitz I 2nd Degree Heart Block

Q4. The Most common cause of primary Mitral Regurgitation is which one of the following?

a. rehumatic Heart Disease.
b. mitral Valve Prolapse.
c. infective Endocarditis.
d. left Ventricular Failure.
e. congenital Heart Disease.

Q5. A 56 years old male presented to ER department with history of chest pain for last 06 hours. His ECG shows ST elevation in leads II, III and aVf. He was given IV Morphine, Aspirin and Clopidogrel. What is the next most appropriate step to ensure revascularization in this patient?

a. IV Heparin. b. Enoxaparin
c. Warfarin d. Angiography & PCI.
e. IV Streptokinase.

Q6. A 16 years old boy presents to you with BP 180/100 and exertional shortness of breath. His 2D Echo shows postductal coarctation of aorta which of the following is associated with this condition?

a. Mitral Valve prolapse
b. Aortic Stenosis
c. Bicuspid Aortic Valve
d. Atrial Septal Defect e. PDA

Q7. A 24-YEAR-OLD Msc Chemistry Student presents to ED with Palpitations. The following is her Rhythm Strip. What does It show?

a. Atrial Flutter
b. Atrial Fibrillation
c. Supraventricular Tachycardia
d. Sinus Tachycardia
e. Ventricular Tachycardia

Q8. A 53-year-old man presents with chest pain Which ol the following features in history of present illness would be most consistent with Angina Pectoris?

a. Chest pain on inspiration.
b. Chest pain on exertion.
c. Chest pain on lying down.
d. Chest pain with swallowing.
e. Chest pain on coughing.

9. A 55-year-old man comes to a Cardiology clinic for a check up. He is concerned that his brother who is 2 years younger than him has had a heart attack. He is a bank manager by profession. He has a sedentary lifestyle and weighs 120 kgs. He is a smoker. His blood pressure is 160/100 mm of Hg. He says that a year ago he was diagnosed with high blood pressure and was prescribed medications which he never bothered to take. What do you think should be your systolic blood pressure goal with treatment?

a. Less than 140. b. 120-130

c. 130 d. 150 e. 100.

Q10. A 55-year-old Woman comes to the Emergency Department with Altered Consciousness Her Blood pressure is 180/120 mm of Hg. Her worried husband says that she had a generalised seizure at home. She has a background of hypertension and a minor stroke 3 years ago. What is the most likely diagnosis?

a. Epilepsy.

b. Stroke

c. Hypertensive Encephalopathy

d. Hypertensive Urgency

e. Hepatic Encephalopathy

Q11. A 65-year-old lady was brought to the emergency department by her husband after she had a fight with her neighbor. She had been well until now and did not have any documented history of hypertension, Diabetes Mellitus or Ischemic Heart disease. The husband told you that she became short of breath at home. On the way to the hospital however she had gradually started to feel better. Her Blood pressure was 170/100 Her Pulse was 110 per minute. Her Spo2 was 99% on room air. What should be the best approach in this situation?

a. Sublingual Nifedipine.

b. Sublingual Captopril.

c. Injection Furosemide.

d. Recheck Blood pressure after 15 minutes

e. Inj Metoprolol 5 mg STAT

Q12. A 70-year-old man was referred by his GP to the Cardiology clinic with shortness of breath on exertion. On examination his blood pressure is 140/80 Pulse is 65 BPM Formation of the precordium reveals that his Apex beat is in the 5thintercostal space with a forceful character. The second heart sound is soft. The is an ejection systolic murmur at the second intercostal space at the right of the sternum. What other symptoms should you specifically ask for?

a. Orthopnea

b. Chest pain on inspiration

c. Exertional syncope

d. Cough

e. Palpitations

Q13.With regards to the modern principles of pharmacological treatment of heart failure what are the goals of treatment of heart faliure?

a. Relieving symptoms

b. Preventing Death

c. Preventing Hospitalization

d. Improving functional status

e. All of the above

Q14. A 35-year-old woman is sent by her GP for evaluation of shortness of breath on exertion and palpitations. On enquiry she states that she has become progressively short of breath over the last 1 year and now cannot walk without getting short of breath from her bed t0 the bathroom. Her blood pressure is 130/80 mm of Hg. Her pulse is 120 beats per minute and is irregularly, Auscultation of her precordium reveals diastole murmur, Her ECG shows atrial fibrillation. What diagnostic test would you order?

a. Arterial Blood Gases

b. Chest.X Ray

c. D Dimers

d. Cardiac Troponins

e. Echocardiography

Q15. A newborn presented with severe cyanosis, CXR shows a small egg-shaped heart. What is your diagnosis?

a. Tetralogy of fallot b. TGA

c. TAPVR d. LargeVSD e. PDA

Q16. A 3 months old baby present with the history of irritability sweatiness and facial puffiness for days. He has tachycardia, tachypnea and gallop rhythm with hepatomegaly on examination. What is the diagnosis?

a. Large VSD
b. Lobar Pneumonia
c. Acute Myocarditis
d. Nephrotic Syndrome
e. Cardiomyopathy

Q17. A 3 months old present with a history of upper respiratory tract infections, now present with signs and symptoms of CCF. What is the diagnosis?

a. Large VSD
b. Lobar Pneumonia
c. Acute Myocarditis
d. Nephrotic Syndrome
e. Cardiomyopathy

Q18. A 1-month old baby presents with pallor and irritability and hepatomegaly on examination, ECG shows narrow QRS complexes with no visible P waves and heart rate of 220/min. What is the diagnosis?

a. Acute Myocarditis
b. Supraventricular Tachycardia
c. Ventricular Tachycardia
d. Cardiomyopathy e. Sinus Tachycardia

Q19. A 57-year-Old Diabetic was recently Discharged from Hospital. His Discharge slip mentions the diagnosis of Congestive Heart Failure Secondary to Coronary Artery Disease. His Blood Pressure is 130/80 mm of Hg. His pulse is 70 BPM. He has no signs of Congestion. He claims he has no Shortness of Breath on Activities of Daily Living.His medications include. Aspirin Enalapril 10mg, Atrovasastin 40g. Furosemide 40mg twice a day. What is the most appropriate medication to add to his drugs at this stage ? stage?

a. Spironolactone
b. Digoxin c. Sacubitril Valsartan
d. Ivabridine e. Bisoprolol

Q20.A 60 years old Gentleman comes back for a follow up Vidits to the cardiology OPD. He claims that he has no shortness of breath. He sleeps well. His only complaint is unilateral Breast enlargement. Which one of this medication would you like to stop?

a. Bisoprolol
b. Lisinopril.
c. Furosemide
d. Empagliflozin
e. Spironolactone

Q21.A 70-year-old Hypertensive, Diabetic presents to the cardiology Outpatients with Shortness of Breath, Orthopnea. Her Blood pressure is 160/90 mm of Hg Pulse is 99 BPM. Her JVP is raised upto the angle of jaw. She has edema up to her ankles. She has mild bilateral basal crepitations. She undergoes an Echocardiogram which is reported as Concentric Left Ventricular Hypertrophy with an ejection fraction of 53%. Normal Mitral and Aortic Valves. What is the best description of her condition?

a. Heart Failure.
b. Uncontrolled Hypertension.
c. Systole Heart Failure.
d. Right sided Heart Failure.
e. Heart Failure with Preserved ejection fraction.

Q22.A 50-year-old man is brought to the Emergency with a Blood pressure of 180/140 in his Left Arm. He complains of severe chest pain for the last 4 hours. He has a background history of Hypertension for the last 4 years but has been non-compliant with medications. On examination He seems to be in agony. His blood pressure in the right arm is 150/90. His Radial Pulse on the Right side is low volume. His ECG is normal. What do you think is number I in the Differential Diagnosis?

a. Coarctation of Aorta.
b. Acute Myocardial Infarction.
c. Uncontrolled Hypertension
d. Dissection of Aorta
e. Right Subclavian Artery stenosis.

Q23. A35 year old Man presents to the ED with productive cough. On routine examination his BP is found to be 145/95. What would you do?

a. Start him Lisinopril 5mg Once a Day and follow him in 2 weeks with renal function tests.
b. Start Bisorolol 5mg Once a day and follow him with Fasting sugar and lipid profile.
c. Ignore the BP since this was just an incidental finding
d. Take a history to screen for end organ damage, cardiovascular risk factor and exclude or otherwise secondary hypertension.
e. Start a low dose Diuretic and follow up with uric acid Levels in 2 weeks.

Q24. A 35 years old chronic smoker patient presented with 3 hours history of Central chest pain, radiating to both arms associated with sweating.12 Leads ECG done in ED as shown below.

What is the most relevant statement in this scenario?

a. Diagnosis is Unstable Angina & management involves Primary PCI
b. Diagnosis is Non-ST elevation MI & management involves Primary PCI
c. Diagnosis is ST-Elevation MI (STEMI) & management involves Primary PCI
d. Diagnosis Is acute Pericarditis management involves Primary PCI
e. Diagnosis is acute Myocarditis management involves Primary PCI

Q25. A 73 years old male known case of ischemic cardiomyopathy with LV EF 30% presented to ER with shortness of breath and orthopnea. What is the most sensitive sign to diagnose acute LVF (left ventricular failure) in this case.

a. Bibasilar crepitations in lung fields
b. Raised JVP
c. D Pedaledema
d. Third heart sound (S3)
e. Pansystolic murmur

7. KMC 2024

1. A 55 – year old woman , visits her general practitioner for a routine checkup . Her blood pressure is consistently elevated , with readings around 140/90mmHg on multiple visits . she has no significant medical history . Based on the scenario , what is the most appropriate initial step in management of of her hypertension?

a. Initiate lifestyle modifications and reassess blood pressure in 3 months
b. Order an ambulatory blood pressure monitoring (ABPM) to confirm the diagnosis
c. Perform additional investigations, including renal function tests and an echocardiogram
d. Prescribe a single antihypertensive medication and reassess blood pressure in 2 weeks
e. Refer mrs. Johnson to a specialist for further evaluation

2. A 45-year-old man with a known history of intravenous drug use, presents to the emergency department with fever, fatigue and a new heart murmer. Blond cultures are drawn and an echocardiogram reveals a vegetation on mitral valve based on the scenario what is the most likely causative organism of endocarditis in this patient?

a. Bartonella henselae
b. Staphylococcus aureus
c. Coxiella burnetii
d. Streptococcus viridans
e. Enterococcus faecalis

3. A 35 years old female patient presented to Medical OPD with 3 months history of fever, body aches. On examination she was found to have parotid enlargement and a slit lamp examination of the fundus revealed uveitis. On examination she is unable to close left eye and having drooping of saliva from the same side of the mouth. Her chest x-ray revealed bilateral hilar shadows. What is your likely diagnosis?

a. Bell's palsy
b. Disseminated Tuberculosis
c. Heerfordt syndrome
d. Lofgren syndrome
e. Muckillz syndrome

4. A 55-years-old man presented to medical emergency with severe shortness of breath (Stage & functional status). He has anginal pain and nonproductive cough. On Physical examination, JVP is raised, loud P2 and tricuspid regurgitation. Echo is documenting: patent foramen ovale with right to left shunt causing cyanosis. Which one is the gold standard investigation in this case?
a. Arterial blood gases
b. Electrocardiogram
c. Echo with Doppler
d. Right side cardiac catheterization
e. X ray chest

5. A 19 year-old woman presents to the emergency department with new-onset chest pain and shortness of breath. the pain started today and is centrally located, sharp in nature and doesn't change with breathing or position. she has been unwell for the past week , with fever and joint pains. She has no medical history of note . On examination she has bibasilar crackles , with dull heart sounds with no sounds. Her vital signs are normal apart from respiratory rate of 24/min. An ECG is performed and shows diffuse T-wave inversion. What is the most likely diagnosis.
a. Cardiac tamponade
b. Coronary artery vasospasm
c. Dilated cardiomyopathy
d. Myocarditis e. Pericarditis

6. A 62 year old woman is admitted to the medical ward with a 3 week history of fever and lethargy . on examination you note a few splinter hemorrhages in the finger nails and a loud systolic murmer at the apex. Your consultant instructs you to take 3 sets of blood cultures and to arrange an echocardiogram. Later that day you receive a call from microbiology about the provisional blood culture results . which of the following is most likely to have grown?
a. Fungal hyphae
b. Gram negative bacilli
c. Gram negative cocci
d. Gram positive bacilli
e. Gram positive cocci

7. A 65 years old woman presents to her primary care physician with intermittent chest discomfort that occurs with exertion and improves with rest . she also experiences dyspnea on exertion. She has a history of hypertension and hyperlipidemia . Based on the scenario, which of the following is the most appropriate initial diagnostic test for her?
a. Chest CT angiography
b. Coronary angiography
c. Echocardiography
d. Exercise stress test
e. High-sensitivity cardiac troponin measurement

8. A 60-year-old male who recently underwent cardiac surgery presents with fever, fatigue, and weight loss . the patient was discharged after a successful mitral valve replacement 4 months ago and as such an urgent echocardiogram is performed. The echo confirms the presence of a new valvular lesion and]diagnosis of endocarditis is made .three sets of blood cultures are taken. Which organism is most likely to be responsible for the patients diagnosis?
a. HACEK organisms
b. Staphylococcus aureus
c. Staphylococcus bovis
d. Staphylococcus epidermis e. Streptococcus mitis

9. A 45 year old man presents to the emergency department with chest pain that radiates to his back. On questioning he says in the last couple of days the chest pain has started, and it is much worse on inspiration. On examination you notice that when the patient breaths in , of days , his jugular venous pulse (JVP) rises. What is the most likely cause of this man's pain?
a. Cardiac tamponade b. Constructive pericarditis
c. Pancreatitis d. Pneumonia
e. Unstable angina

10. A 45-year-old female, presents to the clinic with recurrent episodes of chest pain that occur at rest and are associated with transient ST- segment elevation on the electrocardiogram (ECG). The pain typically occurs in the early morning hours. There is no history of Diabetes, Hypertension or Dyslipidemia.
Based on scenario, which of the following is the most appropriate diagnosis for her?
a. Acute myocardial infarction b. Silent ischemia

c. Stable angina d. Unstable angina
e. Variant (prizmetal angina)

11. A 65 year old man , visits his general practitioner for a routine check-up. He has a history of hypertension and a currently taking an angiotensin-converting enzyme (ACE) inhibitor for blood pressure control. His blood pressure reading today is 170/100mmHg. Based on the scenario, what is the most appropriate next step in the management of his hypertension?
a. Increase the dose of ACE inhibitor
b. Add a calcium channel blocker to the current regime
c. Switch the ACE inhibitor to a calcium channel blocker
d. Prescribe a Beta-blocker in addition to the ACE inhibitor
e. Perform additional Investigations , including renal artery ,ultrasound and 24-hour urine collection for proteinuria

12. A 50-year-old woman, visits her general practitioner with complaints of severe headache, blurred vision, and epistaxis. Her blood pressure reading is 200/120 mmHg. Based on the scenario, what is the most appropriate next step in her management?
a. Evaluate for secondary causes B of hypertension, including renal artery stenosis
b. Order a complete blood count (CBC) and renal function tests
c. Perform an electrocardiogram (ECG) to assess for left ventricular hypertrophy
d. Prescribe antihypertensive medication immediately
e. Refer Mrs. Arsalan to the emergency department for further evaluation

13. A 63-year-old man is reviewed by his physician regarding his blood pressure. He has been on amlodipine for several years, but over the past month, he has noticed that his home blood pressure readings are consistently higher than previously an average of 157/86 mmHg. Today, blood pressure is recorded as 155/88 mmHg. Recent blood tests revealed a potassium level of 4.8 mmol/L. What is an appropriate next step in management, according to guidelines?
a. Add bisoprolol
b. Add diltiazem
c. Add doxazosin
d. Add spironolactone
e. Add Valsartan

14. A 58-year-old man presents with breathlessness and chest discomfort. He has diet controlled diabetes, hypertension and hyperlipidaemia. He has a weak rapid, regular pulse of 160bpm, blood pressure is 80/50mmHg, he is cold peripherally and crepitations are heard bibasally on auscultation of the chest. An ECG shows a regular broad complex tachycardia. What is the best initial management of this arrhythmia?
a. Adenosine
b. amiodarone
c. diltiazem
d. Electrical cardioversion
e. Vagal manoeuvres

15. A 55-year-old woman, presents to the emergency department with new onset chest pain at rest. The pain is severe but variable and episodes are lasting around 30 minutes. She has a history of hypertension and hyperlipidemia. Based on the scenario which of the following is the most appropriate diagnosis for him?
a. Percarditis b. Silent ischemia
c. Stable angina
d. Variant (Prinzmetal) angina

16. A 65-year-old woman with a history of mitral valve prolapse, presents to her primary care physician with fatigue. low-grade fever, and night sweats. On examination, a new regurgitant murmur is appreciated. Blood cultures are drawn, and an echocardiogram reveals a vegetation on the mitral valve. Based on the scevano, what is the most appropriate initial treatment for his endocarditis?
a. Intravenous ceftriaxone
b. Intravenous penicillin and gentamicin
c. Intravenous vancomycin and gentamicin
d. Oral amoxicillin
e. Oral doxycycline and rifampin

17. A 58-year-old man, presents to the emergency department with severe chest pain radiating to his

left arm. He has a history of hypertension and hyperlipidemia. His electrocardiogram (ECG) shows ST-segment elevation in leads II, III, and aVF. Troponin levels are elevated. Which of the following is the most appropriate management for Mr. Arbaz that is proven to be most effective?
a. Administration of thrombolytic therapy
b. Antiplatelet therapy with aspirin and clopidogrel
c. Intravenous nitroglycerin infusion
d. Monitoring in the intensive care unit (ICU)
e. Percutaneous coronary intervention (PCI)

18. Mr.Maaz ,a 50 year old man, presents to the emergency department with severe chest pain that radiates to his left arm. He also feels shortness of breath and diaphoresis. The pain started while he was shoveling snow outside. Based on the scenario, which of the following is the most appropriate immediate management for Mr.Maaz?
a. Administer nitroglycerin sublingualy
b. Order a chest x-ray
c. Perform an electrocardiogram(ECG)
d. Refer for immediate cardiac catheterization
e. Start intravenous opioids for pain relief

19. A 70-year-old man presents to the Emergency Department with a hour history of palpitations and collapse. On examination, he has a swollen ankles and cool peripheries . His observations are as follows:
pulse rate 46 beats per minute, irregularly irregular and thread
blood pressure unrecordable despite three attempts
respiratory rate 26 breaths per minute
Oxygen saturations 91% on air
He was previously well with no history of any structural or ischaemic heart disease. ECG shows no P waves. What is the most appropriate initial management?
a. Immediate electrical (DC) cardioversion followed by thromboprophylaxis
b. Pharmacological cardioversion with amiodarone intravenously
c. Pharmacological cardioversion with flecainide intravenously
d. Thromboprophylaxis with heparin for three weeks followed by DC cardioversion
e. Trans-oesophageal echocardiogram followed by intravenous amiodarone

20. A 50 year-old woman with no medical conditions comes to your outpatients with a 6-month history of worsening exertional dyspnea. Physical examination is unremarkable. The laboratory shows a normal Pro-BNP level. An echo shows normal heart chamber and ventricular function. The resting RVSP is 42 with a mild tricuspid regurgitation. Which medication can be one of the treatment options considering the underlying diagnosis?
a. Ace-inhibitors
b. Beta-blockers
c. Calcium channel blockers
d. Sacubitril
e. Trimetazidine

21. A 62-year-old man with a background of chronic obstructive pulmonary disease (COPD) attends for his annual check-up. He is on 1 litre of home oxygen for 15 hours a day. His treatment for COPD includes salbutamol, Symbicort (budesonide/formoterol) and tiotropium inhaler. On examination, you can hear scattered wheeze with no crackles. You also note pitting oedema in both legs. When you listen to his heart sound, you suspect that he may have pulmonary hypertension. Which of the following features would support this diagnosis?
a. A loud second heart sound
b. A loud second heart sound
c. A soft first heart sound
d. A soft second heart sound
e. Splitting of first heart sound

22. A 54-year-old man presents to the GP with 3 episodes of dizziness and fainting. An ECG is performed that shows a bradycardia with intermittently non-conducted P waves, there is no sign of PR elongation or shortening of the waves that are conducted. Given the most likely diagnosis, what is the best long-term management options?
a. Accessory pathway ablation
b. Atropine
c. Beta blocker
d. Pacemaker insertion
e. Reassurance with 6 monthly review

23. Mr. Elahi, a 62-year-old man, presents to the emergency department with palpitations and presyncope. His ECG shows a regular wide QRS complex tachycardia at a rate of 200 beats per minute, with absence of P waves. Based on the scenario, which of the following is the most likely diagnosis?

a. Atrial fibrillation (AF)
b. Atrioventricular nodal reentrant tachycardia (AVNRT) c. Sinus tachycardia
d. Supraventricular tachycardia (SVT)
e. Ventricular tachycardia (VT)

24. A 45-year-old male presents with pleuritic chest pain that improves with leaning forward and worsens with inspiration. ECG shows diffuse ST-segment elevations. What is the most likely diagnosis?

a. Acute myocardial infarction (MI)
b. Cardiac tamponade
c. Constrictive pericarditis
d. Acute Pericarditis e. Stable angina

25. A 65-year-old female with a history of hypertension and diabetes presents with shortness of breath, orthopnea, and bilateral crackles on lung auscultation. Her Pulse is 45 beats per minute. ECG shows normal rhythm with occasional P waves and regular but wide QRS complexes. Echocardiogram shows an ejection fraction of 25%. What is the most likely diagnosis?

a. First-degree heart block
b. Physiological Bradycardia
c. Second-degree heart block type I (Wenckebach)
d. Sinus bradycardia with normal sinus node function
e. Third-degree heart block (complete heart block)

26. A 35-year-old male presents to the emergency department with chest pain and fever for 2 days. He denies any significant past medical history or family history. Last week he returned to the Pakistan from a 4-week holiday in Australia. On examination, he is in obvious discomfort but is able to speak in full sentences. His observations show a heart rate 120 beats/min , blood pressure 120/85 , respiratory rate 22 breaths/min oxygen saturation 97% on room air , temperature 38.2^C . on auscultation of his chest your clear lung fields and a grating to- and-fro sound is heard over the pericardium. What is the most likely cause of this patients chest pain?

a. Acute pericarditis
b. Community acquired pneumonia
c. Dressler's syndrome
d. Pulmonary embolism
e. Tuberculosis

27. A previously asymptomatic 30-year old woman has presented to the emergency department with severe dyspnoea while jogging. She stated that this has occurred twice before in the last month but this time it was more serious which prompted her to seek help. She has not been diagnosed with any conditions. She is adopted and is aware that her biological mother suffered from rheumatic fever as a child and biological father. had 'some sort of heart problem'. All vital signs were within normal range. An ECG was done and showed left ventricular hypertrophy. What is the most likely diagnosis?

a. Aortic stenosis
b. Friedrich's ataxia
c. Hypertrophic obstructive cardiomyopathy (HOCM)
d. Mitral stenosis
e. Wolff-Parkinson White

28. In the management of hypertension in general practice, which of the following findings should raise suspicion for secondary hypertension?

a. Elevated serum creatinine levels
b. Family history of hypertension
c. Obesity
d. Sedentary lifestyle e. Age at onset (<50 years)

29. Mr.Zahid, a 60-year-old man, is three days post myocardial infarction. He is currently asymptomatic and has been started on optimal medical therapy. Based on the scenario, which of the following interventions is most appropriate for risk stratification and secondary prevention in Mr. Zahid?

a. Cardiac magnetic resonance imaging (MRI) to evaluate myocardial viability
b. Coronary angiography to assess the extent of coronary artery disease
c. Echocardiogram to assess left ventricular function
d. Exercise stress test to evaluate functional capacity

e. Serial cardiac troponin measurements to monitor for recurrent infarction

30. Mrs. Iqbal, a 70 year woman, presents to the clinic with episodes of lightheadedness and syncope. Her ECG shows a prolonged PR interval of 300 milliseconds , with ocassional dropped beats. Based on the scenario , which of the most likely diagnosis?
a. Atrial fibrillation
b. Atrioventricular block
c. Sick sinus syndrome
d. Sinus bradycardia
e. Wolff-Parkinson White (WPW) syndrome

31. Based on the recent infective endocarditis diagnosis criteria, what are the two most important parameters for the diagnosis of this infection?
a. ECG changes and an audible murmur on examination
b. Increased CRP and positive blood culture
c. Positive blood cultures and echocardiographic changes.
d. Positive ASO titers
e. Splenomegaly and a positive blood culture

32. A 60-year-old male presents with chest pain and exertional dyspnea. ECG shows diffuse ST-segment elevations in V2 to V4. Troponin levels are high. What is the most likely diagnosis?
a. Acute anterior MI
b. Acute inferior MI
c. Acute lateral MI
d. Right ventricular MI
e. Unstable angina.

33. A 55 year old woman, presents emergency department of a local hospital where the facilities of of cardiac services are not available, with sudden onset severe chest pain and diaphoresis. The pain started at rest and has been ongoing for the past 30 minutes. She has a history of smoking and hypertension. ECG shows ST elevations in inferior leads. The nearest Cath lab facility is 4 hours away. Based on the scenario, which of the following is the mast appropriate next step in the management of her?
a. Take high dose axprin orally
b. Take sublingual nitroglycerin
c. C Take morphine orally
d. Take IV frusamide
e. Take IV heparin

34. A 60-year-old man, presents to his primary care physician with recurrent episodes of chest discomfort that occur predictably with exertion and resolve with rest or nitroglycerin. The symptoms have been stable for the past few months. He has a history of hypertension and hyperlipidemia. Based on the scenario, which of the following is the most appropriate diagnosis for her?
a. Acute myocardial infarction
b. Silent ischemia
c. Stable angina
d. Unstable angina
e. Variant (prinzmetal) angina

35. You are called to see a 74-year-old patient who is complaining that her heart is racing. On examination, her heart rate is 209bpm and she appears breathless. Cardiac monitoring confirms a rapid narrow complex tachycardia. She states that she is now experiencing chest pain, what is the most appropriate management step?
a. Atropine 500micrograms IV
b. Echocardiogram
c. Prescribe morphine for her chest pain
d. Salbutamol inhaler up to 10 puffs
e. Synchronised DC cardioversion

36. A 72-year-old female presents with palpitations and feelings of light headedness for one month. Her pulse is regular at 84 beats per minute and her ECG is not indicative of any specific pathophysiology. On examination, you note a grade 3 diastolic murmur and when measuring her pulse you notice that her head nods subtly in time with her heart beat. Her symptoms are most likely the result of which pathology?
a. Aortic regurgitation
b. Aortic sclerosis
c. Aortic stenosis
d. Mitral regurgitation
e. Mitral stenosis

37. A 70 years old male presents with symptomatic bradycardia and a resting heart rate of 40bpm. He has no history of heart failure. What is the most appropriate indication for a pacemaker?

a. First- degree heart block
b. Physiological bradycardia
c. Second- degree heart block type 1 (wenckebach)
d. Sinus bradycardia with normal sinus node function
e. Third- degree block

38. Ms. Tamana, a 45-year-old woman, presents to the clinic with episodes of rapid palpitations lasting for few minutes. She feels her heart racing and experiences occasional dizziness during these episodes. An ECG is performed during an episode, and it shows regular narrow QRS complex tachycardia at a rate of 180 beats per min. based on the scenario , which of the following is most likely diagnosis?
a. Atrial fibrillation (AF)
b. Atrioventricular nodal reentrant tachycardia (AVNRT)
c. Supraventricular Ventricular tachycardia (SVT)
d. Ventricular tachycardia (VT)

39. A 56-year-old woman presents to the emergency department with a 6-hour history of palpitations. She describes the sensation as "fluttering and racing". She has never had this before. She is otherwise well, has no past medical history, and takes no medication. An ECG shows atrial fibrillation (AF). An echocardiogram shows no evidence of structural heart disease. Her blood tests are unremarkable. What is the most appropriate medication to treat this patient?
a. Atenolol
b. Digoxin
c. Diltiazem
d. Flecainide
e. Verapamil

40. Ms.Humaira, a 35-year-old woman with a history of congenital heart disease and a ventricular septal defect (VSD) repair in childhood, presents to her cardiologist with fever and malaise. On examination, a new murmur is heard. Blood cultures are drawn, and an echocardiogram reveals a vegetation on the repaired VSD patch. Based on the scenario what is the most llikely mechanism of endocarditis in this patient?
a. Direct spread of an infection from a dental procedure
b. Hematogenous spread of B infection from another site
c. Infection of a preexisting bicuspid aortic valve
d. Infection of a previously undetected VSD
e. Infection of the prosthetic material used for VSD repair

41. A 60-years-old smoker man presented with progressive dyspnea. On examination, he is plethoric and cyanosed. Chest examination shows reduced air entry bilaterally. Cardiac examination shows right ventricular heave with MR and TR. X ray chest revealed cardiomegaly. What is the most probable diagnosis?
a. Congestive cardiac failure
b. COPD
c. Cor Pulmonale
d. Left heart failure
e. Right heart failure

42. A 55-year-old man visits his GP for a routine blood pressure (mmHg) check. After obtaining a reading the GP tells him he may have stage 1 hypertension and will need ambulatory blood pressure monitoring (ABPM) What reading is the GP likely to have obtained?
a. 134/89mmHg
b. 139/86mmHg
c. 148/92mmHg
d. 195/110mmHg
e. 85/55mmHg

43. A 38-year-old man presents to the Emergency Department with sudden onset of uncontrollable epistaxis and chest pain. He is severely anxious and has already vomited on the way to hospital. The medical history reveals that he is a long-term user of recreational drugs especially amphetamine. His blood pressure reading is 205/110 mmHg and fundoscopy reveals retinal bleeding with papilloedema. Which of the following is the most likely cause of this man's symptoms?
a. Encephalopathy
b. Malignant hypertension
c. Myocardial infarction
d. Hypertensive heart failure
e. Hepatic Encephalopathy

44. A 66-year-old man presented to his general practitioner with a longstanding history of leg

swellings is now also complaining of becoming short of breath when walking. He has a background of chronic obstructive pulmonary disease Ischaemic heart disease and diabetes mellitus. He recently stopped smoking after doing so for the last 40 years and is now retired at home living with his wife in a two-bedroom house. Upon examination, he had a pansystolic murmur loudest at the left sternal edge with peripheral pitting oedema to the shins and a clear chest when auscultated. He appeared comfortable at rest and was not in any distress. What is the most likely cause for his murmur?

a. Connective tissue disorder
d. Hyperdynamic circulation
c. Patent ductus arteriosus
d. Pulmonary hypertension
e. Ventricular septal rupture

45. A patient with heart-failure is being reviewed by the cardiologist. Their symptoms are under control at rest although the patient comments that walking to the shops can make him quite breathless. 5-years-ago, he says, this would not have been a problem. He doesn't struggle, though, making breakfast in the morning or moving around his house. He does mention though that more intense house-chores such as cleaning are a struggle. According to the NYHA classification, what stage is this patient at?

a. Stage I
b. Stage II
c. Stage III
d. stage IV
e. Stage V

46. A 65-year-old gentleman with known diabetes and heart failure is currently admitted to the general medical wards suffering from atrial fibrillation. He presented with a fast tachycardia of 130 beats per minutes. He has been given atenolol but this has not yet reduced his heart rate below 120/min. Which of the following can be added as a second-line medication to help control his heart rate?

a. Adenosine
b. Amiodarone
c. Amlodipine
d. Digoxin
e. Verapamil

47. A 60-year old man presents with a history of 2-week history of dyspnoea and leg swelling. On examination, he has raised JVP that doesn,t fall with inspiration. His lung bases are clear. His only past medical history is angina for which he was recently investigated with a coronary angiogram. Given this presentation, which of the following is the most likely cause of his presentation?

a. Acute heart failure
b. Acute pericarditis
c. Cardiac tamponade
d. Constrictive pericarditis
e. infective endocarditis

48. A 35-years-old man presented to medical OPD with day one drowsiness and lack of concentration. He met a road side accident one month back but fortunately he survived. His wife gives history that he thrashes leg to one side and there is frequent arousal from sleep. Examination shows a large goiter with retrosternal extension. Lab investigations show erythrocytosis. How will you confirm your diagnosis?

a. Electrocardiography
b. Electroencephalography
c. Electromyography
d. Polysomnography
e. Thyroid function tests

49. A 75-year-old man presents to the physician with a 10-week history of worsening oedema in his lower legs and breathlessness that the he feels is getting worse, Initially, he was only breathless walking up the stairs but now he feels he is breathless sitting in his chair at rest. Occasionally, he can wake up at night gasping for breath. On examination, pitting oedema is present up the mid-calf, his respiratory rate is 24 breaths/minute, his heart rate is 110 beats/ minute, his blood pressure is 105/50 and his oxygen saturation on air is 91%. The physician refers the patient for an echocardiogram which shows a reduced left ventricular ejection fraction. (LVEF). What is the first-line treatment for this patient's most likely diagnosis?

a. ACE inhibitor + diuretics
b. ACE inhibitor+ calcium channel blocker
c. ACE inhibitor and beta blocker
d. Beta blocker only
e. Beta blockers +calcium channel blocker

50.A 5 years old boy is brought to emergency with a history of loose motions and vomiting for the last 5 days which has increased in frequency for the last 24 hours. Parents got worried when they observed their child getting lethargic since morning. On assessment the child is severely dehydrated. You start dehydration correction and order investigations. Labs show severe metabolic acidosis with a serum creatinine of 4mg/di serum sodium 140mEq/l and potassium of 6.5mEq/L. What ECG findings would you expect in this patient?

a. Flattened P wave
b. No ECG abnormality
c. Peaked P waves
d. Peaked T waves
e. Shallow T wave

51. A 50-year-old male presents with dyspnea, fatigue, and bilateral lower extremity edema. Echocardiogram shows dilated ventricles with decreased systolic function. What is the most likely diagnosis?

a. Dilated cardiomyopathy
b. Hypertrophic cardiomyopathy
c. Ischemic cardiomyopathy
d. Myocarditis
e. restructive cardiomyopathy

52. A 20 year-old woman presents for an insurance in medical examination. On feeling the woman's radial pulse, the doctor can feel 2 separate systolic beats, as if there was a double pulse . which of the following conditions may be cause of this woman's physical findings ?

a. Hypertrophic obstructive cardiomyopathy (HOCM)
b. Mitral regurgitation
c. Mitral stenosis
d. Restructive cardiomyopathy
e. Aortic regurgitation

8. NWSM 2024

1. A 68-year-old male with a history of hyperlipidemia, diabetes, and prior myocardial infarction presents to the emergency department with crushing chest pain. The pain began suddenly while he was walking up a flight of stairs and radiates to his left arm. On examination, his blood pressure is 160/90 mmHg, and his heart rate is 105 bpm. His ECG reveals ST-segment elevation in leads V1 to V4. What is the initial treatment for this patient?

a. IV Diuretics
b. Administration of antibiotics only
c. Immediate coronary angiography and PCI
d. Normal Saline Infusion
e. NSAIDS

2. A 66-year-old man presents to A&E with central chest pain, radiating up into his jaw and shoulder. The pain has persisted for 4 hours and increasing in intensity. He has a 40-pack-year smoking history. He has a past medical history of hypertension, type 2 diabetes, and hypercholesterolemia. An ECG shows 5mm ST elevation in leads aVF, II, and III. A diagnosis of Inferior STEMI is made. Given his presentation and past medical history, what is the vital step to take in the Emergency department?

a. Loading doses of Aspirin and Ticagrelor
b. IV PPI
c. Paracetamol infusion
d. 25% dextrose infusion
e. Normal Saline

3. A 26 year old football player collapsed during the match. CPR was started. Initial ECG showed ventricular tachycardia for which he was DC cardioverter successfully. He was admitted for workup. He was doing well up till now and never had any chest pain or palpitation. Although he had a positive family history of sudden cardiac arrest in his 1st cousins and one of his uncle. CVS exam revealed an Ejection systolic murmur at the Right lower sternal edge, which increased on standing from the squatting position. ECG showed deep t-wave inversions. Echo showed asymmetrical hypertrophy of the interventricular septum. What is the most likely diagnosis?

a. Vasovagal syncope

b. Anxiety neurosis
c. Fractured Tibia
d. Pneumothorax
e. Hypertrophic obstructive cardiomyopathy

4. A 60-year-old male with a history of smoking and hyperlipidemia presents with sudden-onset severe chest pain that started while he was at rest. He is anxious and sweating. On examination, he is tachycardia with a heart rate of 115 bpm, and his blood pressure is 140/85 mmHg. An ECG reveals ST-segment elevation in leads V1 to V4, so you made a diagnosis of:
a. Posterior Wall MI
b. Lateral Wall MI
c. Anterior Wall MI
d. Inferior Wall MI
e. NSTEMI

5. A 28 years old lady is 35 weeks pregnant. She is brought to ER with severe abdominal pain and visual disturbance. She also had 2 episodes of fits. Her vitals are Pulse: 96 beats per minute BP: 154/98 Oxygen saturation: 95% on room air. She has normal audible S1+S2 with no added heart sounds. Her chest is clear. Fetal movements and Heartbeat Ok. ECG: Sinus rhythm, No STT changes. Hb: 12g/dl, Platelets are low. Urine shows an Albumin creatinine ratio of >30mg/mmol. Alt is 3 times high the upper limit. What is the most likely diagnosis?
a. Grade 1 hypertension
b. Eclampsia
c. Pre-eclampsia
d. Gestational hypertension
e. Severe hypertension

6. A 45-year-old female with a history of dilated cardiomyopathy presents with increasing fatigue, shortness of breath, and a dry cough for the past 3 weeks. On examination, her blood pressure is 155/80 mmHg, heart rate is 95 bpm, and her jugular venous pressure is elevated. Lung auscultation reveals crackles at the bases, and an echocardiogram shows a reduced ejection fraction of 35%. Which of the following medications is most likely to benefit this patient in the long term?
a. Beta-blockers and ACE inhibitors
b. Calcium channel blockers
c. Diuretics
d. Antibiotics
e. Nitrate therapy

7. A 45-year-old woman presents with a 2-week history of fever, weight loss, and malaise. She also notes pain in her fingers and toes and has noticed small, painful, erythematous nodules on the pads of her fingers. She has a history of intravenous drug use and a murmur that was detected on a routine examination. Echo reveals vegetation on the mitral Valve along with moderate mitral regurgitation. Which finding is most likely to be seen on this patient's physical exam and is consistent with the probable diagnosis?
a. Osler's nodes, Jane way lesions and splinter hemorrhages
b. Hepatomegaly
c. Congested throat
d. Lymphadenopathy
e. Mild ankle edema

8. An 81-year-old man with a history of Hypertension is admitted with fever, chills, and loss of appetite. His investigations show streptococcus viridians growth sensitive to penicillin. His echocardiogram shows 5mm mass attached to the aortic valve cusp with no regurgitation. He is started on IV antibiotics as per sensitivities. What is the best recommendation regarding antibiotic management in this patient?
a. IV antibiotics for minimum of 2 weeks
b. IV antibiotics for minimum of 4 weeks
c. IV antibiotics for minimum of 6 weeks
d. IV antibiotics for minimum of 3 months
e. Refer for emergency surgery

9. A 78 years old male presents to ER with shortness of breath and orthopnea. His heart rate is 92/min. BP: 110/60 SPO2: 95% on room air. He has few scattered basal crypts, normal S1 and S2, with no added sounds. CXR shows upper lobe diversion. Which investigation is most important to establish his diagnosis?

a. ECG
b. Echocardiogram
c. CT Chest
d. CBC and renal profile
e. D-Dimers

10. A 55 years old man presented to ER with shortness of breath. His heart rate is 96/min reg BP: 160/96 SPO2: 94% on room air. He has pedal edema, high JVP and basal crypts. His blood works are unremarkable. Echocardiogram shows LV Ejection fraction of 40%. He is successfully offloaded with IV diuretics. Which drug combination is best for discharge?

a. Furosemide plus Spironolactone
b. Ramipril plus hydrochlothiazide
c. Valsartan plus amlodipine plus hydrochlorothiazide
d. Bisoprolol plus Ramipril plus spironolactone plus dapagliflozin
e. Bisoprolol plus diltiazem plus spironolactone

11. A 68-year-old female presents with a complaint of dizziness and occasional headaches. Her blood pressure is found to be 180/110 mmHg. She has a history of Type 2 diabetes mellitus and hyperlipidemia. She is currently on metformin and statins. What is the most likely cause of her elevated blood pressure, and what is the next step in management?

a. White coat syndrome; advise rechecking BP at home and in a relaxed environment
b. Primary hypertension; initiate a calcium channel blocker and monitor closely
c. Secondary hypertension, likely due to Reno vascular disease; order renal artery ultrasound
d. Hypertensive crisis; admit to the hospital for intravenous antihypertensive therapy
e. Hyperthyroidism; order thyroid function tests to rule out thyroid disease

12. A 57-year-old man is admitted with a fever and left-side weakness. Blood cultures yielded gram-positive streptococci and echocardiogram shows an oscillating mass of 8 mm attached to the anterior mitral valve leaflet. He has been on IV antibiotics according to culture results, for the last8 days. The patient suddenly became bradycardia, with an HR of 36/min, and BP: 140/80. ECG shows complete heart block. A temporary pacemaker is inserted and HR is maintained at 80/min. Choose the next best course of action from the following.

a. Repeat 2 sets of blood cultures, both aerobic and anaerobic
b. Refer to a cardiac surgeon for urgent surgery
c. Change antibiotics to more potent antibiotics
d. Insert dual chamber permanent pacemaker
e. Do trans-esophageal echocardiogram

13. A 55-year-old male presents to the emergency department with a complaint of palpitations and dizziness. His heart rate on examination is 150 bpm, and his rhythm is irregular. He has a history of hypertension and moderate alcohol use. An ECG shows an irregularly irregular rhythm with no distinct P waves and normal QRS complexes. What is the most likely diagnosis for this patient?

a. Atrial fibrillation
b. Supraventricular tachycardia (SVT)
c. Ventricular fibrillation
d. Atrial flutter
e. Sinus tachycardia

14. A 60-year-old female with a history of chronic heart failure presents with sudden-onset palpitations, shortness of breath, and chest discomfort. On examination, her heart rate is 200 bpm, and the ECG shows a regular, narrow-complex

tachycardia. There are no visible P waves, and the QRS complexes are narrow. What is the most likely diagnosis and appropriate next step in management?
a. Ventricular tachycardia; administer amiodarone intravenously
b. Atrial fibrillation; start rate control with a beta-blocker
c. Supraventricular tachycardia (SVT); attempt vagal maneuvers, and if unsuccessful, administer adenosine
d. Atrial flutter; cardioversion should be performed immediately
e. Sinus tachycardia; reassure the patient and provide hydration

15. A 58-year-old male presents to the emergency department with severe chest pain that started 30 minutes ago. The pain is described as a crushing sensation radiating to his left arm. He is sweating profusely and feeling nauseated. His blood pressure is 150/90 mmHg, and his heart rate is 110 bpm. An ECG shows ST-segment elevation in leads II, III, and aVF. Which of the following is the definitive management for this patient?
a. Oral nitroglycerin and monitoring
b. Immediate administration of aspirin and a P2Y12 inhibitor
c. Intravenous heparin and beta-blocker therapy
d. Immediate coronary angiography and possible percutaneous coronary intervention (PCI)
e. Oxygen therapy and referral for coronary artery bypass grafting (CABG)

16. A 68-year-old lady with is seen in OPD with chief complaint of headaches. Her vitals are Pulse: 92 beats/min regular, BP: 144/92, Oxygen saturation: 98% on room air, Wt: 96kg. Her home BP readings are an average of 144/94. She has normal audible S1 and loud S2. No added heart sounds. Her chest is clear. Investigations show Creatinine: of 0.8 mg/dl (Normal is <1.2). ECG: Normal voltage QRS complexes in chest leads. The echocardiogram shows Normal LV systolic function with no LVH. Choose the single best management option.
a. Admit the patient and start on IV nitrates
b. Lifestyle advice and start on antihypertensive medications and review in 3 months
c. Review in clinic in 2 weeks to confirm diagnosis of Hypertension
d. Lifestyle advice, weight loss and review in clinic in 6 weeks
e. Arrange a 24-hour BP monitor

17. A 55-year-old male with a history of a prosthetic mitral valve presents with fever, fatigue, and a new murmur for the past 5 days. On examination, he has petechial lesions on his conjunctiva and a janeway lesion on his palm. Blood cultures are positive for Staphylococcus aureus. A finding of 4x8 mm vegetation on mitral valve is appreciated on Echo. What is the most likely diagnosis?
a. Acute rheumatic fever
b. Myocardial infarction
c. Infective endocarditis
d. Pericarditis
e. Systemic lupus erythematosus

18. A 78-year-old man has presented with being generally unwell, lack of appetite, and low back ache for the last 3 months. He has received multiple courses of IV antibiotics. His vitals are Pulse: 65/min BP: 110/70 SPO2: 95% on air Respiratory rate: 16/min and Temperature: 38.4 degree centigrade. He has erythematous macular patches on the soles and Osler's nodes. He has an ejection systolic murmur. His blood cultures show no growth and Transthoracic echocardiogram shows aortic stenosis with no obvious vegetation. What is the next best investigation for diagnosis?
a. X-ray lumbar spine
b. Trans-esophageal echocardiogram
c. Slide for MP
d. Procalcitonin and urine RE
e. CT lumbar spine

19. A 68-year-old lady with is seen in OPD with chief complaint of headaches. Her vitals are Pulse: 92 beats/min regular, BP: 144/92, Oxygen saturation: 98% on room air, Wt: 96kg. Her home BP readings are an average of 144/94. She has normal audible S1 and loud S2. No added heart sounds. Her chest is clear. Investigations show Creatinine: of 0.8 mg/dl (Normal is <1.2). ECG: Normal voltage QRS complexes in chest leads. The echocardiogram shows Normal LV systolic function with no LVH. Choose the single best management option.

a. Admit the patient and start on IV nitrates
b. Lifestyle advice and start on antihypertensive medications and review in 3 months
c. Review in clinic in 2 weeks to confirm diagnosis of Hypertension
d. Lifestyle advice, weight loss and review in clinic in 6 weeks
e. Arrange a 24-hour BP monitor

20. A 66 years old man with Type DM and HTN presents to clinic with headaches. His Pulse is 68/min BP: 168/100, SPO2: 98%. He has normal audible heart sounds and his chest is clear. His labs show Creatinine: 1.5mg/dl, Potassium: 4.3. ECG: Flat T wave inferior leads. Echocardiogram shows Preserved LV systolic function. He is on Amlodipine 5mg OD for hypertension. Which of the following is the next best treatment strategy?

a. Amlodipine plus Valsartan
b. Amlodipine 5 BD
c. Enalapril plus Valsartan
d. Bisoprolol plus amlodipine
e. Add Tenormin plus Hydrochlorothiazide and continue Amlodipine

21. A 62 years old man is seen in OPD with for pre op assessment for hernia. His vitals are Pulse: 96 beats /min, BP: 180/108, Oxygen saturation: 96% on room air, Weight: 100kg. He has normal audible S1+S2+0. Chest is clear. He has high cholesterol and suffers from Type 2 DM too. What is his diagnosis?

a. High normal Blood pressure
b. Grade 1 Hypertension
c. Grade 2 hypertension
d. Grade 3 hypertension
e. Grade 4 Hypertension

22. A 68 years old male is admitted with low-grade fever and weight loss for 6 weeks. He has spiked a temperature of 38.5 degrees centigrade. He has a pan systolic murmur in the mitral area. His echocardiogram shows an oscillating mass of 5 mm attached to the anterior mitral valve leaflet. His blood cultures show gram-positive staphylococci growth. What is the diagnosis?

a. Definite Infective endocarditis
b. Possible infective endocarditis
c. Probable infective endocarditis
d. Gram positive bacteremia
e. Contaminated growth from common skin commensal

23. A 70-year-old male with a history of aortic stenosis and diabetes mellitus presents with a 4-day history of fever, chills, and a persistent headache. He also reports weakness of right side of body and has noticed some blood in his urine. On examination, his heart rate is 110 bpm, blood pressure is 100/65 mmHg, and a new systolic murmur is auscultated over the left sternal border. A fundoscopic exam shows retinal hemorrhages. Suspicion of Infective endocarditis is high. Which of the following complications is most concerning in this patient?

a. Cerebrovascular accident (stroke) secondary to thromboembolic phenomena
b. Acute renal failure
c. Myocardial infarction
d. Acute exacerbation of diabetes
e. Chronic liver disease

24. A 68-year-old man with a history of heart failure with reduced ejection fraction (HFrEF) presents with increased shortness of breath and fatigue for the

past 2 days. He also has a history of recent non-compliance with his medications. On examination, his blood pressure is 110/70 mmHg, heart rate is 98 bpm, and he has bilateral pitting edema up to his knees. The patient's chest is clear on auscultation. What is the most likely cause of this patient's symptoms?

a. Pulmonary embolism
b. Acute exacerbation of heart failure
c. Acute myocardial infarction
d. Pneumonia
e. Renal failure

25. A 61 years old male with diagnosis of COPD in the past presents with increasing shortness of breath at rest despite the use of his medications for the treatment of COPD. His arterial Blood Gases show a Partial Pressure of Oxygen of 52 mm Hg (Below Normal). What treatment is warranted in this patient at this stage of disease to improve the natural history of his Disease?

a. Long Term Oxygen Therapy
b. Cigarette Smoking
c. Corticosteroids
d. Influenza Vaccination
e. Chest Physiotherapy

26. A 32 years old pregnant lady is seen in Obstetric clinic. It's her 30th week of pregnancy. She is found to have Bp: 150/90. Her pulse is 80/min, SPo2: 95% on air. She has normal audible heart sounds. Her chest is clear. Urine shows 1 plus proteins. Which medication is contraindicated in pregnancy?

a. ACE inhibitor
b. Amlodipine
c. Labetalol
d. Methyldopa
e. Hydralazine

27. A 55-year-old female with no significant past medical history presents with a 1-hour history of tight chest pain radiating to her left arm. She denies any shortness of breath, but she is visibly anxious and pale. On examination, her heart rate is 100 bpm, and blood pressure is 135/85 mmHg. Her ECG shows no significant ST changes, but T-wave inversions are noted in the inferior leads. Cardiac biomarkers, including troponin, are mildly elevated. What is the most likely diagnosis?

a. Unstable angina
b. Non-ST-elevation myocardial infarction (NSTEMI)
c. Stable angina
d. Aortic dissection
e. Pericarditis

28. A 75-year-old male with a history of hypertension, coronary artery disease, and diabetes presents with progressive shortness of breath on exertion for the past 3 weeks. He also notes swelling in his ankles and a recent decrease in exercise tolerance. On examination, he is tachycardia with a heart rate of 110 bpm, blood pressure of 140/90 mmHg, and bilateral lower extremity edema. Jugular venous distention is noted, and lung auscultation reveals bilateral basal crackles. What is the most likely diagnosis?

a. Acute myocardial infarction
b. Chronic obstructive pulmonary disease (COPD)
c. Acute pulmonary embolism
d. Heart failure with reduced ejection fraction (HFrEF)
e. Acute kidney injury

29. A 72-year-old woman with a history of hypertension and type 2 diabetes presents to the emergency department with mild chest discomfort. She states the pain started about 2 hours ago and has been gradually increasing in intensity. She is also feeling lightheaded. Her blood pressure is 130/85 mmHg, heart rate 98 bpm, and her ECG shows ST-segment depression in the lateral leads. Cardiac biomarkers, including troponin, are elevated. Which of the following diagnoses is most likely for this patient?

a. Unstable angina

b. Non-ST-elevation myocardial infarction (NSTEMI)
c. ST-elevation myocardial infarction (STEMI)
d. Aortic dissection
e. Pulmonary embolism

30. A 62 years old lady presented with long long-standing history of cough and shortness of breath. She has comorbidities of Hypertension. On examination, she is found to have a systolic murmur in the pulmonic area. Echocardiogram shows atrial septal defect. CBC and CRP are in the normal range. She is planning for Bronchoscopy. Choose the best options from below regarding antibiotic prophylaxis for infective endocarditis.
a. Amoxicillin 2 gm orally 1 hr. before the bronchoscopy
b. Clindamycin 600mg orally 1 hr. before the bronchoscopy
c. Cephalexin 2gm IV 1 hr. before the bronchoscopy
d. Ceftriaxone 1 gm IV 1 hr. before the bronchoscopy
e. No need for antibiotic prophylaxis before the bronchoscopy

31. A 6 years old child presents to you with history of recurrent episodic wheeze, cough and dyspnea. He has daytime symptoms every day, he wakes up at night due to shortness of breath 2 to 3 nights per week. How would you classify the severity of his asthma?
a. Mild intermittent
b. Mild persistent
c. Moderate persistent
d. Severe persistent e. Severe intermittent

32. A 70-year-old man presents to A&E with central chest pain radiating up his jaw. He describes it as a 'heaviness' and feels sweaty. It started 5 hours ago and getting progressively worse. He has a past medical history of hypertension and takes amlodipine for it. He has 30 pack year history of smoking. His ECG shows significant ST depression in leads II, III, and aVF. On arrival to A&E Troponins were significantly raised. What is the most likely diagnosis?
a. Panic attack
b. Pneumonia
c. NSTEMI
d. Muscle spasm e. Herpes zoster

33. A 63-year-old male presents to the emergency department with severe chest pain, shortness of breath, and nausea. His blood pressure is 220/130 mmHg, and he appears in distress. His ECG shows signs of acute myocardial ischemia. What is the most appropriate first-line treatment for this patient's hypertensive emergency?
a. Administer sublingual nitrates to reduce blood pressure quickly
b. Start an intravenous beta-blocker to reduce heart rate and blood pressure
c. Administer intravenous sodium nitroprusside to rapidly lower blood pressure
d. Start an ACE inhibitor and monitor blood pressure closely
e. Begin oral antihypertensive therapy and discharge the patient for follow-up

34. An 82-year-old lady is brought into A&E following a collapse at home. She reports blacking out for a few seconds after feeling dizzy when getting up from her chair. She denies chest pain, palpitations or shortness of breath. She has a history of resistant HTN and takes Ramipril 5mg OD, amlodipine 10mg OD, bendroflumethiazide 2.5mg OD, and doxazocin 2 mg. Clinical examination is grossly normal. Her ECG, Echo, and blood tests including cardiac enzymes and RBS are all normal. What is the most likely cause of her collapse?
a. Myocardial Infarction
b. Acute gastroenteritis
c. Anxiety
d. Postural hypotension secondary to anti-hypertensive medications
e. Hypoglycemia

2. MED- PULMONOLOGY

1. KGMC 2024

1. A 22 years old man present with 2 months history of productive cough and blood stained sputum. He is having low grade fever weight loss for the same period. He has a positive contact history for TB. What is the most specific test to diagnose?

a. Monteux test
b. ESR
c. X-ray chest
d. CT scan chest
e. Sputum for AFB

2. A 65 years old woman having recurrent chest infections because of post tuberculosis bronchiectasis which one is the best strategy to decrease the frequency of infections in her?

a. Antibiotics before procedure.
b. Pneumococcal vaccination.
c. Chest physiotherapy
d. Regular antibiotics
e. Influenza vaccination

3. A patient with hypertension is complaint with his medication but he develop cough by using it. What is that medication??

a. Diuretic
b. ACEI
c. Beta blockers
d. ARB
e. Calcium channel blocker

4. 36-year-old lady presented with 3 weeks history of purulent foul smell sputum, fever, weight loss and anorexia. She has been treated for pneumonia with some antibiotic but partial Improvement. Her chest ray shows a cavity with air fluid lever in the right apex. Which one of the Following is the most appropriate further investigation she needs?

a. Sputum septic culture
b. Sputum for AFB
c. CT scan chest
d. Bronchoscopy
e. CBC and ESR

5. 65yr woman having recurrent chest infection because of post TB bronchiectasis. Best strategy for decreasing frequency of recurrent infection?

a. Influenza vaccine
b. Regular antibiotics
c. Antibiotics before procedures
d. Pneumococcal vaccine
e. Chest physiotherapy

6. A 32 week presents with systolic murmur and widened pulse pressure. What is your diagnosis?

a. ASD
b. VSD
c. Tetralogy of Fallot
d. Transposition of great vessels
e. PDA

7. A 36 year old woman presented with 3 weeks history of purulent foul smelling Sputum, fever, weight loss and anorexia. She has been treated for pneumonia with antibiotics but with partial improvement. Chest x ray shows cavity with air fluid level. Which of the following investigation should be done for diagnosis?

a. CT scan of chest
b. Bronchoscopy
c. Sputum for AFB
d. Sputum for culture
e. CBC and ESR

8. 40 years old male having 3cm lesion stage 1A lung cancer in right lower lobe what is gold. Standard management in this case?

a. Segmentectomy
b. Thoracoplasty
c. Lobectomy
d. Wedge resection
e. Chemo radiation therapy

9. A 38 yr old man presents with worsening exercise tolerance, fatigue, and sensation of Breathlessness when lying down. He also reports a frequent cough with blood tinged sputum. On examination he has accentuated first heart sound and an opening snap. What is the most likely underlying cause of his cough?

a. Pulmonary embolism
b. Bronchogenic CA
c. Pulmonary hypertension
d. Pulmonary effusion

10. A 20 yr old lady presented with two months history of low grade fever and Right sided chest pain which increases with inspiration, Clinical examination shows a pale and wasted last with dull percussion note and decreased breath sounds on right side lower chest. Which one of the following is the most likely diagnosis?

a. Pleural Effusion due to TB
b. Hemothorax due to Bronchogenic Carcinoma
c. Pleural Effusion due to mesothelioma
d. Lung Abscess
e.Pneumothorax due to TB

11. . A 22 years old man presented with 2 month history of productive cough with blood stained sputum He has low grade fever and weight loss for same duration which one of the following treatment is diagnostic??

a. ESR b. X-ray chest
c. Sputum for AFB
d. Sputum C/S e Manteaux test

12. A 20 years old man who is known case of asthma presented to ER with severe shortness of breath and sweating. He cannot speak because of shortness of breath. Heart rate 120/min Respiratory rate 28/min fever 98f. On auscultation few inspiratory and expiratory wheeze present. Which is most immediate management step?

a. 100% oxygen b. 28% oxygen
c. Iv antibiotics d. Iv steroids
e. Ipratropium nebulization

13. A person develop chorea after strep A infection? Which is the specific name for that chorea?

Sydenham chorea

14. 40 years old patient lesion of 3cm Stage 1A Ca lung in right lower lobe, which of the following is gold std treatment option?

a. Segmentectomy
b. Thoracoplasty
c. Lobectomy
d. Chemoradiotherapy
e. Wedge resection

2. RMC 2024

1. A 60-year-old male present to you in OPD with progressively increase breathlessness for the last few months. He has cough productive of white colored sputum. He smokes 10 to 20 cigarettes per day. On examination he is mildly tachypniec at rest. Chest examination revealed prolonged expiration with occasional wheeze. How will you assess the severity of symptoms; select one:

a. Chest x-ray
b. CT chest
c. Measuring FEV1/FVC ratio
d. Measuring arterial blood gases e. ECG

2. A 40-year male presented to emergency room with the history of right-sided chest pain, cough, fever and breathlessness for the last 2 days. On examination he is ill looking, tachypniec. His temperature is 100° F. He has herpes labialis. He is hemodynamically stable. Chest examination revealed poor expansion of chest on the right side with impaired percussion note and bronchial breath sound. What is the likely diagnosis? Choose one:

a. R sided plural effusion
b. R sided pneumonia
c. R sided pneumothorax
d. R sided malignancy e. None of the above

3. A 60 year old male who is smoker for many years and has been getting progressively worsening breathlessness for many months, came to emergency room with increase breathlessness, cough, sputum, and fever for the last 3 days. On examination he is drowsy but arousable. Has tapping tremors of the outstretched hands. His chest examination revealed expiratory wheeze. His arterial blood gases analysis showed hypercapnia. Which one of the following treatments is not indicated in this case?

a. Steroids
b. Antibiotics
c. Anticholinergics
d. High concentration of oxygen
e. B2 agonist

4. A 60 years old male who is ex-smoker, who quit smoking a year ago after having smoked for 30 years and has no other co morbidity, presented to Chest OPD with the history of exertional dyspnea, dry cough for the last few months. These symptoms are getting worse with time. No history of fever or chest pain. On examination revealed bilateral reticular shadowing in the lower lung fields. His echo was normal. What is the likely diagnosis?

a. Chronic obstructive lung disease
b. Pulmonary edema
c. Acute bronchitis
d. Idiopathic pulmonary fibrosis
e. Pulmonary edema

5. A 70 years old male presented to Emergency room with the history of breathlessness on mild exertion for the last few months. Also, he complained of cough productive of sputum and occasionally hemoptysis. He has developed hoarseness of voice and difficulty in swallowing solids. He has lost weight. On examination revealed that the trachea has shifted to the L side of the chest. He had poor expansion of the chest on the L, with impaired percussion and diminished breath sound on the L. Chest X-ray showed that the trachea is shifted to the left and there was an opacity on the L upper zone. What is the likely diagnosis? Select one.

a. L sided Pneumonia
b. L sided malignancy
c. COPD with acute exacerbation
d. R sided pneumothorax
e. L sided pleural effusion

6. A 40-year-old lady presented to the emergency department with the history of cough productive of purulent sputum, hemoptysis, L sided chest pain and breathlessness for the last two days. She has no comorbidity and is non-smoker. On examination she is a looking pyrexia and dyspneic at rest. She has herpes labialis. Chest examination revealed poor expansion of chest on the L side, impaired percussion and bronchial breath sound. Chest X-ray showed patchy opacity on the L lower zone. Which is usual causative organism of this condition?

a. Mycoplasma Pneumonia
b. Mycobacterium tuberculosis
c. Streptococci Pneumonia
d. Klebsiella Pneumonia
e. Staph. Aureus

7. A 70 years old female came to emergency room with the history of fever, cough, sputum, R sided chest pain and breathlessness for the last 3 days. Also, she complain about anorexia. On examination looked ill with coated tongue, herpes labialis, BP was 80/60 and she has pyrexia. She was breathless and her respiratory rate was 30/min. Her oxygen saturation was 80% on pulse oximetry. She was confused and restless. The chest examination revealed diminished movement of the chest on the R side with impaired percussion note and bronchial breath sounds. Chest X-ray showed R sided consolidation. Her blood investigations revealed leukocytosis with urea of 10mmol/L. Where this patient should be managed? Select one.

a. Can be discharged home with antibiotics

b. Should be admitted in hospital and managed in the ward
c. Should be admitted to ICU in the hospital
d. Should be observed in ER for 24 hours
e. Should be referred to the chest specialist in OPD

8. Which is the most common lung tumor in non-smokers?
a. Adenocarcinoma
b. Squamous cell carcinoma
c. Small cell carcinoma
d. Large cell carcinoma
e. Carcinoid tumor

9. Which lung tumor is most chemo-sensitive?
a. Squamous cell carcinoma
b. Large cell carcinoma
c. Small cell carcinoma
d. Hamartoma
e. Broncho alveolar carcinoma

10. A 65 years old smoker with 30 pack- year histories presented to the emergency department with shortness of breath and hemoptysis. He presumed the hemoptysis to be 600ml in the last 24 hours. CT scan of the chest shows a mass in the left lower lobe. Keeping in mind the scenario which statement is correct?
a. Pulmonary arterial circulation is high-pressure low capacitance circulation
b. Bronchial circulation is high-pressure high capacitance circulation
c. Bronchial circulation constitutes 98% of the lung circulation
d. Bronchial circulation is responsible for hemoptysis in this case
e. Bronchiectasis is less common cause of massive hemoptysis

11. In COPD patient with Alpha-1 antitrypsin deficiency (AATD), which mechanism is the basis for AATD pathology?
a. Increased bacterial a colonization of lung tissue
b. Unbalanced neutrophil elastase activity in lung tissues
c. Reduced recruitment of WBCs to lung tissues
d. Enhanced cytokine production by AAT-deficient white blood cells
e. Increased hydrogen peroxide activity in lung tissue

12. A young male presented to you with dry cough and central chest pain from the last one month. You ordered an X-ray chest that showed bilateral hilar lymphadenopathy. You suspect sarcoidosis. What else in blood tests of this patient can be found to strengthen your suspicion?
a. Low calcium
b. Raised ACE level
c. Raised hemoglobin
d. High creatinine
e. High ESR

13. Which of the following statement is correct regarding COPD?
a. 15% of patients are non-smoker
b. Biomass burn exposure is not the causes of COPD
c. 10 pack year smoking history is a strong predictor
d. Hemoptysis is common in COPD and needs not to be investigated
e. Blue bloaters are common in emphysema

14. Pulmonary hypertension is called primary pulmonary hypertension when it is caused by:
a. Cardiac disease
b. Hypoxemia secondary to COPD
c. Recurrent pulmonary embolism
d. Idiopathic
e. Granulomatous disease like sarcoidosis

15. A 70-years old ex-smoker presented with shortness of breath and cough from the last 6 months. On examination he is clubbed, his saturation is 93% and there are bilateral crepitation. His X-rays show haziness in the lower zones. There is

no other systemic disease. What ca be the investigation of choice in this case?

a. CT thorax with contrast b. HRCT thorax
c. Bronchoscopy d. Spirometry
e. VQ scan

16. A young female presented with exertional dyspnea. Her chest examination and spirometry are normal and echocardiography shows very high right ventricular systolic pressure. She underwent right heart catheterization and is diagnosed with primary hypertension. Which of the following medication is not used to treat pulmonary hypertension?

a. Sildenafil
b. Calcium channel blocker
c. Endothelin receptor antagonist
d. Digi toxin e. Prostacyclin

17. Cigarette smoking s most common risk factor for development of COPD. Its dose is commonly calculated in pack year. What minimum dose of smoking is considered risk factor for COPD development?

a. 5 pack year b. 10 pack year
c. 15 pack year d. 20 pack year
e. 25 pack year

18. A 50 year-old smoker comes to see you because he has had a cough for the last eight weeks and his weight has fallen by 5kg. He is concerned as he notices streaks of blood in his sputum recently. What is the most likely appropriate clinical investigation?

a. Sputum AFB b. Bronchoscopy
c. Spirometry
d. HRCT chest e. Chest X-ay

19. A 28 years old man presents with a six-week history of a hoarse voice, weight loss, and malaise. He also has night sweats. What is the most likely diagnosis?

a. Acute laryngitis
b. Laryngeal tuberculosis
c. Primary tuberculosis
d. Laryngeal polyp
e. Hypothyroidism

20. A 45 years chronic smoker presents to your clinic with cough, hemoptysis and shortness of breath for the last 3 months. His chest X-ray shows. What is the most likely diagnosis?

a. Lobar pneumonia
b. Pulmonary edema
c. Bronchogenic carcinoma
d. Atypical pneumonia e. Pulmonary fibrosis

21. A 26-year-old women with epilepsy has been diagnosed with pulmonary tuberculosis and is about to be started on quadruple therapy. The following need to be discussed with her except:

a. Method of contraception
b. The need for screening for ocular complication with ethambutol
c. Interaction with other medications
d. Discoloration of urine due to isoniazid
e. Compliance

22. A 19-year-old woman present with fever and cough. Sputum sample are negative on microscopy for acid fast bacilli, but six weeks later M. tuberculosis is grown. She completed a course of anti TB drugs 2 months previously. Her chest radiograph is unchanged from one take at this time. Which of the following is the most likely explanation for these finding?

a. She has HIV co infection causing increase susceptibility to mycobacteria
b. The organism isolated is contaminant
c. She has been re-infected with a different strain of TB
d. She has underlying IFN-G receptor deficiency causing increase susceptibility to mycobacteria
e. She has been poorly adherent to therapy and her TB is recurred

23. A 75-year-old man with 30 pack year cigarette smoking history complains of continuous right shoulder pain, a persistent cough and weight loss. His chest radiograph shows a right apical shadow. On examination you note that he is clubbed, has a small right pupil and rigt Ptosis. What is the most likely diagnosis?

a. Small cell lung cancer
b. Squamous cell carcinoma
c. Broncho alveolar carcinoma of lung
d. Adenocarcinoma of left lung
e. Bronchial carcinoid

24. A 60-years-old patient presents to the emergency department with severe shortness of breath. His respiratory rate is more than 30, his saturations are 80% on room air. He is unable to complete sentences. He suddenly collapses. There are no relatives available for getting a collateral history. On examination he has tar stained nails. His CKR shows hyper inflated lung fields with flat diaphragms. What is the underlying lung pathology?

a. Atopic asthma
b. Chronic heart failure
c. Sarcoidosis
d. Pulmonary hypertension
e. Chronic obstructive airways disease

25. A 75-year-old male presented to chest to the Emergency rooms with 1-week history of Dyspnea, fever, cough and chest pain. His ECG showed irregular heart rate, chest x-ray showed an opacity in the left middle lobe. His CRP and white cell count, urea and creatinine Levels were raised. What is the diagnosis?

a. Infective exacerbation of COPD
b. Infective endocarditis
c. Acute kidney injury
d. Community acquired pneumonia
e. Bronchogenic carcinoma

26. A 25-year-old girl with severe difficulty in breathing presents to the emergency department. She has had a history of asthma with two previous ICU admissions. Her peak Flow is currently 200L/min (predicted value 350L/min). She is unable to say more than a few words. She was given nebulized Salbutamol and IV hydrocortisone 250mg in the emergency department. Which treatment should she now receive?

a. Intravenous antibiotic
b. Intubation and ventilation
c. Intravenous magnesium 2g
d. Intravenous salbutamol
e. Nebulization with clenil

27. A 54 year old man with history of MI 2 years ago attends the pulmonary clinic with the chief complaints of cough, shortness of breath and orthopnea. Chest x-ray was done which revealed bibasilar pleural effusion. Pleural fluid analysis was performed which revealed a transudate effusion. What is the cause of his effusion?

a. Simple para pneumonic effusion
b. Complicated para pneumonic effusion
c. Lung Malignancy
d. Pulmonary thromboembolism
e. Congestive cardiac failure

28. An 18 years old boy presented to emergency department with the history of Left sided chest pain and breathless since one day. On examination he is tall and thin. He is hemodynamically stable. He is anxious looking and mildly breathless. Chest examination revealed increased resonance on the Left side of chest and decreased Cardiac dullness. The breath sound was diminished on the Left of the chest. What is the most Probable Diagnose?

a. Pneumonia
b. Myocarditis
c. Left side Pneumothorax
d. Pulmonary Embolism
e. Right side Pneumothorax

29. A 60 years old lady who is confined to bed for the last one year because of Left sided weakness, developed chest pain, breathlessness and blood mixed sputum for the last two days. She has diabetes and hypertension. On examination she was tachypniec and tachycardiac, On Chest Auscultation there was normal vascular breathing. What could be the most likely Diagnosis?

a. Aspiration Pneumonia
b. Pulmonary TB
c. Pulmonary Embolism
d. Recurrent Stroke
e. Myocardial Infarction

30. A 20-years-old student residing at a religious Institute presents with Cough, Hemoptysis and weight loss. Chest X-ray reveals cavitating lesions in the right upper zones. What would be your next Investigation of choice to confirm the suspected diagnosis?

a. CT Chest with contrast
b. BAL for cytology
c. Sputum for fungal hyphae
d. Sputum for Ziehl Neelsen staining
e. Sputum for gram staining

31. A 24 years old man is brought into the emergency department after a fall from a ladder. His breathing is labored and he is cyanotic. No breath sound d can be heard, even in a right lung field, which resonant to percussion. The first step in his management should be:

a. Cricothyroidotomy
b. Obtaining a stat chest way
c. Passing an oral endotracheal tube
d. Starting oxygen by a valve-mask device
e. Tube thoracostomy

32. The optimal method for managing a patient with a massive flail chest is:

a. Controlled breathing with a valve mask device delivering pure oxygen
b. Elevation of the fail segment with skeletal traction
c. Endotracheal intubation and mechanical ventilation
d. Intercostal nerve blocks and nasal oxygen
e. Stabilization of the flail segment with sandbags

33. A 65 year old man undergoes cardiac surgery for triple vessel coronary artery disease. What can be anticipate?

a. 95% chance his grafts will occlude after 12 months
b. 5% chance of living for 5 years
c. If the internal mammary artery is used as a conduit, patency is increased
d. Mortality of 10-20% in most centers
e. Functional improvement with the saphenous vein graft is better than internal memory artery

34. While landing at the end of flight a young woman develops shortness of breath and right sided pressure chest pain. She is tall and thin. The pain, although less in intensity, occurs during her menstrual periods. She has not previously consulted a doctor. A chest film is likely to show?

a. Left pleural effusion
b. Pneumothorax
c. Dilated stomach
d. Widening of the mediastinum
e. Cardiomegaly

35. A patient with a moderate sized aneurysm of the descending thoracic aorta is likely to have:

a. Back pain
b. Diaphragmatic paralysis
c. Recurrent nerve palsy
d. Tracheal compression
e. No symptoms

3. GMC 2024

1. A 32-year-old female falls from the tenth floor of her apartment building in an apparent suicide attempt. Upon presentation, the patient has obvious head and extremity injuries. Primary survey reveals that the patient Is totally apneic. By which method is

the immediate need for a definitive airway in this patient best provided?
a. Orotracheal intubation
b. Nasotracheal intubation
c. Percutaneous cricothyroidotomy
d. Intubation over a bronchoscope
e. Needle cricothyroidotomy

2. A 30-year-old man is brought to the emergency department in respiratory distress following shotgun wound to the face. There is possible cervical spine injury. Which is the best way to gain rapid control of the airway?
a. Nasotracheal intubation
b. Percutaneous jet ventilation.
c. Cricothyroidotomy
d. Endotracheal intubation
e. Aspiration of blood from pharynx and jaws thrust

3. A man undergoes a pneumonectomy. After surgery, invs show hyponatremia. What could be the cause of the blochemical change?
a. Removal of hormonally active tumor
b. Excess dextrose
c. Excess colloid
d. Excessive K+
e. Hemodilution

4. A 74yr man who has been a smoker since he was 20 has recently been dx with SCLC. What serum electrolyte picture will confirm the presence of SIADH?
a. High serum Na, low serum osmolarity, high urine osmolarity
b. Low serum Na, low serum osmolarity, high urine osmolarity
c. Low serum Na, high serum osmolarity, high urine osmolarity
d. High serum Na, low serum osmolarity, low urine osmolarity
e. High serum Na, high serum osmolarity, low urine osmolarity

5. A man brought into the ED after being stabbed in the chest. Chest is bilaterally clear with muffled heart sounds. BP is 60/nil. Pulse is 120bpm. JVP raised. What is the most likely dx?
a. Pulmonary embolism
b. Cardiac tamponade
c. Pericardial effusion
d. Hemothorax
e. Pneumothorax

6. A 26yr man present to ED with increasing SOB on left side and chest pain. He has been a heavy smoker for the past 4 years. He doesn't have any past med hx. What is the likely dx?
a. Pulmonary embolism
b. MI
c. Asthma
d. Pleural effusion
e. Pneumothorax

7. A 35yr man presents with progressive breathlessness. He gave a hx of polyarthralgia with painful lesions on the shin. CXR: bilateral hilar lymphadenopathy. What's the most likely dx?
a. Bronchial asthma
b. Cystic fibrosis
c. Sarcoidosis
d. Bronchiectasis
e. Pneumonia

8. A 70yr man admits to asbestos exposure 20yrs ago and has attempted to quit smoking. He has noted weight loss and hoarseness of voice. Choose the single most likely type of cancer a w risk factors present.
a. Basal cell carcinoma
b. Bronchial carcinoma
c. Esophageal carcinoma
d. Nasopharyngeal carcinoma
e. Oral carcinoma

9. A pt who came from India presents with cough, fever and enlarged cervical LN. Exam: caseating granulomata found in LN. What is the most appropriate dx?
a. Lymphoma
b. 1B adenitis
c. Thyroid carcinoma
d. Goiter
e. Thyroid cyst

10. A 55yr woman was found collapsed at home, paramedics revived her but in the ambulance she had a cardiac arrest and couldn't be saved. The paramedic's report tells that the woman was immobile lately due to hip pain and that they found ulcers on the medial side of ankle. She had DM and was on anti diabetics. What is the cause of her death?
a. Acute MI
b. DKA
c. Pulmonary embolism
d. Acute pericarditis
e. Cardiac tamponade

11. A 30yr female attends OPD with a fever and dry cough. She says that she had headache, myalgia and joint pain like one week ago. Exam: pulse100bpm, temp-37.5C. CXR: bilateral patchy consolidation. What is the Single most likely causative organism?
a. Pneumococcal pneumonia
b. Legionella
c. Mycoplasma.
d. Klebsiella
e. Chlamydia pneumonla

12. A 45yr IV drug abuser is brought into the ED with complaint of fever, shivering, malaise, SOB and productive cough. Exam: temp-39C, pulse 110bpm, BP-100/70mmHg. Inv: CXR-bilateral cavitating bronchopneumonia. What is the single most likely causative organism?
a. Mycoplasma
b. Staphylococcus
c. Chlamydia pneumonia
d. Both a and b
e. None of the above

13. A 56yr man complains of increased vol of sputum with specks of blood and chest pain. He has a hx of DVT. Exam: clubbing. What is the cause of blood in his sputum?
a. Pulmonary thrombosis
b. Bronchial carcinoma
c. Bronchiectasis
d. Pulmonary TB e. Both band c

14. A 32yr female has a hx of SOB and fever. Pre-broncho-dilation test was done and it was 2/3.5 and post-bronchodilator was 3/3.7. The pt was dx of eczema and TB. What is the possible dx?
a. COPD
b. Asthma
c. Pneumonia
d. Bronchiectasis
e. All of the above

15. A 74yr lady called an ambulance for an acute chest pain. She has a hx of DM and HTN, and is a heavy smoker. Paramedics mentioned that she was overweight and recently immobile because of collapsed and died in the ambulance. What is the most likely cause of death?
a. Pulmonary embolism b. MI
c. Stroke d. Cardiac arrhythmia
e. Cardiac failure

16. A 65yr man presents with significant weight loss and complains of cough, SOB and chest pain. Exam: left pupil constricted, drooping of left eyelid. What is the most likely dx?
a. Pancoast tumor b. Thoracic outlet syndrome
c. Cervical rib d. Pneumonia
e. Bronchogenic ca

17. A lady from Asia presented with lump in her neck. FNAC has been done and revealed lesions with caseous material in the center surrounded by fibrosis. What is the most probable dx?

a. Thyroid carcinoma b. T8 lymphadenitis
c. Lymphoma d. Inf Mono
e. Mesothelioma

18. A 34yr IVDA presents with a 4m hx of productive cough. He has lost 10kgs. What is the single most appropriate inv?

a. Sputum for AFB b. Laryngoscopy
c. Bronchoscopy d. CT neck
e. CXR

19. A 32yr man working in a shipyard comes with SOB. Exam: dullness on left side of the chest, pain in left side of chest, pleuritic rub and crackles been heard on the same side. What is the single most likely dx?

a. Pericarditis b. Pleurisy
c. Pleural effusion d. CCF e. TB

20. A 20yr student who recently visited Asia came to the OPD with complains of low grade fever, night sweats, anorexia and productive cough. Inv: CXR cavitatory lesions in upper lobes. What is the single most likelt causative organism?

a. Mycoplasma b. Klebsiella
c. TB d. PCP e. Viral pneumonia

21. A pt comes back from India and presents with night sweats and lymphadenopathy. XR: cavitations. What inv should be done next?

a. CT scan b. AFB stain
c. Blood culture d. Bronchoscopy
e. None of the above

22. A 50-year-old smoker male with COPD develop aching in the distal extremities specially the wrist joints, he has a 10 kg weight loss and clubbing. X-ray Hand show periosteal thickening. You would

a. Ciprofloxacin
b. Get a chest X-Ray
c. Aspirate Joint
d. Start DMARD
e. None of the above

23. 20 year old patient present with fever weight loss and night sweat, on examination he has decrease chest moments with dull percussion notes and absent breath sound. The likely Diagnosis is.

a. Pneumothorax
b. Pleural effusion
c. Consolidation
d. Atelectasis
e. Both a and b

24. 50 year old female with history of UTI, COPD and Asthma present with bilateral infiltrates and eosinophil count of 15%. The least likely diagnosis is:

a. Allergic Bronchopulmonary aspergillosis
b. Hypersensitivity Pneumonitis
c. Side effect of nitrofurantoin
d. Strongyloides infection.
e. None of the above

25. 50 year old patient develops cough and fever chest X-ray show air fluid level in the superior segment of the right lower lobe. The mostly likely etiologic agent is

a. Strep. Pneumoniae b. H.influenzae
c. Legionella d. Anaerobes
e. None of the above

26. Which of the following does not indicate a poor prognostic finding in asthma?

a. Altered mental status.
b. Silent chest.
c. Hypercapnia
d. Pulsus paradoxus of 5 mmhg
e. None of the above

27. In a cigarette smoker with a history of intermittent claudication and newly diagnosedhtn, a doubling of the serum creatinine concentration immediately after the addition of an ace inhibitor suggests:

a. Hemodynamically significant bilateral renal artery stenosis
b. Pheochromocytoma
c. Primary aldosteronism
d. Emboli from arteriosclerosis obliterans of the descending aorta
e. Secondary aldosteronism

28. A 56-year-old man comes to the office a few days after an episode of chest pain. This was his first episode of pain, and he has no risk factors. In the emergency Department, he had a normal ekg and normal ck-mb and was released the next Day. Which of the following is most appropriate in his further management?

a. Repeat ck-mb
b. Statin
c. Ldl level
d. Stress (exercise tolerance) testing
e. Angiography

4. WMC 2024

1. Which of the following statement regarding Bronchogenic Carcinoma is True

a. The commonest bronchogenic carcinoma is small-cell carcinoma.
b. Myasthenia syndrome associated with bronchogenic carcinoma improves with exercise.
c. Small cell carcinoma is treated with surgery.
d. Incidence of Carcinoma in associated with no of cigarette
e. Alveolar cell carcinoma type of Adenocarcinoma

2. Which of the following statement regarding Pneumothorax is true

A. Primary spontaneous Pneumothorax is the commonest cause
B. Small Pneumothorax in COPD patients in not the indication for Tube-Thoracostomy C. Tube-Thoracostomy is not indicated in hydro Pnemothorax
D. Secondary Pneumothorax common in COPD
E. Catamenial Pneumothorax occur in Male

3. Which of the following statement regarding pneumothorax is true

a. 60% hospital deaths implicate pneumonia
b. During sleep everybody aspirate even with normal cough reflex.
c. PCP (Pneumocystis Carinii Pneumonia) occurs typically in neutropenic patients
d. The most common bacteria in CAP (Community -Acquired Pneumonia) is chlamydia
e. Streptococcus pneumonia is a common Bacteria in CAP

4. Patient in more prone to get pulmonary Embolism

a. Antithrombin III deficiency
b. Immobilisation
c. Protein "S" Deficiency
d. Protein "C" Deficiency e. All of the above

5. In Pulmonary Embolism conditions that favors pulmonary embolism are

a. Venous stasis
b. Injury to venous Intima
c. Alteration in coagulation fibrinolytic system
d. All of the above
e. Surgery in past 4 week

6. Pulmonary TB treatment aims at

a. Quickly make the patient Non-Infectious
b. To prevent relapse
c. To prevent development of resistance
d. To prevent the spread of TB in community
e. All of the above

7. Tuberculosis (TB) spread is

a. Waterborne
b. Vector borne
c. Airborne
d. All of the above

e. None of the above

8. Tuberculosis (TB) which of the following anti TB drugs kills the rapidly dividing TB Bacili

a. Rifampicin.
b. Streptomycin.
c. Isoniazid.
d. Ethambutol.
e. Pyrazinamide.

9. The best Index of TB infection in community is

a. Annual risk of infection rate,
b. Prevalence rate.
c. Death rate.
d. Morbidity rate.
e. Attack rate

10. Which of the following statement regarding is True

a. 60% hospital deaths implicate pneumonia
b. During sleep everybody aspirate even with normal cough reflex
c. PCP (Pneumocystis Carinii Pneumonia) occurs typically in neutropenic patients
d. The most common bacteria in CAP (Community - Acquired Pneumonia) is chlamydia
e. It is 3rd common cause of death after IHD/CUA

11. Which of the following statement regarding Pleural Effusion is True

a. One of the causes of pleural effusion is decrease pulmonary capillary pressure
b. Pleural effusion occurs with increased oncotic pressure
c. Pleural fluid protein less than 25gm/dl make it Transude effusion
d. In Pleural fluid protein less than 25gm/dl make it exudative effusion
e. In CCF Fluid is Transcedab

12. Which of the following statement regarding Pleural Effusion is True

a. One of the causes of pleural effusion is decrease pulmonary capillary pressure
b. Pleural effusion occurs with increased oncotic pressure
c. Pleural fluid protein less than 25 gm/ dl make it Transude effusion
d. Pleural fluid protein less than 25 gm/dl make it exudative effusion
e. In Tb pleural effusion is exuclate

13. In moderate COPD FEV in less than

a. 90% b. 80% c. 50%
d. 30% e. 20%

14. FE1/ FVC ratio increased in

a. COPD
b. Asthma
c. Empeysina
d. Restrictive lung Disease
e. Acute bronchitis

15. Asthma following drug should should not be used

a. Sedatives b. Beta Blocker
c. Calcium Channel Bcocker
d. Beta 2 Agonist e. Antibiotics

16. Diet in Asthma Should include

a. Magnesium b. Low salt
c. Fresh food d. Rice e. Banana

17. Asthma management alam include

a. Patient education
b. Assess asthma with DFT
c. Avoid trigger of actions
d. Establish plan for exacerbation
e. Regular follow- up

18. Which statement regarding asthma treatment is true

a. Prevent asthma exacerbation
b. Keep DFT to normal
c. Avoid side effect of lung

d. Prevent asthma mortality
e. Control symptoms

19. In very severe Asthma FEV 1 is less than
a. 80% b. 60% c. 30%
d. 30% e. Normal

20. Regarding ILD(DF)
a. IDF is not Common ILD
b. 60 % people are above age 60
c. It affects 1 out of 200
d. Cigaritti implicated in its development
e. Classically fibrosis inflammation occurs **21. Treatment of IDE**
a. Steroids b. N- Acetyl cysteine
c. Pirfenidone d. Methotrexate
e. Inter from

22. IDF Management include
a. IPE Nurse b. Symptomatic
c. Stop Unnecessary d. Antibiotics
e. Lung Transplant

23. Pirfenidone side effect include
a. Nausea b. Joint Pain c. Heart Failure
d. Rush e. Heart block

24. Virchou's Triad include
a. Hypercoagulability b. Venous Stasis
c. Endothelial damage d. Hypertension
e. Asthma

25. In well score pulmonary embolism islikely if score is
a. more than 2 b. > than 3
c. > than 4 d. > than I e. None

5. KIMS 2024

1. A 60-year-old female presents to the emergency department with sudden onset of dyspnea and chest pain. She is hypotensive and tachycardiac. You suspect a massive pulmonary embolism (PE). Which of the following is the most appropriate initial step in management to confirm the diagnosis and guide treatment?

a. Administer thrombolytic therapy without further imaging
b. Transthoracic echocardiogram to assess for right heart strain
c. Order a CT pulmonary angiography immediately
d. Perform a D-dimer test to rule out PE
e. Perform a V/O scan to assess for PE

2. An 80-year-old woman with a history of chronic exertional dyspnea and a dry cough presents to the outpatient clinic. On examination, she has notable supraclavicular lymphadenopathy and bilateral parotid gland enlargement. Chest X-ray demonstrates bilateral hilar lymphadenopathy and diffuses pulmonary infiltrates. Her laboratory results include serum calcium of 13 mg/dL, total leukocyte count (TLC) of 7800/cubic mm with lymphocytes at 15%, and an elevated serum angiotensin-converting enzyme (ACE) level.
Given her clinical presentation, which of the following diagnostic tests would most likely confirm the diagnosis?
a. Bronchoscopy with biopsy
b. Serum vitamin D level
c. Bone marrow biopsy
d. Sputum acid-fast bacilli (AFB) smear
e. CT scan of the chest

3. A 50-year-old male, previously treated for tuberculosis, presents with a 6-month history of fatigue, unintentional weight loss, and occasional hemoptysis. He denies fever or significant respiratory distress. A chest CT reveals a cavitary lesion with a mobile mass inside. Sputum microscopy shows scanty hyphal fragments, and culture grows Aspergillus fumigatus. Serum IgG against A.fumigatus is elevated. Which of the following is the most likely diagnosis?
a. Invasive pulmonary aspergillosis
b. Chronic necrotizing aspergillosis
c. Simple aspergilloma
d. Allergic bronchopulmonary aspergillosis (ABPA)

e. Tuberculous cavity with secondary bacterial infection

4. A 65-year-old male, long-term smoker, presents with worsening fatigue, muscle weakness, and unsteady gait over the past 3 months. On examination, he has proximal muscle weakness, difficulty rising from a seated position, and absent deep tendon reflexes in the lower limbs. His gait is broad-based, and he exhibits slight digital clubbing. Blood tests reveal hyponatremia (serum sodium 123 mmol/L) with low serum osmolality, and a chest X-ray shows a mass in the right upper lobe. Which of the following paraneoplastic syndromes is most likely contributing to his presentation?

a. Lambert-Eaton myasthenia syndrome and syndrome of inappropriate antidiuretic hormone secretion (SIADH)
b. Hypercalcemia due to parathyroid hormone-related peptide secretion and cerebellar degeneration
c. Carcinoid syndrome and polyneuropathy
d. Ectopic adrenocorticotrophic hormone secretion and hypertrophic pulmonary osteoarthropathy
e. Polymyositis and nephrotic syndrome

5. A 55-year-old male with no significant smoking history presents with a 6-month history of progressive breathlessness and a dry, persistent Cough. On examination, bilateral basal crackles are heard, and digital clubbing is noted. A chest X-ray reveals reduced lung volumes and reticulonodular shadowing. Pulmonary function tests show a restrictive ventilator defect. Which of the following additional findings would be most consistent with a diagnosis of diffuse parenchymal lung disease at an advanced stage?

a. Central cyanosis and signs of right ventricular failure
b. Central cyanosis with decreased expiratory breath sounds and hyperinflation on imaging
c. Large lung volumes and obstructive ventilator defect on pulmonary function tests
d. Peripheral cyanosis with normal high-resolution computed tomography (HRCT) findings
e. Unilateral crackles and patchy consolidation on chest X-ray

6. A 62-year-old male with a 45-year history of smoking presents with fatigue, significant weight loss, and persistent bone pain, particularly lower legs. He also reports recent episodes of headaches, occasional confusion, and new onset seizures. Physical examination reveals clubbing, tenderness over the anterior shin, and mild pitting edema. X-rays of the tibia and fibula show subperiosteal new bone formation. A brain MRI shows multiple small lesions, and a CT scan of the chest reveals a right upper lobe mass. Which of the following best explain patient's clinical presentation?

a. Hypertrophic pulmonary osteoarthropathy (HPOA) and metastatic brain disease
b. Finger clubbing and paraneoplastic syndrome with cerebellar degeneration
c. Epilepsy secondary to metastatic brain lesions and paraneoplastic myelopathy
d. Metastatic liver disease causing seizures and bone pain
e. Hypercalcemia and digital clubbing associated with parathyroid hormone-related peptide secretion

7. A 30-year-old previously healthy woman presents with a 2-week history of fever, night sweats, and a dry cough. She reports recent weight loss and fatigue. On examination, she has hepatosplenomegaly and normal breath sounds on auscultation. Fundoscopic examination reveals choroidal tubercles. A chest X-ray shows multiple small nodular lesions scattered throughout both lung fields. Blood tests reveal anemia and leucopenia. Which of the following best describes her likely diagnosis?

a. Primary pulmonary tuberculosis with hypersensitivity reaction

b. Miliary tuberculosis with possible tuberculous meningitis
c. Post-primary pulmonary tuberculosis with apical cavitary lesions
d. Latent tuberculosis infection with acute progression
e. Extrapulmonary tuberculosis with isolated bone marrow involvement

8. A 57-year-old man presents with a persistent cough for the past 6 weeks, weight loss, night sweats, and low-grade fever. He lives in an area with a high prevalence of tuberculosis (TB). A chest X-ray shows bilateral upper lobe cavitary lesions. Sputum smear microscopy, using the Ziehl-Neelsen stain, is negative for acid-fast bacilli. The patient has a significant history of smoking but no recent travel or known exposure to TB. Which of the following is the most appropriate next step in the diagnostic workup?
a. Initiate empirical anti-TB therapy based on clinical suspicion
b. Perform a bronchoscopy with lavage to obtain more diagnostic material
c. Order a rapid molecular test such as Cepheid GeneXpert MTB/RIF
d. Wait for sputum culture results before starting any treatment
e. Use light-emitting diode fluorescent microscopy with aura mine staining for immediate diagnosis

9. A 28-year-old woman with tuberculosis (TB) begins treatment with rifampicin, isoniazid, ethambutol, and pyrazinamide. She observes that her urine and tears have turned orange/red and is concerned about interactions with her oral hypoglycemic medication for type 2 diabetes. She is also planning a pregnancy and asks about the safety of TB medications during this time. Which of the following statements best addresses her concerns?
a. Rifampicin causes orange/red body fluid discoloration minimally affects oral hypoglycemic; ethambutol needs no renal dose adjustments.
b. Rifampicin causes orange/red body fluid discoloration and accelerates oral hypoglycemic metabolism, requiring dose adjustments, ethambutol requires caution in renal impairment.
c. Rifampicin causes orange/red body fluid discoloration, does not alter oral hypoglycemic efficacy; ethambutol does not require renal adjustments, and no additional monitoring is needed.
d. Ethambutol should be avoided in renal impairment; rifampicin has minimal impact on oral hypoglycemic and does not require contraceptive adjustments.
e. Rifampicin causes orange/red body fluid discoloration and does not affect oral hypoglycemic or require additional monitoring

10. A 55-year-old male smoker presents with a persistent cough, breathlessness, ankle swelling, and occasional morning headaches. He describes his cough as a "smoker's cough," and his physical examination shows quiet breath sounds but no finger clubbing. Based on this presentation, which diagnosis is most likely given the combination of symptoms and clinical findings?
a. Chronic bronchitis with secondary pulmonary hypertension due to smoking-related damage.
b. Asthma exacerbated by smoking, with symptoms of oedema & morning headaches suggesting a possible alternative diagnosis
c. Chronic obstructive pulmonary disease (COPD) with potential complications such as Cor pulmonale and exacerbation-related symptoms requiring further evaluation for tuberculosis.
d. Bronchiectasis with secondary symptoms of morning headaches and ankle swelling not typically associated with COPD.
e. Congestive heart failure exacerbated by smoking, with symptoms (breathlessness & ankle swelling misattributed to COPD)

11. In evaluating the severity and impact of Chronic Obstructive Pulmonary Disease (COPD), using FEV1% predicted is traditional. However, a more detailed assessment considers various factors. Given the following options, which method provides a more complete evaluation of COPD severity, taking into account both objective measures and patient experiences?

a. Combining FEV1% predicted with the Modified Medical Research Council (mMRC) dyspnea scale, and noting activity limitatior and exacerbation frequency.
b. Relying on FEV1% predicted and imaging results while ignoring patient symptoms and functional limitations.
c. Relying only on patient-reported symptoms and exacerbation history without considering FEV1% predicted.
d. Using FEV1% predicted alone to determine severity and guide treatment.
e. Using FEV1% predicted and the frequency of exacerbations without considering patient-reported symptoms

12. A 45-year-old male presents with complaints of excessive daytime sleepiness, difficulty concentrating, and frequent headaches in the morning. His spouse reports that he snores loudly in all sleeping positions and experiences episodes of gasping and choking during sleep, often followed by pauses in breathing. The patient denies a history of heart disease but is concerned about his decreased cognitive function and work performance. He has also noticed nocturia. Which of the following is the most important next step in the management of this patient?

a. Advise weight loss and lifestyle modifications without further investigation
b. Perform a brain MRI to rule out central nervous system causes of excessive sleepiness
c. Prescribe a short course of benzodiazepines to improve sleep quality
d. Refer for overnight sleep study to assess breathing patterns and sleep quality
e. Start a trial of continuous positive airway pressure (CPAP) therapy

13. A 55-year-old male presents with a 10-year history of chronic daily cough producing copious amounts of purulent sputum, sometimes streaked with blood. He reports recurrent respiratory infections, pleuritic chest pain during exacerbations, and increasing breathlessness on exertion. He has lost weight unintentionally over the past 6 months and experiences significant fatigue and anorexia. Examination reveals crackles over the lung bases and halitosis. Given his presentation, which of the following complications is he most at risk for if his condition is left untreated?

a. Cor pulmonale
b. Lung abscess
c. Massive hemoptysis
d. Pneumothorax
e. Pulmonary hypertension

14. A 72-year-old male with advanced chronic obstructive pulmonary disease (COPD) presents to the emergency department with severe dyspnea, drowsiness, and confusion. On examination, he has warm peripheries, bounding pulses, a flapping tremor, and evidence of hyperinflation with intercostal in drawing. Arterial blood gas (ABG) reveals pH 7.28, PaCO, 75 mmHg, and PaO2 50 mmHg. After initial supplemental oxygen therapy, he remains drowsy, with low respiratory effort. What is the next best step in managing this patient?

a. Administer a high-dose diuretic and monitor response
b. Administer bronchodilators and corticosteroids, then reassess
c. Continue high-flow oxygen until PaO2, improves
d. Immediate intubation and mechanical ventilation
e. Non-invasive ventilation (NIV)

15. A 30-year-old woman presents with episodic shortness of breath, wheezing, and a dry cough, especially at night and after exercise. She has no history of smoking or other significant comorbidities. Her spirometry reveals an FEV, of 1.8 L before a bronchodilator and 2.2 L after administration. To confirm the diagnosis of asthma, which of the following additional findings would provide the most definitive evidence?

a. A 10% improvement in FEV, after administration of a bronchodilator
b. A decrease in FEV, of 10% after 6 minutes of exercise
c. FEV, increase of 15% and 400 mL after bronchodilator administration
d. No change in FEV post-bronchodilator but symptomatic improvement
e. PEF diary showing 10% diurnal variation over 2 weeks

16. A 28-year-old pregnant woman with a history of poorly controlled asthma presents for prenatal care. She reports frequent exacerbations despite adherence to her asthma medications. Which of the following maternal and fetal complications is she at the highest risk for if her asthma remains uncontrolled throughout her pregnancy?

a. Enhanced risk of pre-eclampsia and intrauterine growth restriction
b. Greater risk of maternal anemia and neonatal sepsis
c. Higher likelihood of postnatal depression and neonatal jaundice
d. Increased incidence of multiple pregnancies and congenital malformations
e. Increased risk of gestational diabetes and preterm labor

17. A 45-vear-old patient with severe asthma has been prescribed oral prednisolone for the past 6 months to manage symptoms. To address the potential long-term side effects associated with prolonged glucocorticoid use, which of the following is the most suitable management strategy?

a. Consider biologic therapies such as benralizumab, mepolizumab, or dupilumab for eosinophilic asthma
b. Increase the oral glucocorticoid dose to enhance symptom control
c. Initiate biologic therapy such as omalizumab for igE-driven atopic asthma
d. Prescribe bisphosphonates to mitigate the risk of osteoporosis
e. Refer the patient for a specialist severe asthma assessment

18. A 65year-old male with a history of chronic obstructive pulrmonary disease (COPD) and hypertension presents to the emergency department with acute shortness of breath and chest discomfort. His vital signs show a blood pressure of 90/60 VmmHg heart rate of 110 beats per minute, and oxygen saturation of 85% on room air. An ECG shows sinus tachycardia without ST-segment changes. Laboratory tests reveal elevated plasma troponin levels, Which of the following conditions is least likely to be associated with the elevated troponin levels in this patient?

a. Pulmonary embolus
b. Pulmonary edema
c. Septic shock
d. Stable angina

6. AMC 2024

Q1. A 19 years old student presented to your clinic with repeated episodes of productive cough and occasional hemoptysis since early childhood. On further Inquiry he reported passing unformed stools and retarded growth of his body.There is no history of any skin rash or night fever. On examination his weight is 35 kg. height 155cm. On auscultation crepitations are heard all over his chest bilaterally. His Random Blood Suga is 220 mg/di.CT Scan of chest shows bronchiectasis in upper lobes bilaterally. What is the most likely diagnosis?

a. Ciliary dysfunction

b. Cystic fibrosis
c. Hypogammaglobulinemia
d. Primary T8
e. Post measles bronchiectasis

Q2. A 20 years college student came to your clinic with history of recurrent cough, dyspnea and chest tightness for the last six months. On further inquiry he tells that his symptoms worsen after walking in his garden. There is no history of fever. Examination revealed pulse 85 /min, Respiratory rate :17 /min, BP: 115/75 mm Hg and bilateral wheeze were heard all over the chest. What is most likely the diagnosis?

a. Allergic bronchopulmonary aspergillosis
b. Asthma
c. Chronic obstructive pulmonary disease
d. Hypersensitivity pneumonitis
e. Recurrent pulmonary embolism

Q3. A50 year old businessman came to Emergency Room with history of sudden onset dyspnea and chest pain for the last two hours. He has been smoking one pack of cigarettes daily for the last 15 years. On examination his pulse rate is105/min BP 90/60 Respiratory rate of 24/min, resonant percussion notes & diminished breath sounds on right side of his chest.
What is most appropirate diagnosis for this patient?

a. Arterial Blood Gases
b. Chest X-ray
c. Electrocardiogram
d. Serum D-Dimers
e. Spirometry

Q4. The gold standard to diagnose Pulmonary Embolism is

a. Ventilation
b. D Dimer Test
c. Perfusion Scan
d. Pulmonary Angiogram
e. Ultrasound of Pulmonary Arteries

Q5. MDR TB is resistance to

a. Rifampicin, Ethambutol, Pyrazinamide, isoniazid
b. Isoniazid, Ethambutol, Pyrazinamide
c. Rifampicin, & isoniazid
d. Levofloxacin, Streptomycin, Rifampicin, pyrazinamide
e. None of the above

Q6. Pulmonary function tests were performed on a child recently diagnosed with Cystic Fibrosis. What is the first lung-function abnormality seen in children?

a. Decreased forced vital capacity (FVC)
b. Decreased Forced expiratory volume (FEV1)
c. Increased mid maximal flow rate (MMFR)
d. Decreased Total lung capacity (TLC)
e. Increased Residual volume (RV) & Functional Residual capacity (FRC)

Q7. Ahmad 21 years old came to the hospital, because he had a productive cough for the last 8 months also, he smoked. We did sputum culture, we found macrophages full of carbon, and a lot of neutrophils. What is the diagnosis?

a. Chronic bronchitis
b. Emphysema
c. Chronic asthma
d. Bronchiectasis
e. Pneumonia

Q8. Spirometry testing reveals results below:
FEV: 87% predicted
FEV1:84% predicted
FEV1/FVC: 80%
FEF25%-75%: 80% predicted
With which of the following are these values the most consistent?

a. Acute asthma
b. Normal lung function
c. Small airway obstruction
d. Pulmonary fibrosis.
e. COPD

Q9. A 25 years old male presented with 3 days history of left sided pleuriticchest pain What statement would be most relevant in this case:

a. Chest pain Increases on Lying down
b. Chest pain Decreases on leaning forward
c. Presence of Pericardial Friction Rub
d. Recent Viral illness
e. All of the above

Q10. A 20 years old male presented with hypertension with BP of 170/100 mmhg, His 2D echo showed increased gradient across thoracic aorta. Which one of the following is a pathognomonic radiographic feature of this disease?
a. Hilar prominence
b. Rib notching
c. Prominent pulmonary vasculature
d. Upper lobe diversion
e. Air bronchogram

Q11. A 23 years old man presented with recurrent pneumothorax. He was treated with chest tube placement. During his hospital stay his hung expanded and there is no residual pneumothorax on CXR. What among the following procedures will yield better results in order to prevent the recurrence of pneumothorax in future
a. Chemical pleurodesis via chest tube
b. Chemical pleurodesis via thoracoscopy
c. Pleural abrasion via thoracoscopy
d. Thoracotomy with Pleurectomy
e. Indwelling pleural catheter placement

Q12. A 30-year-old male patient with asthma presented in emergency room with acute asthma attack. What medications will you give for acute relief his symptoms
a. Salmeterol inhaler
b. Beclomethasone inhaler
c. Montelukast tablets
d. Doxofylline syrup
e. Salbutamol inhaler

Q13. Saleem, a 55-year-old male, who works as a teacher, presents to his GP. He has progressive shortness of breath on exercise, a dry cough and has lost some weight recently. He is a previous smoker of 10day for 29 years. On examination the ends of his fingers appear rounded and there are inspiratory crackles on auscultation. PEFR was normal. A chest X ray is organized, which shows no obvious mass, however there appears to be some haziness at both lung bases. What is the most likely cause of the above presentation.
a. COPD
b. Lung cancer
c. Idiopathic pulmonary fibrosis
d. TB
e. Coal worker pneumoconiosis

7. KMC 2024

1. A 50 years old smoker who is known case of COPD presented to OPD with shortness of breath and cough. PFTs shows FEV1/FVC ratio of 65% and FEV1 is 45% of the predicted. What is the severity of his disease?
a. Mild
b. Moderate
c. Normal
d. Severe
e. Very severe

2. A 60 year old male patient was diagnosed as a case of bronchogenic carcinoma . After workup , the multidisciplinary team decided to manage this tumor with radiation therapy that utilizes radioactive seeds implanted directly into tumor? What type of therapy is this?
a. Brachytherapy
b. Gamma knife radiosurgery
c. Intensity modulated radiation therapy
d. proton therapy
e. Stereotactic body radiation therapy

3. While testing for cystic fibrosis in new born who is born to parents who are unaffected carriers, the best strategy would be
a. No need for testing as different CF gene mutation from each parent will give cystic fibrosis
b. Sweat test is the most reliable diagnostic test
c. Blood for ΔF508 gene mutation
d. The immune-reactive trypsin level is typically low in CF
e. The newborn blood spot IRT test is only valid if the baby has received at least 3 days milk feed

4. A 75 years old woman presented to medical OPD with anorexia, significant weight loss, asthenia and

hemoptysis. She had also noted change in his voice. On examination the patient was pale and anemic, clubbed and had left ptosis. Chest examination showed trachea deviated to left and dull percussion note in left apical area. There was also stony dull percussion note with absent breath sounds in left lower chest. What is investigation of choice to reach final diagnosis?

a. CT chest
b. Fiberoptic bronchoscopy
c. Pleural fluid aspiration for malignant cells
d. sputum cytology
e. sputum for AFB and GenXpert

5. A 50 year old was diagnosed as a case of bronchogenic carcinoma. Multidisciplinary team decided to manage this tumor with immunotherapy on the basis of workup. Which of the following is a type of immunotherapy for bronchogenic carcinoma?

a. Bleomycin
b. Carboplatin
c. Gemcitabine
d. Pembrolizumab
e. Vinorelbine

6. A 50 year old smoker working in wool mill is having longstanding history of chronic cough and dyspnoea. The physician advised him Pulmonary function tests. The following results are obtained on spirometry: FEV1: 74% predicted, FVC: 68% predicted, TLCO: 46% predicted, KCO: 53% predicted. Which of the following is the most likely cause?

a. Asthma
b. Chronic obstructive pulmonary disease
c. Kyphoscoliosis
d. Lung fibrosis
e. Morbid obesity

7. A 50 years old smoker patient presented to Medical OPD with chief complaints of miosis, drooping of eyelid and anhidrosis. He is also complaining of cough, hemoptysis and weight loss. On examination, there is clubbing of fingers, which clinical condition is present in this patient

a. Horner's Syndrome b. Kartegener's syndrome
c. Lofgren Syndrome d. Pancoast syndrome
e. Plummer Vinson's syndrome

8. A 50-years-old woman presented to emergency with severe shortness of breath which is present even at rest She was experiencing these attacks quite frequently in the past as well. She is house wife and cooks food for her kids on wood fire. Physical examination shows clubbing and cyanosis. Chest examination shows fine end inspiratory crackles and occasional wheeze. Cardiac examination shows right ventricular heave and loud P2? What is the diagnosis

a. Cor pulmonale due to Bronchial Asthma
b. Cor pulmonale due to Bronchiectasis
c. Cor pulmonale due to COPD
d. Cor pulmonale due to ILD
e. Cor pulmonale due to Pneumoconiosis

9. A young gentleman presented to Medical OPD with shortness of breath. On examination his chest was wheezy. Pulmonary Function Tests showed FEV1/FVC ratio of 65% and FEV1 was 60%. FEVI was repeated after salbutamol inhaler which did not improve. What is your diagnosis?

a. Bronchial asthma
b. Bronchiectasis
c. Chronic Obstructive Pulmonary Disease (COPD)
d. Interstitial Lung disease
e. Pneumonia

10. A 30-year-old woman has presented to the emergency department of Khyber Teaching Hospital after a head on collision of his car 5 minutes back. He is restless , short of breath and cyanosed. His neck veins are distended , the right side of chest is hyper-resonant and breath sounds are not audible on the right side. The appropriate immediate treatment is

a. Chest incubation on right side
b. Needle decompression on the right side followed by chest intubation
c. To perform a chest x-ray
d. To perform a tracheostomy
e. Insert endotracheal tube

11. A 48-year-old man presents with increasing breathlessness and cough. This has been getting worse over the last year and he had repeated chest

infections over the last six months. He smoked 10 cigarettes a day until eight years ago. He has no known allergies. He works as a hairdresser. A chest X-ray was reported as being normal. Pulmonary function testing demonstrated:
FEV1: 1.601 (53% predicted),
FVC: 2.861 (78% predicted), Total lung capacity: 4.831 (110% predicted) TLCO: 6.63% (93% predicted)
KCO: 1.36 (120% predicted)
What is the most likely diagnosis?
a.Asthma b.Chronic bronchitis
c. Emphysema d. Obesity
e. Pulmonary embolism.

12. A 35-year-old woman with a history of severe, persistent asthma presents with worsening cough, wheezing, and dyspnea. She reports that her cough produces thick, brown sputum and has not improved despite treatment with moxifloxacin 400 mg by mouth daily for the past 21 days. Pulmonary-function testing demonstrates an FVC of 3.25 liters (predicted value is 3.20 liters), an FEV1 of 1.4 liters (predicted is 2.5), and an FEV1/FVC ratio of 0.43 (predicted is 0.80). Laboratory testing reveals an absolute eosinophil count of 1200 per mm3 (reference range, 0-350) and a serum immunoglobulin E level of 800 IU/mL (10-179). CT of the chest shows central bronchiectasis. Which one of the following diagnoses is most likely in this case?
a. Allergic bronchopulmonary aspergillosis
b. Atypical mycobacterial pneumonia
c. Burkholderia cepacia pneumonia
d. Chronic eosinophilic pneumonia
e. Legionella pneumonia

13. A 25 year old was complaining of fever and dry irritating cough for the last 3 days. On examination, there were reduced breath sounds with dull percussion notes and bronchial breathing in the right lower zone. The doctor on duty did his radiologic workup which showed an air bronchiogram. What is the expected diagnosis in this patient?
a. Bronchial Asthma
b. Bronchiolitis
c. COPD
d. Pneumonia
e. Pneumothorax

14. A medical undergraduate is complaining of nocturnal dry cough. He is denying any history of gastro- mophageal reflux disease. As a doctor,you are suspecting bronchial asthma.You are planning for spirometry in this patient. Asthma can be diagnosed , on spirometry 10 minutes after bronchodilator by which of the parameter?
a. Increase in FEV1 of more than 400 ml from baseline
b. Increase in FEV1 of more than 200 ml from baseline
c. Increase in FEV1 of more than 18% from baseline
d. Increase in FVC of more than 10% from baseline
e. Increase in TLCO of more than 10% from baseline

15. A 50 years old patient whose occupation is a stone cutter for the last 30 years presented to us with shortness of breath and cough. What radiological abnormality is expected in the plan X-Ray chest of this patient?
a. Dystrophic calcification
b. Egg shell calcification
c. Granulomatous classification
d. Linear calcification
e. Metastatic calcification

16. A 30 years old male presents to the emergency with sudden onset right sided chest pain. After receiving life saving measures in the A/E department, the attending physician decides to insert a chest tube on the right side. What is the most appropriate location for passing the chest drain
a. 4th intercostal space in mid-axillary line
b. 4th intercostal space in mid-clavicular line
c. 7th intercostal space in antertior -axillary line
d. 7th intercostal space in mid-axillary line.
e. 7th intercostal space in mid-clavicular line

17. A 12 years old girl has a difficult-to-treat asthma 6 months after management. She was provided with asthma education, her treatment was Optimized by treating comorbidities and modifiable risk factors. High-dose inhaled corticosteroids (ICS) were tried. What is the diagnosis according to GINA guidelines?
a. Intermittent Asthma
b. Severe persistent asthma
c. Moderate persistent Asthma

d. Mild persistent Asthma
e. No Asthma

18. A 12-years-old boy presented to medical OPD with recurrent attacks of chest infection with spitting of huge amount of foul smelling sputum. He also gives history of poor growth and diarrhea. CT chest shows diffuse bronchiectasis. How would you investigate this patient to reach the final diagnosis?
a. Full blood count with ESR
b. HIV Test
c. Sputum Cytology and culture/sensitivity
d. Sweat Chloride Test
e. X Ray Chest

19. A 40 years old patient presented to Medical OPD with chief complaints of chronic cough with copious purulent sputum, hemoptysis and weight loss. On examination he was having clubbing and coarse crackles in the upper and lower zone of lungs. What is the most likely diagnosis?
a. Allergic bronchopulmonary aspergillosis
b. Bronchiolitis
c. Bronchial Asthma
d. Bronchiectasis
e. Chronic obstructive pulmonary disease

20. A 60 year old male is smoker for the last 25 years. He presented to medical OPD with 2 months history of weight loss and cough. A chest X ray revealed a left apical mass for which he underwent bronchoscopy and transbronchial biopsy. Which type of malignancy is expected to be the most common in this patient?
a. Adenocarcinoma
b. Large cell carcinoma
c. Mesothelioma
d. Small cell carcinoma
e. Squamous cell carcinoma

21. A 25 years old asthmatic patient presented to Medical OPD with chief complaints of shortness of breath. On Examination his respiratory rate was 30 and Heart rate was 115/min. with feeble respiratory sounds. PEFR was 30%, SpO2 was 90% and PaCO2 is 5.0Kpa (4.6-6.0Kpa). What is the severity of the patient's asthma?
a. Acute Severe Asthma
b. Life threatening Asthma
c. Mild Asthma
d. Moderate Asthma
e. Near Fatal Asthma

22. A 55 year old smoker was diagnosed as a case of bronchogenic carcinoma. Multidisciplinary team decided to manage this tumor with targeted therapy on the basis of workup. Which of the following is type of targeted therapy for bronchogenic carcinoma?
a. Bevacizumab
b. Cisplatin
c. Erlotinib
d. Methotrexate
e. Paclitaxel

23. While assessing a conscious trauma patient in a primary healthcare facility, the best way to check the airway is to
a. Check the blood pressure
b. Check the gag reflex
c. Talk to the patient whether he can talk back
d. Check for response to pain
e. Do suction of the airway

24. A 2 mo-old female infant is presented with a chief complaint of poor feeding and lethargy. Parents report that the child was well until 3 days earlier, when poor feeding began. Pulse rate is 280 beats/min, respiratory rate is 65/min, and blood pressure is 80/50 mm Hg. Physical examination shows a gallop rhythm and an enlarged liver palpable 2-3 cm below the right costal margin. The most appropriate diagnostic test for this patient would be
a. ABGs analysis
b. Blood culture
c. CBC
d. chest radiograph e. ECG

8. NWSM 2024

1. A 23 years old female with history of cough, wheeze and chest tightness presents to the OPD for evaluation. Her symptoms are usually prominent in the early winter whenever she has upper respiratory tract infection. On auscultation she has bilateral wheeze. There is no cyanosis and she is afebrile.

a. CXR b. ECHO c. CBC
d. PFTs e. HRCT Chest

2. A 33 years old female with diagnosis of Pulmonary Tuberculosis is started on Anti Tuberculous Therapy for the last two weeks. She follows with complains of discoloration of her Urine. Her appetite is normal. Her CBC and Liver Function Tests are normal. What can be the cause of this presentation?
a. Drug Induced Hepatitis
b. Side Effect of Rifampicin
c. Hemolysis with Hemoglobinuria
d. Change in diet and fluid intake
e. Hematuria due to Renal TB

3. A 47-year-old man presents to the ER with fever, body aches & breathlessness of 7 days duration. His Pulse is 120, BP 110/70, SpO2 78% on room air & respiratory rate of 35/minute. Labs: Hb 13.8 gm/dl, TLC 8000/ cubic millimeter, CRP 22 mg / dl. His SARS COV-2 PCR comes back positive. Which of the following treatment have been shown to improve his outcome?
a. Amphotericin
b. Dexamethasone
c. Hydroxycholoroquine
d. Meropenem
e. Enoxaparin

4. A 27-year-old female is seen in the clinic with 2 months history of cough & breathlessness. She also reports intermittent fevers. A chest x-ray shows bilateral diffuse nodular infiltrates. The patient had been keeping pigeons at home for the last 8 months. Subsequent blood tests, pulmonary function tests & HRCT suggest a diagnosis of Hypersensitivity pneumonitis. What is the next best step in her management?
a. Start Perfenidone
b. Start Prednisolone 0.5 mg/ kg
c. Remove pigeons from home
d. Start Dexamethasone
e. Send blood for Anti-nuclear antibodies (ANA)

5. A 75 year old man was recently started on Prifenidone for Progressive Idiopathic pulmonary fibrosis. He comes back to clinic with unbearable adverse effects and tells you that he cannot tolerate the drug. What other drug can be used for his treatment?
a. Cyclophosphamide
b. Etanecept
c. Nintedanib
d. Rituximab
e. Tociluzimab

6. A 59 years old female presents to ER with 5 day history of high-grade fever and SOB. Her vitals are Pulse: 110/min BP: 138/80 SPO2: 92% on air and Respiratory Rate: 23/min. She has a temperature of 39.5 degrees centigrade. She has an ejection systolic murmur in the aortic area and basal crept. What is the best next course of action?
a. Give broad-spectrum antibiotics straight away before waiting for investigations
b. Do CBC, CRP and then give IV antibiotics and IV Furosemide
c. Take samples for CBC, CRP, and Renal profile, Urine RE, and 2 sets of blood cultures and then give IV antibiotics
d. Do an emergency echocardiogram before giving any treatment
e. Do CXR before giving IV Furosemide

7. A 30 years old female presents with sudden onset right sided chest pain and dyspnea for the last 12 hours. On examination she is afebrile, Pulse is 110 per minute, Respiratory rate of 22 per minute and Normal Oxygen saturation. Percussion of right side of chest is hyper resonant and auscultation reveals absent breath sound over right chest. What is the first investigation to confirm the diagnosis in this patient?
a. Pulmonary Functions Test

b. Arterial Blood Gases
c. CT scan Chest with contrast
d. Chest Radiograph
e. Echocardiography

8. A 79-year-old man gets admitted with COPD exacerbation. He is on standard treatment and is now on IV Steroids & Nebulization as well. The Oxygen saturations are 84% on room air. Your consultant instructs you to give controlled oxygen as the patient is at risk of retaining CO2 due to his lung disease. What device would you use to deliver oxygen?
a. Nasal cannula
b. Nebulizer mask
c. Non rebreather mask
d. Simple face mask
e. Venturi mask

9. A 45-year-old female presents with progressive shortness of breath, fatigue, and swelling of her legs. She reports a recent history of a viral infection, and three days ago, she began experiencing pleuritic chest pain, which worsens when she lies down. On examination, you note peripheral edema, jugular venous distention (JVD), and a muffled heart sound. Her electrocardiogram (ECG) shows diffuse ST-segment elevation. Which of the following is the most likely cause of her symptoms, and what is the next step in management?
a. Acute pericarditis with associated effusion; initiate high-dose aspirin or colchicine therapy
b. Acute myocardial infarction; initiate thrombolytic therapy immediately
c. Heart failure exacerbation; start intravenous diuretics
d. Pulmonary embolism; begin anticoagulation therapy
e. Aortic dissection; perform immediate imaging for confirmation

10. A 52 years old male, Chronic Smoker presents with history of productive cough and shortness of breath on most days for the last three years. He denies history of fever and weight loss. On examination he is overweight, cyanosed with pedal edema and bilateral rhonchi on chest auscultation. His Arterial Blood Gas Analysis shows low Partial Pressure of Oxygen and slightly raised Partial Pressure of Carbon Dioxide. What is the diagnosis?
a. Bronchial Asthma
b. Emphysema
c. Chronic Bronchitis
d. Heart Failure
e. Pneumonia

11. A 39-year-old female presents to the emergency room with acute severe asthma. She has been having asthma for the last 15 years. On examination her Pulse is 115/min, BP 100/70, SpO2 92% on room air, Respiratory rate 30/min. She has bilateral diffuse wheezing on examination. What would be the first step in her pharmacological management?
a. IV Adrenaline
b. IV Aminophylline
c. IV Magnesium sulphate
d. Repeated Nebulized bronchodilators
e. IV Salbutamol

12. A 70-year-old gentleman presented to you in OPD, complaining that he frequently awakes in the middle of the night due to air hunger. After sitting upright, he feels better. He has recently noted swelling of his feet and also gets fatigued on minimal exertion. He was taking medication for his long-standing diabetes, hypertension, and heart failure. But he has missed his doses for 2 weeks as his son forgot to refill his prescription before going on a foreign business trip. Chest examination reveals B/L crepitation up to mid zones. Which medication among the following should be started for relief of his symptoms?
a. Beta 2 Agonist b. Diuretics

c. Steroids d. Anti-coagulants
e. Antiplatelet

13. A 45 year old man gets admitted to the medical ward with a community acquired pneumonia. He does not have any comorbid and has never been admitted to a hospital. The patient is vitally stable and there are course crackles on examination of his right chest. A chest x-ray shows right sides infiltrates. What antibiotics would you start?
a. Amoxicillin - Clavulanic acid
b. Ceftriaxone
c. Cefotaxime
d. Ceftriaxone + Clarithro
e. Piperacillin Tazobactam

14. A 47 years old male with Pulmonary Tuberculosis presents with Acute Swelling of right big toe. He is using Anti Tuberculous Therapy for the last 10 days. He is afebrile but is having tender, swollen right Meta-Tarso-Phalangeal Joint. His Uric acid is 11 mg/dL. What is the cause of his presentation?
a. Trauma to right big toe
b. Tuberculous Osteomyelitis
c. Rheumatoid Arthritis
d. Osteoarthritis
e. Hyperuricemia secondary to Pyrazinamide

15. A 35-year-old man presents to the ER in the month of December with fever, cough for 3 days & breathlessness for the last 1 day. He admits to having runny nose, sore throat & aches & pains in the body for 3 days prior to developing cough. The pulse is 126/min, BP 100/70, Respiratory rate 29/min, SpO2 92% with 6Litres/min. There are bilateral lower part crackles on chest examination. His WBC count is 7 x 109, PLTs 109 & CRP is 31. Other labs are normal. The chest x-ray shows bilateral middle and lower zone alveolar infiltrates. What is the most appropriate treatment?
a. Amoxicillin P.O
b. Ceftriaxone, Clarithromycin, Oseltemevir
c. Meropenem, Levofloxacin
d. Meropenem, Vancomycin, Gemifloxaxin
e. Piperacillin/tazobactam

16. A 40 year old male comes for follow up of his long standing asthma. He uses his inhalers intermittently when he develops symptoms. The patient is vitally stable and has mild wheezing on auscultation. What is the recommended method of assessing his asthma control?
a. Frequency of reliever (Short acting Beta 2 agonist) use
b. Serial PEF measurements
c. Serial spirometry
d. The number of used inhaler canisters
e. The patient's subjective view of his level of control

17. A 21 years old male presents with anorexia, Fever, Productive cough and weight loss for the last four weeks. On examination he is having a temperature of 100 F, Pulse is 80 per minute and no cyanosis or clubbing. Chest examination is normal. Labs Show Hemoglobin of 11.3 g/dL (Low) and ESR of 84 mm in first hour. Chest radiograph shows apical lung opacities. What should be the next step to diagnosis?
a. CBC
b. CT scan chest with contrast
c. C Reactive Protein
d. Sputum for ZN stain
e. Blood cultures

18. A 72 years old male with recent ischemic stroke and bedridden for the last two weeks presents with one week history of high grade fever, cough and purulent sputum. On examination he is febrile and clubbed. Chest radiograph shows a thick walled cavity with in the right middle zone. Which of the following pathogens are usually present in the sputum of patients with lung abscess?
a. Streptococci
b. Pseudomonas
c. Anaerobes

d. Mycobacterium Tuberculosis
e. Pneumocystis jirovecia

19. A 25-years-old lady presents with 5 years history of cough, copious sputum and recurrent episodes of fever & increased chest symptoms. She is vitally stable. There are diffuse course crackles on auscultation of the chest. An HRCT chest is done which shows bilateral cystic shadows suggestive of Bronchiectasis. What is the most important step in the management of bronchiectasis?
a. IV antibiotics
b. Chest toilet
c. Inhaled bronchodilators
d. Inhaled antibiotics
e. Referral to Allergy clinic

20. A 53 years old female admitted in Medical ICU and on Mechanical Ventilation develops high grade fever and increasing shortness of breath on fourth day of admission. You are suspecting Ventilator associated Pneumonia. Which antibiotic would you use in this patient?
a. Amoxicillin
b. Clindamycin
c. Tetracycline
d. Ceftriaxone
e. Piperacillin Tazobactam

21. A 44-year-old female presented to the A&E department with complaints of sudden shortness of breath while she was walking in a park. She is the mother of 2 kids and currently using OCPs. They are back from 2 weeks trip to the Middle East after taking 12-hour non-stop flight. Her BP was 90/60 and she was tachycardia with a heart rate of 120 bpm. Her Oxygen saturation was 88% on room air. The chest was clear to auscultation and she has normal heart sounds apart from tachycardia. ECG showed sinus tachycardia and an S1Q3T3 pattern. The echo revealed dilated right-sided cardiac chambers. Labs show raised D. dimers. What's the most likely cause?
a. Pneumonia
b. Asthma exacerbation
c. Pulmonary Embolism
d. Unstable angina
e. Trauma

3. PEADS-CARDIOLOGY

1. KGMC 2024

1. A 5 years old child has mass in anterior mediastinum CT chest is done What is the most probable diagnosis?
a. Ca lung
b. Ca esophagus
c. Schwannoma
d. Teratoma
e. Rhabdomyosarcoma

2. A 4 years old girl otherwise healthy present to ER With history of exertional dyspnea. On examination systolic thrill in suprasternal notch and systolic murmur at right upper sternal edge radiating to neck. Surgery most appropriate at which gradient?
a. 20-30 mm Hg
b. 30-40 mm hg
c. 50-60 mm Hg
d. 60-80 mm Hg
e. 20-30 mm Hg

3. A Newborn present with central cyanosis and loud single s2.which of following congenital heart Disease he is suffering from?
a. Tetralogy of Fallot
b. Vsd
c. Asd
d. Transposition of great vessel

4. A patient with hypertension is complaint with his medication but he develop cough by using it. What is that medication?
a. Diuretic
b. ACEI

c. Beta blockers
d. ARB
e. Calcium channel blocker

5. A years old boy known case of VSD present with fever, new onset murmur and splinter hemorrhages on nails, what is most likely causative organism?
a. Staph Viridians
b. Staph aureus
c. H. influenza
d. Pseudomonas
e. Enterococcus faecalis

6. New born cause severe cyanosis, respiratory distress and right sided aortic arch. What is the probable diagnosis?
a. Truncus arteriosus
b. Arterial Septal Defect
c. Transportation of great arteries
d. Total anomalous pulmonary venous return
e. Tetralogy of fallot

7. 2 years girl present with recurrent episode of palpitation associated with sudden onset and termination. What is the 1st line treatment for acute episodes?
a. Adenosine
b. Amiodarone
c. Propanolol
d. Metoprolol
e. Verapamil

8. A 16 year old lady diagnosed with rheumatic fever with carditis with addition antibiotics. Which of the following medication need to prevent further inflammations? Option:
a. Prednisolone
b. Cyclosporine c. Azathioprine

9. A 12 year old child of rheumatic fever having movement disorder. What is the most appropriate Term for his movement disorder associated with rheumatic fever?
a. Ball….
b. Sydhenhemhorea c. Athetosis
d. Myoclonus

10. 5 year old child having mass on anterior mediastinum. In which of the following mass presentation is on anterior mediastinum?
a. Teratoma
b. Rhabdomyosarcoma
c. Esophageal ca
d. Lung ca
e. Mesothelioma

11. A 12 year old athletic boy presents with exertional dyspnea and a systolic murmur heard best at the left lower sternal border. What conditions most likely causing these symptoms?
a. Restrictive Cardiomyopathy
b. Hypertrophic Cardiomyopathy
c. Dilated Cardiomyopathy
d. Ventricular Septal Defect
e. Atrial Septal defect

12. A new born child presented with dyspnea and respiratory distress. Chest x ray show snowman and figure of 8 appearance. What the diagnosis?
a. Tetralogy of Fallot
b. Transposition of great vessles
c. Ttavp d. VSD e. ASD

13. A 5 years old boy having machinery murmur radiate to left infraclavicular region has?
a. Tof. b. PDA
c. Transposition of great arteritis

14. 12 year old boy of known rheumatic fever presented with dyspnea and respiratory distress. Echo shows valvular abnormality which valve is most commonly affected in rheumatic fever?
a. Aotic

b. Pulmonary stenosis
c. Mitral stenosis
d. Tricuspid regurgitation

15. The newborn child with breathlessness and qrs elevation :
a. Tricuspid atresia
b. Patent ductus arteriosus
c. VSD
d. ASD
e. Coarctation of aorta

2. RMC 2024

1. What is the most common congenital heart defect with a left to right shunt causing congestive heart failure in the pediatric age group?
a. Atrioseptal defect
b. Patent ductus venosis
c. Atrioventricular canal
d. Ventricular septal defect
e. Aorta-pulmonary window

2. A 2-year-old infant is noted to have mild cyanosis who assumes a squatting position during long walking. He is noted to have increasing fussiness followed by Increasing cyanosis, limpness, and unresponsiveness. The most likely underlying lesion is:
a. Hypo plastic left heart
b. Tetralogy of Fallot
c. Transposition of great vessels
d. Anomalous pulmonary venous return
e. Aspiration with obstruction to air passages

3. What is the most common complication of infective endocarditis?
a. Congestive heart failure
b. Pericardial effusion
c. Splenomegaly
d. Cerebral stroke e. Hematuria

4. Which of the following would not be an expected sign of right sided congestive heart failure?
a. Prominent jugular vein
b. Pulmonary edema
c. Hepatomegaly
d. Right ventricular hypertrophy e. Pleural effusion

5. Which of the following infection is commonly associated with Rheumatic fever?
a. Group B Streptococcus lower respiratory tract infection
b. Group A Streptococcus upper respiratory tract infection
c. Streptococcus pneumonia upper respiratory infection
d. Adenovirus lower respiratory tract infection
e. Staphylococcus aureus upper respiratory tract infection

6. All of the following are major criteria on the Jones Criteria for Rheumatic Fever EXCEPT which one?
a. Erythema marginatum b. Chorea
c. Subcutaneous Nodules
d. Fever e. Polyarthritis

7. What types of medications are used to treat and manage rheumatic heart disease?
a. Throat examination b. Chest X-ray
c. X-ray Neck d. CBC e. Blood culture

8. What happens in rheumatic fever?
a. There is no immune response and this results in an illness
b. The immune system attacks only the bacteria
c. The immune system mistakenly identify body proteins
d. There is an underactive immune response
e. A and B

9. Which of the following is the primary site of infection in infective endocarditis?
a. Myocardium
b. Pericardium
c. Epicardium

d. Endocardium
e. Both d and e

10. Which of the following microorganisms is commonly associated with acute, rapidly progressing endocarditis?
a. Streptococcus viridians
b. Staphylococcus aureus
c. Enterococcus faecalis
d. Streptococcus bovis
e. Serrati

11. Jane way lesions, Osler's nodes, and Roth spots are clinical signs associated with:
a. Infective endocarditis
b. Atherosclerosis
c. Myocarditis
d. Pericarditis
e. Rheumatic heart fever

12. The condition associated with the highest risk of developing infective endocarditis (IE) is:
a. Mitral valve prolapse with regurgitation
b. The presence of a prosthetic heart valve
c. Rheumatic fever without valvular defects
d. Intravenous drug abuse
e. None of the above

13. All true regarding ASD except:
a. Atrial septal defect is the second most common congenital heart defect in children and adults
b. Patients with atrial septal defects may have an embolic stroke as the initial presentation
c. Most children with atrial septal defects are asymptomatic
d. The most common yet least serious type of atrial septal defect is an ostium secundum defect
e. The most common yet least serious type of atrial septal defect is ostium primum defect

14. Tetralogy of Fallot is defined by which of the following lists of defects?
a. Ventricular Septal Defect, Aortic Stenosis, Over-riding aorta, Left Ventricular Hypertrophy
b. Atrial Septal Defect, Pulmonic Stenosis, Over-riding aorta, Right Ventricular Hypertrophy
c. Ventricular Septal Defect, Pulmonic Stenosis, Over-riding aorta, Aortic Stenosis
d. Ventricular Septal Defect, Pulmonic Stenosis, Over-riding aorta, Right Ventricular Hypertrophy
e. None of these

15. Most common ASD is:
a. Ostium primum
b. Ostium secundum
c. Sinus venosus
d. All of the above
e. None of the above

16. Murmur heard in ASD:
a. Soft murmur
b. Mild diastolic murmur
c. Best heard at upper left sternal border
d. Wide and fixed splitting of S2
e. All of the above

17. PDA can cause all of the following Except:
a. Excess pressure in the heart
b. Left ventricular overload
c. Congestive heart failure
d. All of the above
e. None of the above

18. As the doctor you know which statements below are correct about the ductus arteriosus?
a. The ductus arteriosus is a structure that should be present in all babies in utero
b. The ductus arteriosus normally closes about 3 days after birth or sooner
c. The purpose of the ductus arteriosus is to help carry blood that is entering the left side of the heart to the rest of the body, hence bypassing the lungs
d. The ductus arteriosus connects the aorta to the pulmonary vein

e. Both A and B

19. Which 1 of the following is cyanotic heart disease?

a. Patent ductus arteriosus
b. Ventricular septal defect
c. Tof
d. Atrial septal defect
e. None of the above

3. GMC 2024

1. What is the primary defect in Tetralogy of Fallot?

a. Aortic valve regurgitation
b. Anterior deviation of infundibular septum
c. Atrial septal defect
d. Ventricular septal defect
e. Mitral valve stenosis

2. Which component of Tetralogy of Fallot is responsible for cyanosis?

a. Pulmonary stenosis
b. Ventricular septal defect
c. Dextroposition of the aorta
d. Right ventricular hypertrophy
e. All of the above

3. What is the typical radiologic configuration seen in Tetralogy of Fallot?

a. Enlarged left heart border
b. Prominent right heart border
c. Boot-shaped cardiac silhouette.
d. Narrow aortic arch
e. None of the above

4. What is the characteristic position assumed by children with Tetralogy of Fallot during episodes of dyspnea?

a. Supine position
b. Standing position.
c. Lying down position
d. Squatting position
e. Prone position

5. What intervention can be performed to break a severe hypoxic spell in Tetralogy of Fallot?

a. Administration of oxygen
b. Injection of morphine
c. Intravenous sodium bicarbonate
d. Intubation and anesthetic sedation
e. All of the above

6. What is the primary defect in Ebstein anomaly?

a. Aortic valve stenosis
b. Mitral valve regurgitation
c. Tricuspid valve displacement
d. Pulmonary valve atresia
e. Ventricular septal defect

7. What is the cause of cyanosis in patients with Ebstein anomaly?

a. Atrial septal defect (ASD)
b. Ventricular septal defect (VSD)
c. Pulmonary valve stenosis
d. Tricuspid valve regurgitation
e. Right-to-left shunting through the foramen ovale

8. What is the characteristic auscultatory finding in Ebstein anomaly?

a. Diastolic murmur at the right sternal border.
b. Systolic murmur at the left sternal border
c. Continuous murmur throughout the precordium
d. Split S2 heart sound
e. Ejection click at the apex

9. What is the diagnostic imaging modality of choice for Ebstein anomaly?

a. Chest radiography
b. Electrocardiogram (ECG)
c. Echocardiography
d. Cardiac catheterization
e. Magnetic resonance imaging (MRI)

10. What is the potential risk associated with cardiac catheterization in patients with Ebstein anomaly?

a. Ventricular arrhythmias
b. Pulmonary hypertension
c. Aortic valve regurgitation
d. Right bundle branch block
e. Increased right precordial voltage

11. Which of the following is the most common congenital heart defect?
a. Ventricular septal defect
b. Atrial septal defect
c. Patent ductus arteriosus
d. Tetralogy of Fallot
e. Coarctation of the aorta

12. Which of the following is a type of cyanotic congenital heart disease?
a. Ventricular septal defect
b. Atrial septal defect
c. Coarctation of the aorta
d. Tetralogy of Fallot
e. Patent ductus arteriosus

13. Congenital heart block occuer with which of the following diagnosis
a. SLE
b. Malignancy
c. Hypothyroidism
d. Typhoide
e. Malaria

14. 14 years boy was brought to doctor with blue discoloration of feet and clubbing of feet. His b.p in right and left arm was 110/70 and 140/80 respectively.on auscultation he had a systolic murmur in pericardium.what is the diagnosis?
a. Aortic stenosis
b. Pulmonary stenosis
c. Co-arctation of aorta
d. Aortic regurgitation
e. Hypotension

15. Diagnosis of the rheumatic fever is made according to which criteria?
a. Modified dukes criteria
b. Modified simpson criteria
c. Revised jhones criteria.
d. Rutherford criteria
e. Acc criteria

16. 17 year boy p/w high grade fever rigors and chills. Dx of infective endocarditis was made which criteria is used for dx of infective endocarditis?
a. Modified dukes criteria
b. Modified jhones criteria
c. Rukfield criteria
d. Back walls criteria
e. Revised jhones criteria

17. A three-year old boy came to you with fever and breathing difficulty. There is past history of recurrent chest infections. On examination there is the tachypnea, pan- systolic murmur at left lower sternal border. What is most likely diagnosis?
a. Atrial septal defect.
b. Ventricular septal defect
c. Tetralogy of Fallot
d. PDA e. None of the above

18. A 2 Year old girl has been recently diagnosed as a case of ventricular septal defect. Which of the following is NOT a management option?
a. Diuretics
b. ACE Inhibitors
c. Beta Blockers
d. Surgery e. None of the above

19. A 5 Yr old girl presented with mild dyspnoea on exertion, On examination she is well built, stable vitals. Precordial examination shows Ejection systolic murmur at left upper sternal border with wide fixed splitting of second heart sound. What is most likely diagnosis?
a. Ventricular septal defect

b. Tetralogy of Fallot c. PDA
d. Atrial septal defect. e. None of the above

20. Which of the following is NOT sign of congestive cardiac failure?
a. Tachypnea b. Tachycardia
c. Dyspnoea d. Seizures
e. All of the above

21. Which of the following investigation is ideal to diagnose congenital heart diseases?
a. CBC b. Chest xray
c. Echo cardiology d. ECG
e. Both A and D

22. A 10-year-old boy is brought to the emergency department with a history of fever, fatigue, and joint pain for the past two weeks. On physical examination, he has a temperature of 39°C (102.2°F), a new heart murmur, splenomegaly, and petechiae on his skin. Blood cultures are positive for Streptococcus viridans. Based on the case scenario, what is the most appropriate initial treatment for this patient?
a. Oral amoxicillin
b. Intravenous penicillin G and gentamicin
c. Oral azithromycin
d. Intravenous vancomycin and ceftriaxone
e. Observation and follow-up in one week

23. : A 12-year-old girl with a history of a congenital heart defect presents with fever, fatigue, and weight loss over the past two weeks. On examination, she has a new heart murmur that was not present previously. Blood cultures are positive for Streptococcus viridans. An echocardiogram shows vegetations on the mitral valve. Which of the following clinical signs is most specific for the diagnosis of infective endocarditis in this child?
a. Fever
b. New or changed heart murmur
c. Janeway lesions
d. Splenomegaly
e. Arthralgia

24. A 9-year-old boy with a history of congenital heart disease presents with fever, malaise, and petechiae. Which of the following is the most likely initial test to confirm the diagnosis of infective endocarditis?
a. Chest X-ray
b. Complete blood count
c. Echocardiography
d. Electrocardiogram (ECG)
e. Urinalysis

25. What is the primary risk factor for developing infective endocarditis in children?
a. Recent viral infection
b. Congenital heart disease
c. Asthma
d. Diabetes mellitus
e. None of the above

26. A 10-year-old boy presents to the pediatric cardiology clinic with complaints of chest pain during physical activity, shortness of breath, and occasional dizziness. On physical examination, the cardiologist notes a systolic ejection murmur heard best at the right upper sternal border with radiation to the carotids. There is also evidence of a diminished and delayed carotid upstroke. An echocardiogram is ordered. What is the most likely finding on the echocardiogram that would confirm the diagnosis of aortic stenosis in this child?
a. Left ventricular hypertrophy with normal aortic valve
b. Thickened & calcified aortic valve with restricted opening
c. Dilated right ventricle and tricuspid regurgitation
d. Enlarged left atrium with mitral valve prolapse
e. Normal heart structures with no abnormalities

27. Rhematic fever child is allergic to penicillin. Which of the following medicine will be alternate for his Treatment?

a. Penicillin. b. Azithromycin.
c. Ciprofloxacin. d. Cefixime.
e. Cefaclor

28. year child presented with bluish discoloration of lips, tongue and fingers. There is no hepatomegaly on examination but fingers are clubbed. Chest x ray shows oligemic lung field and boat shaped heart. What is your diagnosis?

a. TOF b. TGA c. VSD d. ASD e. CCF

29. If child is suffering from cyanotic congenital heart it indicates:

a. There is normal oxygenated hemoglobin.
b. There is increased oxygenated hemoglobin.
c. There is decreased oxygenated hemoglobin.
d. There is normal carbon dioxide in blood.
e. There is only decreased hemoglobin

30. Diagnosis of congenital heart disease is done by:

a. Chest X-Ray. b. MRI c. ECCHO
d. ECG e. CBC

31. 9-month infant is suffering from barking cough with low grade fever. She is irritable and reluctant to feed. Chest examination shows wheezy chest. CBC is normal. What is your diagnosis?

a. Pneumonia.
b. Epiglottis
c. Croup (acute laryngeotrachiobronchitis
d. Bronchiolitis
e. Asthma

32. What is the primary indication for balloon valvuloplasty in children with valvular aortic stenosis?

a.Prevention of LV dysfunction
b. Prevention of aortic insufficiency
c. Prevention of coronary artery stenosis
d. Prevention of LV dilation
e. Prevention of LVH

33. What is the recommended peak-to-peak systolic gradient between the left ventricle and aorta at rest for balloon valvuloplasty in children with valvular aortic stenosis?

a. 30-40 mm Hg
b. 40-50 mm Hg
c. 50-60 mm Hg
d. 60-70 mm Hg
e. 70-80 mm Hg

34. Which procedure involves using the patient's own pulmonary valve to replace the abnormal aortic valve?

a. Balloon valvuloplasty
b. Aortic valve replacement
c. Aertopulmonary translocation (Ross procedure)
d. Homograft valve replacement
e. Mechanical prosthetic valve replacement.

35. What is the recommended approach for prophylaxis against infective endocarditis in patients with aortic stenosis?

a. Regular monitoring and intervention
b. Antibiotic prophylaxis
c. Balloon valvuloplasty
d. Aortic valve replacement
e. No longer recommended

4. WMC 2024

1. Which system is not affected in Rheumatic fever

a. Blood vessels b. Spleen c. Joints
d. CNS e. Subcutaneous tissue

2. Which one is not a risk factor for Rheumatic fever

a. Age 5-15 years
b. Age Birth to 1 year
c. Overcrowding
d. Winter and spring
e. Poor sanitation

3. Which one is not a clinical sign of chorea

a. Fits b. Jack in the box sign
c. Pronator sign d. Milking sign
e. Grimacing of face

4. Which one is diagnostic of Rheumatic fever
a. Two major and 1 minor criteria
b. Two major and two minor criteria
c. One major and two minor criteria
d. 5 minor criteria
e. All of above

5. Rheumatic fever with carditis and residual heart disease should get prophylaxis till
a. 10 years
b. 18 years age of
c. 25 years
d. Life long
e. None of above

6. Infective Endarteritis involve
a. Aorta
b. Sup vena cava
c. Aneurysms
d. A.V shunts
e. All of above

7. Which one is not causative organisms of infective endocarditis
a. H. influenzae type B
b. Streptococcus viridans
c. Staph aureus
d. Pseudomonas
e. None of above

8. Which one is not high-risk factor for infective endocarditis
a. Prosthetic valve
b. Complex cyanotic heart disease
c. Central catheter
d. Previous coronary bypass surgery
e. Injection drug user

9. How many blood samples should be taken for blood culture
a. One
b. 2
c. 3-5
d. All of above
e. None of above

10. Duke's criteria includes (for definite infective endocarditis)
a. one major
b. 3 minor
c. 4 minor
d. 5 minor
e. All of above

11. Which one is not cyanotic congenital heart disease
a. PDA b. VSD c. ASD
d. Coarctation of aorta
e. Transposition of great arteries

12. Hypoxie spells are managed with
a. Morphine
b. Beta blockers
c. O2
d. Knee chest position
e. All of above

13. Which cardiomyopathy will not manifest with cardiac failure
a. Dilated cardiomyopathy
b. Restrictive cardiomyopathy
c. Hypertrophic cardiomyopathy
d. All of above
e. None of above

14. Which one is not cause of fetal cardiac failure
a. Anemia
b. Gestational diabetes
c. Hemolysis
d. Fetal maternal transfusion
e. None of above

15. Patent ductus arteriosus is associated with
a. Blowing murmur
b. Harsh murmur
c. Machinery murmur

d. Rumbling murmur
e. None of above

16. Innocent murmurs are
a. Soft
b. Systolic
c. Short
d. Present in supine position
e. All of above

17. Cyanosis is present when concentration of reduced Hb is
a. Above 5gm%
b. Below 5gm%o
c. At 5gm%
d. Not related to all
e. None of the above

18. Which one is not duct dependant lesion
A. Tetralogy of fallot
B. Pulmonary atresia
C. Tricuspid atresia
D. VSD
E. none of above

19. Radiofemoral delay is present in
a. Tetralogy of fallots
b. VSD
c. ASD
d. Coarctation of aorta
e. None of above

20. There is left to right shunt in
a. Coarctation of aorta
b. Pulmonary stenosis
c. Aortic stenosis
d. VSD
e. All of above

21. In Eissenmenger's syndrome there is
a. Left to right shunt.
b. Right to left shunt.
c. No shunt at all
d. None of above
e. Biphasic shunt

22. Which one is not true for VSD
a. Is most common congenital cardiac lesion
b. Asymptomatic at birth
c. It is acyanotic lesion
d. Has a diastolic murmur
e. None of the above

23. Medication used in heart failure as
a. Frusemide
b. Spironolactone
c. Digoxin
d. ACE inhibitors
e. All of the above

24. Coarctation of aorta should be surgically treated
a. In infancy
b. Under 2 years of age
c. Under 5 years of age
d. In neonatal life
e. Before puberty

25. Which one is not feature of tetralogy of fallot
a. Left ventricular hypertrophy
b. Right ventricular hypertrophy
c. Large VSD
d. Overriding aorta
e. Pulmonary stenosis

5. KIMS 2024

1. A 05 years old with history of central cyanosis since birth has presented to emergency department with altered consciousness since morning. He has been unwell for the past 5 days. It started with low grade fever and headache on day 1 and next day he started vomiting which was followed by one episode of fit. Only symptomatic treatment was given. What is the most likely diagnosis?
a. Brain abscess b. Tuberculous meningitis
c. Bacterial meningitis d. Encephalitis
e. Stroke

2. An infant 9 months old is brought to well-baby clinic for routine checkup. He seems to be thriving well, weighing 8.5 kgs. He is holding his head and

can sit alone. Auscultation reveals a clear chest and a murmur is heard (which is ejection of systolic type) on the left side of the upper chest. What is the most likely diagnosis?

a. VSD b. ASD c. PDA
d. Coarctation of aorta e. Tetralogy of fallot

3. A twelve month old has a history of hospitalization twice for lower respiratory tract infection. According to his mother he is also not gaining weight.Clinical examination reveals a pansystoloic murmur at lower left sternal border. First heart sound is normal whereas loud second heard sound is heard in pulmonary area. There is no edema. Chest is clear bilaterally. Best treatment option for this case?

a. Diversify weaned foods
b. Start ACE inhibitors
c. Opt for a surgical intervention
d. A follow up in 6 months
e. No Intervention is needed as child will outgrow this problem

4. A 12 years old presents to OPD with off and on headache for the past year and a half. Headache is diffuse and is not associated with fever. There is also no history of loss of consciousness or fts. His mother is not satisfied with his food intake as well, He also often complains of pain in his legs for which a G.P prescribed him some calcium and vitamin D syrups. He often takes pain killers for his headache but shows no improvement. Clinically examination reveals; H/R 95/mts and R/R 18 /mts and B.P of 150/85. Diagnosis is?

a. Migraine
b. Coarctation of aorta
c. Space occupying lesion of the brain
d. Stress headache
e. Arrhythmias

5. An eight-day neonate presents with cyanosis since birth. He was delivered full term SVD with immediate cry but develops cyanosis few hours after birth. Clinically he is tachpneac and precordium is showing increased left ventricular implusle and e. Arrythmias holosystolic murmur is audible along left sternal border. ECG done shows left axis deviation and left ventricular hypertrophy. Most likely diagnosis is?

a. Ebstein anomaly
b. Transposition of great arteries
c. Tricuspid atresia
d. Tetralogy of fallot
e. Critical aortic stenosis

6. An eight months old infant presents with three days history of upper respiratory tract infection. amtoms and never got sick since morning however he has developed severe respiratory distress. Muffled heart sounds his pulses are weak and a third heard sound is also audible. His liver is also palpable. Most likely diagnosis?

a. Acute Myocarditis
b. Supraventricular tachycardia
c. Atrial fibrillation
d. Severe pneumonia with heart failure
e. Cardiac tamponade

7. A 12 years old presents with off and on history of chest pain. He also complains often of getting tired quickly as he has to go on toot to school and takes many short breaks before reaching there. He is taking iron therapy as advised by a physician. His elder brother is also taking multivitamins and medications for some heart problem, clinically his vitals are stable and auscultation of the heart reveals ejection systolic murmur at aortic region not associated with a click. What is the most likely diagnosis?

a. Aortic stenosis
b. Hypertrophic cardiomyopathy
c. Atrial fibrillation
d. Dilated cardiomyopathy
e. Constrictive pericarditis (tuberculous)

6. AMC 2024

Q1. A 6-year boy presented with a history of mild cyanosis, and dyspnea on exertion. On examination he has Oxygen saturation of 85%. Pulses are normal, CVS examination shows abnormal rhythm and systolic murmur. CXR shows severe cardiomegaly almost wall to wall heart. What is your diagnosis?

a. Tetralogy of fallot.
b. ASD.
c. Large VSD.
d. Ebstein Anomaly
e. Large PDA.

2.A 1-month old baby presents with pallor and irritability. His pulse is feeble and BP was not recordable. He has hepatomegaly. ECG shows narrow QRS complexes with no visible P Waves and heart rate of 220/min. What is the treatment for this child?

a. Adenosine IM
b. Synchronized DC Cardioversion
c. Adenosine IV
d. IV Lignocaine
e. IV Flecainide

Q3. A 6 days old baby presents with cyanosis since birth. His oxygen saturations are 78%. Pulses are good volume, there is a systolic murmur 3/6 at left sternal border.CXR shows wide upper mediastinum with appearance of a figure of 8. What is your diagnosis?

a. Tetralogy of fallot
b. TAPVR
c. Large VSD
d. Ebstein Anomaly
e. Large PDA

Q4.A newborn presents with severe cyanosis and respiratory distress He has low volume pulses and a harsh systolic murmur at lower left sternal border. Echocardiography shows no pulmonary veins opening into left atrium. There is right to left shunt at the large ASD.What is your diagnosis?

a. Tetralogy of Fallot
b. ASD
c. Large VSD
d. Ebstein Anomaly
e. TAPVR

Q5.A 2 months old baby presents with severe respiratory distress, and oxygen saturation of 87% at normal air. Echocardiography shows only one large vessel originating from heart. What is the diagnosis?

a. Tetralogy of Fallot
b. ASD
c. Large VSD
d. Truncus Arteriosus
e. Large PDA

Q6. A 2 days old baby presents with severe cyanosis. He is baby of a diabetic mother. There is no murmur audible and CXR shows egg on a string heart. What is best complete treatment option in the baby ?

a. Atrial septostomy.
b. Prostaglandin infusion.
c. Atrial Switch operation
d. Senning operation
e. Pulmonary Artery Banding

7. KMC 2024

1. A 4 months old infant has a history of sweating while taking feeds and most of the time the baby is lethargic. Oxygen saturation in room is 95 percent chest auscultation is unremarkable with a grade 3/6 ejection systolic murmer over the right second intercoastal space. You suspect aortic stenosis. The murmer of aortic stenosis radiates to

a. A left axial b. Left sternal border
c. Neck d. Right axilla
e. there is no radiation of murmer of aortic stenosis

2. A 60 month old infant is presented with cough respiratory distress and poor feeding for the last one week O/E he was having tachycardia , tachypnea, and hepatomegaly. Precordium examination reveals a continuous machinery murmur and a wide pulse pressure with a prominent apical impulse.the most likely diagnosis is

a. Aortic stenosis

b. Anomalous coronary artery
c. Patent ductus arteriosus
d. Pulmonic stenosis
e. Ventricular septal defect

3. A neonate is brought to nursery few hours after birth when the midwife noticed the baby is getting blue. He is a full term baby with an uneventful birth, on examination the baby is cyanosed and in respiratory distress chest auscultation is unremarkable and there is no murmer audible on cardiac examination. You inform pediatric cardiologist to assess the child and order chest x ray ECG and ECHO. Egg on side appearance of heart on chest radiograph is seen. This abnormality is seen in which of the following condition
a. Ebstein anomaly
b. Purtussis
c. Tetralogy of fallot
d. Total anomalous pulmonary venous return
e. Transposition of great arteries

4. A 6 weeks old infant who was diagnosed at birth with tetrology of fallot has been asymptomatic throughout his first month of life and was scheduled for surgery at 6 months. Over the last few weeks has been having multiple hypercyanotic spells and was brought to the emergency room by his mother. After assessment he was admitted in the cardiac unit which of the following palliative procedure is used on temporary basis for increasing pulmonary blood flow in this patient.
a. Blalock-taussig shunt
b. Mustard procedure
c. Ramstead procedure
d. Rashkind procedure
e. Senning procedure

5. A 12 years old infant who brought with complaints of fever and breathlessness of 6 days duration. He gave a history of joint pains and swelling involving both knee joints one week before the onset of illness. On inquiring he gave a history of sorethroat 4 weeks ago for which he had taken some medication. On examination there are no signs of inflammation in joints . Auscultation of heart reveals pansystolic murmer at the apex , which commonest valvular abnormality you would expect in the above scenario?
a. Aortic regurgitation
b. Aortic stenosis
c. Mitral regurgitation
d. Mitral stenosis
e. Tricuspid regurgitation

6. Which cardiac anomaly may be associated with maternal lithium ingestion
a. ASD
b. ebstein anomaly
c. PDA
d. total anomalous pulmonary venous return
e. truncus arteriosus

7. A 5 months old baby is brought to you by his mother with increased fussiness for last 2 days. He is pale irritable and mild respiratory distress. He is tachycardiac with a heartrate of 300 beats/min. Liver is not palpable. Diagnosis of Supraventricular tachycardia is made. The first step of management of this infant is?
a. DC cardioversion
b. digitalization
c. IV verapamil
d. IV morphine
e. Vagal stimulation

8. You are evaluating a recently adopted 2 years old child. His new parents were told that this child has some cardiac issue. They noticed that he loves to run around the house but he often takes breaks squats down and breathes heavily. He has dark skin and dusky lips but they wonder if he looks dusky then he runs. O/E he has 80% saturation in room air a harsh systolic murmur at left upper sternal border. There is no hepato- splenomegaly, and pulses in all extremities are equal. Which congenital cardiac lesion do you suspect?
a. Atrial septal defect
b. Coarctation of aortic
c. Patent ductus arteriosus
d. Tetralogy of fallot
e. Ventricular septal defect

9. A 2 weeks old infant was brought to your clinic with a history of cyanosis for last few days especially

in morning. On examination you see a vitally stable child with oxygen saturation of 86% in room air. He is not in respiratory distress. Bilatral chest auscultation reveals clear lung fields.there is a grade 3/6 ejection systolic murmer on the left upper sternal border. You suspect TETRALOGY OF FALLOT. You order a echo, Which of the following is not included in tetralogy of fallot?

a. Atrial septal defect
b. Obstruction to right ventricular outflow
c. Overriding of aorta
d. Right ventricular hypertrophy
e. Ventricular septal defect

10. 3 months old infant has had upper respiratory symptoms for few days and presented to emergency with fever, cough and breathing difficulty. His mother is suffering from flu. O/E he is irritable, tachypnea with air hunger, wheezy and hypoxic. What is most likely Diagnosis?

a. URTI b. Pneumonia
c. Asthma d. Diaphragmatic Hernia
e. Bronchiolitis

11. A healthy 9 months old infant is brought to the physician for a well-child examination. He has no history of serious illness. He has been feeding and growing well. Pulse oximetry on room air shows oxygen saturation of 98% he is pink in air. A grade 3/6 ejection systolic murmur is heard along the left middle and upper sternal border. S2 is widely split and does not vary with respiration. Pulses are good in all extremities. What is the most likely diagnosis

a. Atrial septal defect
b. Ebstein anomaly
c. Patent ductus arteriosus
d. Transposition of great arteries
e. Ventricular septal defect

12. A 3 days old neonate presents with increased work of breathing and decreased oral intake on neonatal assessment pediatrician had advised ECHO as he noticed there is some cardiac lesion you examine the baby and hear a continuous murmer all over the precordium. What is the contraindication for indomethacin use in closure of patent ductus arteriosus

a. Serum ALT of 90mg/dl 8
b. Serum creatinine greater than 1.7mg/dl
c. Serum ALT of 90mg/dl and Serum creatinine greater than 1.7mg/dld. Serum creatinine greater than 1.7mg/dl and thrombocytopenia
e. thrombocytopenia

3. A 3 Years old child is presented to emergency with shortness of breath of lethargy. He was perfectly alright 3 days back. He had mild upper respiratory tract infection 2 days back & at night he suddenly developed respiratory distress. On examination the child is lethargic, has cold peripheries with feeble peripheral pulses and has gallop rhythms, chest auscultation reveals bilateral equal air entry and fine basal crepitation. What is the clinical diagonisis?

a. Acute viral myocarditis b. CROUP
c. Pleural effusion d. Pneumothorax
e. Tet spell

14. A 10 years old infant presents with decreased oral intake. Birth history was unremarkable but the baby was not reviewed by a child specialist at birth and was discharged home on day 2 of life. Physical examination reveals a lethargic infant who is in respiratory distress. There is a a pan systolic murmur of grade 3 on left lower sternal border which is the most likely congenital heart defect

a. Aortic stenosis b. Atrial septal defect
c. Hypoplastic left heart syndrome
d. Transposition of great arteries
e. Ventricular septal defect

15. 12 years old child presents with cyanosis, respiratory distress. His mother reports that the child is already on cardiac medications but over a Period of few months his condition is deteriorating. Due to affordability issues they failed to do followup visits with their cardiologist. Which of the following is Correct about eisenminger syndrome

a. Considered a high indication for surgery in a baby with congenital heart disease
b. It is usually a primary cyanotic congenital heart disease
c. Pulmonary hypertension is not always present
d. Represents a serious complication of Acyanotic congenital heart disease
e. His phenomenon is associated with transposition of great arteries

16. An 8 years old child has a previous history of cyanotic congenital heart disease has now developed fever for last 4 weeks. He has used multiple antibiotic but not improving. You examine the child. He is toxic looking with a fever of 101 Fahrenheit. His post auricular lymphnodes are palpable. On abdominal examination spleen is palpable 5cm extending from the left costal margin. Among the following what is an important risk factor for developing infective endocarditis?

a. MMR vaccine
b. Arrhythmias
c. Diarrhea
d. Poor dental hygiene
e. RSV infection

17. A 10 years old school going child is brought by his father for a well-child examination. He is otherwise a healthy child but gives history of shortness of breath sometimes while he is participating in sports at his school. His cousin has been recently diagnosed with some cardiac condition. Father wants his child to be assessed. Physical examination is unremarkable. You order some basic labs and an ECG. Shows first degree heart block Which is best characterized by Which one of the following.

a. A completely normal ECG
b. Normal PR interval with intermittently missed QRS complexes
c. A prolonged PR interval
d. A progressively increased PR interval than a rmissing QRS in a cyclical pattern
e. No relationship between QRS complexes and P wave

18. A worrisome mother complaints that she has observed her 02 years old infant turns blue early in the morning and after heavy episodes of crying. She has now presented to emergency when she observed her infant is breathing fast and has turned blue restless and agitated since an hour. Which one of the following is not used for the treatment of this patient

a. Furosemide
b. knee chest position
c. Morphine
d. oxygen
e. Propranolol

19. 6 months old 7 kg infant is unwell for the last one day. He is lethargic unable to take feed. Mother has observed that his heart is beating fast. On examination the infant is pale looking lethargic with a heart rate of 280 beats per min. his liver is 3cm below the right costal margin. What ECG findings do u expect in this patient?

a. Inverted P waves with no QRS complexes
b. Narrow QRS complexes with C no visible P waves
c. Narrow QRS complexes with peaked P waves
d. Peaked P waves with absent QRS complexes
e. Widened QRS complexes with no visible P waves

20. An infant with congestive cardiac failures recieves digoxin, you notice that the heart rate of the infant slows down to less than 100 beats per min. You suspect digoxin toxicity How will you manage this child after stopping the digoxin

a. Give atropine
b. Give KCl infusion in 5% dextrose
c. Give atropine and KCl infusion in 5% dextrose
d. Give morphine
e. With calcium gluconate

21. A child diagnosed with rheumatic fever with carditis but without residual heart disease will require prophylaxsis for which of the following duration ?

a. 5 years or until 21 years of age whichever is longer
b. Lifelong prophylasis
c. Needs no prophylasis
d. 10 years of until 21 years of age, whichever is longer
e. 10 years or until 40 years of age, whichever is longer

22. A 2-month-old boy with a 3-day history of upper respiratory infection, who suddenly develops high grade fever, cough, and respiratory distress; within 48 hours, the patient has developed a pneumatocele and a left sided pneumothorax. What is the most likely diagnosis?

a. Mycoplasma pneumonia
b. Pneumococcal Pneumonia
c. Chlamydial Pneumonia
d. Staphylococcal Pneumonia

e. Viral Pneumonia

23. 10 years old child who is otherwise well came with a concern that during his previous admission for acute gastroenteritis the doctors noticed wide splitting of second heart sound and advised an echocardiogram. The echo report showed an Atrial septal defect. They are anxious about further management of this child. Surgical closure of atrial septal defect is indicated in the following condition?

a. All patients irrespective of symptoms
b. All Asymptomatic patients
c. Al patients thriving wel
d. Asymptomatic patients with a shunt ratio of 1:1
e. Symptomatic patients with a shunt ratio of 2:1

8. NWSM 2024

1. A 7 years old boy presents to OPD with chief complaints of fever and pain in left knee joint from last 3 days. He also had pain in right elbow joint 6 days ago which improved without taking any treatment. Mother states that he is having some abnormal movements which do not occur during sleep. She also gives history of throat infection which occurred 2 weeks ago. Initial workup reveals increased ESR and CRP. On examination left knee joint is red, swollen and tender. There is no history of palpitations or any skin lesion. What is the most probable diagnosis?

a. Infective endocarditis
b. Juvenile idiopathic arthritis
c. Septic arthritis
d. Rheumatic fever
e. Hemophilia

2. A 9 months old male child presented to you with profuse sweating during feeding, tachycardia, tachypnea and multiple episodes of respiratory infections in past. On examination there is harsh pan-systolic murmur at left lower sternal edge. Chest X-ray shows increased pulmonary vascularity and cardiomegaly. Which is the most appropriate diagnosis?

a. Atrial septal defect
b. Tetralogy of Fallot
c. Ventricular septal defect
d. Tricuspid atresia
e. Infective endocarditis

3. During a regular check-up of an 8-year-old child, you note a loud first heart sound with a fixed and widely split second heart sound at the upper left sternal border that does not change with respirations. The patient is otherwise active and healthy. Which of the following heart lesions most likely explains these findings?

a. Atrial septal defect (ASD)
b. Ventricular septal defect (VSD)
c. Isolated tricuspid regurgitation
d. Tetralogy of Fallot
e. Mitral valve prolapse

4. A 1 year old boy presents to you with cyanosis, dyspnea on exertion and digital clubbing. There has been history of paroxysmal hyper-cyanotic spells in the past. On examination there is harsh ejection systolic murmur along left sternal border in 3rd intercostal space. You order a chest X-ray which shows boot shaped heart. What is the most appropriate diagnosis in this patient?

a. Ventricular septal defect
b. Atrial septal defect
c. Tetralogy of Fallot
d. TAPVR
e. Tricuspid atresia

5. A 4-day-old infant presents with decreased oral intake and decreased activity. Birth history was unremarkable and he was discharged home on day 2 of his life. Physical exam reveals a cool, mottled infant, with decreased pulses. No significant murmur is audible. Which is the most likely congenital heart defect?

a. Ventricular septal defect
b. Tof c. TGA
d. Hypo plastic left heart syndrome

e. Epstein anomaly

6. An otherwise healthy 14-year-old girl complains of chest pain that is particularly severe over the left precordium when she is lying supine. She has begun sleeping upright due to chest pain. She has had a mild viral respiratory infection and intermittent, low-grade fever (<38.5 degrees) for the past 2 weeks. Physical examination is remarkable only for mild jugular venous distention and distant heart sounds. The CXR shows a moderately enlarged cardiac silhouette, and the ECG shows diffusely decreased voltages throughout all leads. Of the following, the MOST likely diagnosis is?

a. Acute rheumatic fever
b. Costochondritis
c. Infective endocarditis
d. Myocarditis
e. Pericarditis

7. A 3 months old child presents to OPD with chief complaints of poor feeding, tachypnea and weak lower limbs movements. On examination there is an ejection systolic murmur present on left sternal border and there is radio femoral delay. On further examination there is a significant difference between blood pressure in upper and lower limbs. What is the most probable diagnosis?

a. Coarctation of aorta
b. Tetralogy of Fallot
c. Ventricular septal defect
d. Atrial septal defect
e. Patent ductus arteriosus

8. A cyanotic newborn is suspected of having congenital heart disease. He has an increased left ventricular impulse and a holosystolic murmur along the left sternal border. The ECG shows left-axis deviation and left ventricular hypertrophy (LVH). Which of the following is the most likely diagnosis?

a. TGA b. Truncus arteriosus
c. Tricuspid atresia d. Tof e. Vsd

9. You are seeing a 7-year-old boy with a documented antecedent strep infection, positive ASO, and evidence of carditis of echocardiography, how many MINOR criteria would you need to make the diagnosis of ARF?

a. 2 b. 3 c. 1 d. 5 e. 4

10. A 10-year-old boy had a sore throat about 2 weeks ago but did not tell anyone because he was afraid he would miss the play-offs. Since several children have been diagnosed with rheumatic fever in the area, his mother is worried that he may be at risk as well. You tell her that several criteria must be met to make the diagnosis but the most common finding is which of the following?

a. Carditis b. Polyarthritis
c. Erythema marginatum
d. Chorea e. Subcutaneous nodules

11. A 6 month old baby boy presented with recurrent respiratory tract infections and failure to thrive for the past 5 months. The mother is also concerned that the baby gets tired, sweaty and breathless while feeding. On examination there are signs of respiratory distress, CVS S1, S2, Grade 3/6 blowing pan systolic murmur at the left lower sternal border, Chest B/L equal air entry with B/L crepitation, Hepatomegaly on abdominal examination. What is the most like diagnosis?

a. Ventricular Septal Defect
b. Atrial Septal Defect
c. Patent Ductus Arteriosus
d. Dilated Cardiomyopathy
e. Tetralogy of Fallot

12. A 3 months old child presents to OPD with chief complaints of poor feeding, tachypnea and weak lower limbs movements. On examination there is an ejection systolic murmur present on left sternal border and there is radio femoral delay. On further examination there is a significant difference

between blood pressure in upper and lower limbs. What investigation will you do to reach the diagnosis?

a. Chest X-ray
b. Complete blood count
c. CT chest
d. Echocardiography e. ECG

13. A 2-year-old child with minimal cyanosis has an S3 and S4 (a quadruple rhythm), a systolic murmur in the pulmonic area, and a mid-diastolic murmur along the lower left sternal border. An ECG shows right atrial hypertrophy and a ventricular block pattern in the right chest leads. Which of the following is the most likely diagnosis?

a. Tricuspid regurgitation and pulmonic stenosis
b. Pulmonic stenosis and a VSD (tetralogy of Fallot)
c. Atrioventricular canal
d. Ebstein anomaly
e. Wolff-Parkinson-White syndrome

14. A 6-year-old boy, with no previous cardiac history, is admitted to the PICU in congestive heart failure. Upon questioning his parents, he had a fever and culture proven strep throat 3 weeks ago, but the family could not fill the antibiotic prescription. Your differential diagnosis includes ARF. Carditis is a major criterion. What other MAJOR criterion do you need to confirm to make this diagnosis?

a. Arthritis
b. Elevated ESR
c. Elevated CRP
d. Anemia and elevated white blood count
e. ECG changes of prolonged PR and/or QT intervals

15. A 7 years old girl presents to you with the history of joint pain and swelling for the past 2 weeks. At first her right wrist joint got swollen that improved then her right elbow joint got swollen. She also has a rash over her arms and legs. The child had a streptococcal sore throat 3 weeks prior to this illness. On examination tender, hot, swollen right elbow joint, erythema marginatum all over the arms and legs, CVS S1, S2, grade 3/6 pan systolic murmur at the apex, rest of the examination is unremarkable. What is the most likely diagnosis?

a. Infective endocarditis
b. Rheumatic Fever
c. Myocarditis
d. Pneumonia
e. Septic Arthritis

16. A 9 months old child presents to you with history of cyanotic spells for the past 4 months. The mother is concerned that the child becomes blue, starts gasping and is irritable. On examination Central Cyanosis, clubbing, CVS ejection systolic murmur at left upper sternal border, Chest B/I equal air entry. What is the most like diagnosis?

a. Tetralogy of Fallot
b. Transposition of great arteries
c. Ebstein Anomaly
d. Ventricular Septal defect
e. Atrial Septal Defect

17. A 67-year-old man is admitted with fever and RT side weakness. Blood cultures yielded MRSA and the echocardiogram shows an oscillating mass of 8 mm attached to the anterior mitral valve leaflet. He has been on IV antibiotics according to culture results, for the last 6 days. The patient's condition has now deteriorated, BP is 60 systolic, and with norepinephrine support, it is 90 systolic. CXR shows frank pulmonary edema. The echocardiogram shows an Oscillating mass of 15 mm attached to the mitral valve and severe mitral regurgitation. Choose the best option from the following:

a. Repeat 2 sets of blood cultures, both aerobic and anaerobic
b. Refer to a cardiac surgeon for emergency surgery
c. Give IV Lasix
d. Change antibiotics to more potent antibiotics
e. Do CXR and ECG before giving IV Lasix and beta blockers

18. A five-month-old child with unrepaired tetralogy of Fallot presents to the clinic with 2 weeks of intermittent low-grade fever, malaise, weight loss, and irritability with movement. His parents have been watching for "Tet spells" but have noted no cyanosis. A workup performed at a freestanding clinic the prior day revealed a normal white count, but a blood culture grew Kinsella kingie. The next step in management should be:

a. Repeat the blood culture and reassure the parents that the child has a viral illness and that the organism in the blood culture is a typical skin contaminant
b. Increase the caloric density of his formula to help with weight gain and follow-up next week
c. Arrange an evaluation by his cardiologist next week
d. Initiate oral clindamycin therapy and follow-up in two day
e. Admit directly to the hospital, get two more blood cultures, and start vancomycin

4. PEADS-PULMONOLOGY

1. KGMC 2024

1. A 2 year old boy with a sudden onset of dyspnea. When this happened he was eating peanuts. There are signs of respiratory distress, right side wheeze,X-ray chest shows right side hyperinflation. What is the diagnosis?

a. Foreign body aspiration b. CCF
c. Acute Bronchiolitis. d. Asthma
e. Pneumonia

2. You are suspecting a 8 year old child has a para pneumonic pleura. You have sent a pleural effusion fluid culture. Which organism mostly commonly causes the problem?

a. Staph aureus
b. Mycobacterium TB
c. Mycobacterium Avium
d. Streptococcus pneumonia.

3. A 4yr old girl presented to OPD with persistent cough and tachypnea. Her mother says that she is having episodes of cough and whistling sounds from chest since 6 months of age. On examination flaring of nostrils and chest examination shows wheezing with increased respiratory rate. 2 more siblings also have history of recurrent respiratory infection. Chest x-ray shows hyperinflation, flattening of diaphragm, narrow and elongated heart. CBC shows eosinophilia… diagnosis will be?

a. TB
b. Asthma
c. Bronchiolitis
d. Pneumonia
e. Pleural Effusion

4. A 2 yr old boy sudden onset of respiratory distress. Mother narrates child was playing with small blocks. He developed distress. Chest x ray had unilateral hyperinflation. What is the best treatment modality?

a. Bronchoscopy
b. Laryngoscopy
c. IV antibiotics
d. IV fluid
e. CT

5. 7 yr old child present with recurrent respiratory tract infections. On touch his sinuses are tender to touch, there are bilateral crepitation on chest auscultation, apex beat is on the right side. What is the diagnosis?

a. Foreign body aspiration
b. Cystic fibrosis
c. Primary ciliary dyskinesia
d. Primary immunodeficiency
e. Acquired immunodeficiency

6. 3 years old boy present to you with high grade fever and chills. Mother complains that his is having cough and not taking feeds in appropriate amounts. On examination there is diminished movements on left side of chest, increased vocal fremitus, dullness on percussion, bronchial breathing in left lower zone. WBC=18000permm3. What is diagnosis?

a. Asthma
b. Bronchiolitis
c. TB
d. Pneumothorax
e. Bacterial pneumonia

7. . A 7 year old child presents with Recurrent Respiratory tract infections. His sinuses are tender to touch and there are bilateral crepitation with apex beat displaced to the right. Which of the following is the moat likely diagnosis?
a. Cystic fibrosis
b. Primary ciliary dyskinesia
c. Foreign body
d. Primary Immunodeficiency
e. Acquired Immunodeficiency

2. RMC 2024

1. What is the most common complication of nasal foreign body?
a. Infection
b. Sinusitis
c. Meningitis
d. Bleeding
e. Nasal septal perforation

2. A 2 years old child playing with toys suddenly developed shortness of breath and decreased air entry. The child already had fever and cough. What is the likely diagnosis?
a. Pneumonia
b. Foreign body aspiration
c. Cardiac failure
d. Asthma
e. Pneumothorax

3. A toddler while playing had a sudden onset of respiratory distress. What is the next step?
a. Chest X-ray
b. Bronchoscopy
c. CBC
d. Spirometry
e. Throat swab

4. A young child presented with flu, fever and stridor. He is otherwise active. What is the likely diagnosis?
a. Epiglottitis b. Croup
c. Foreign body d. Asthma
e. Pharyngitis

5. A child wakes up at midnight frightened and with barking cough. What is the most likely diagnosis?
a. Asthma b. Spasmodic Croup
c. Epiglottitis d. Night terror
e. Pharyngitis

6. A child presented with few hours history of high grade fever, toxic look, stridor and drooling of saliva. What will be the first step of management?
a. Give IV fluids
b. Give Paracetamol
c. Give Antibiotics
d. Secure airway
e. Throat examination

7. A child presented with few hours history of high grade fever, toxic look, strider and drooling of saliva. How will you approach this child?
a. Throat examination b. Chest X-ray
c. X-ray Neck d. CBC
e. Blood culture

8. A child presented in ER with high grade fever, stridor, drooling of saliva, X-ray Neck showed thumb sign. What is the most likely diagnosis?
a. Bacterial tracheitis b. Croup
c. Epiglottitis d. Asthma
e. Laryngitis

9. What is the most common cause of bronchiolitis?
a. Parvo virus
b. Parainfluenza virus
c. Influenza Virus

d. Respiratory Syncytial virus e. Adenovirus

10. A 3 months old baby presented with fever, rhonchi and rales. Her father had flu few days ago. What is the most likely diagnosis?

a. Pneumonia
b. Bronchiolitis
c. Bronchitis
d. Acute respiratory distress syndrome
c. Pharyngitis

11. A 9 month old with cough and cold, having respiratory rate of 40/min. There were no subcostal or intercostal recession on examination. What will be the IMNCI classification?

a. No pneumonia
b. Severe pneumonia
c. Moderate pneumonia
d. Sore throat
e. Some pneumonia

12. A 4 years old child presented with difficulty in breathing, respiratory rate 42/minute and mild subcostal recession. What will you do as per IMNCI?

a. Severe pneumonia, refer to tertiary care hospital
b. Pneumonia, refer to tertiary care hospital
c. Pneumonia, given antibiotics and follow after 2 days
d. Severe pneumonia, given antibiotics and follow after 2 days
e. Cough & cold, do nothing

13. A 3 years old presented with cough and mild fever. Her respiratory rate is 18/min without chest in-drawing and stridor. Are antibiotics recommended?

a. Ampicillin b. Amoxicillin
c. Co-amoxiclav d. Azithromycin
e. Not recommended

14. What is the treatment of choice for foreign body in airway?

a. CPR b. Bronchoscopy
c. Endoscopy d. Steroids
e. Antibiotics

15. What is the cause of lobar pneumonia?

a. Staph Aureus
b. Streptococcus pneumonia
c. H. influenza
d. Viral Pneumonia
e. Mycobacterium tuberculosis

16. What is the most common organism causing pneumonia till 4 years of age?

a. Staph Aureus
b. Mycoplasma
c. H. influenza
d. Pseudomonas
e. Streptococcus Pneumonia

17. A child with chronic diarrhea and recurrent respiratory tract infections, has family history suggestive of cystic fibrosis. How will you confirm the diagnosis?

a. Chloride test b. Sweat Chloride test
c. Chest X-ray
d. HR-CT chest e. Bronchoscopy

18. In case of Cystic Fibrosis during sweat chloride testing, what will be the effect on sodium and chloride values?

a. Na increases and Cl decreases
b. Na decreases and Cl increases
c. Both increase
d. Both decrease e. No set pattern

19. A child presented with recent history of high grade fever, cough and respiratory distress. On examination he was tachypniec with tracheal shift, decreased air entry on one side of chest and dull percussion note. Likely diagnosis?

a. Bacterial Pleural effusion
b. Tuberculosis pleural effusion
c. Bacterial pneumonia
d. Pneumothorax

e. Foreign body aspiration

20. A child developed empyema. What is the most common organism responsible for empyema?

a. Tuberculosis

b. Staph Aureus

c. Streptococcus Pneumonia

d. HSV e. Chlamydia

21. What is the most common cause of bronchiolitis in infants?

a. Influenza virus

b. Adenovirus

c. H. influenza

d. Respiratory syncytial virus

e. Para-influenza virus

3. GMC 2024

1. What is the most common cause of croup?

a. Bacterial infection

b. Allergic reaction

c. Viral infection

d. Chronic lung disease

e. Environmental pollution.

2. Which of the following symptoms is characteristic of croup?

a. Sore throat

b. Productive cough

c. High-grade fever

d. Inspiratory stridor e. Watery eyes

3. Which of the following symptoms is characteristic of acute epiglottitis?

a. Barking cough

b. Rhinorrhea

c. Sore throat with mild fever

d. Rapidly progressing respiratory obstruction

e. Hoarseness and inspiratory stridor

4. What is the typical posture assumed by a child with acute epiglottitis?

a. Lying flat on the back

b. Leaning backward with the neck hyperextended

c. Sitting upright with the head tilted forward

d. Curling up in a fetal position

e. Leaning forward with chin down & mouth closed

5. Which radiographic sign is characteristic of epiglottitis?

a. Steeple sign

b. Thumb sign

c. C-shaped airway

d. Honeycomb appearance

e. Butterfly appearance

6. What is the recommended approach for establishing an airway in patients with epiglottitis?

a. Administering bronchodilators

b. Initiating oxygen therapy

c. Performing tracheostomy

d. Endotracheal or nasotracheal intubation.

e. Administering corticosteroids

7. A 6yrs old boy presented with cough, dyspnoea and orthopnea from 2 months. On examination he is having HR 140/mint, RR 56/mint, BP 90/60mmhg. Pulses are weak. There is hepatomegaly, muffled heart sounds and basal crepitation's. What is most likely diagnosis?

a. Bronchopneumonia

b. Bronchial Asthma

c. Ventricular septal defect

d. All of the above

e. Congestive cardiac failure

4. WMC 2024

1. Acute epiglottitis is caused by

a. Streptococcus (beta hemolytic)

b. Staph aureus

c. Pneumococcus

d. H. influenzae type b

e. All of above

2. Clinical examination of a child with acute epiglottitis should be done in

a. OPD b. Ward

c. O.T

d. Clinic e. All of above

3. Which X-ray should be requested if you suspect croup
a. Chest X-ray
b. X-ray of neck (lateral view)
c. X-ray of neck A.P view
d. All of above
e. None of above

4. Which one is not the feature of streptococcal pharyngitis / tonsillitis
a. Low grade fever
b. Enlarged red tonsils
c. Exudates
d. Tender cervical lymphadenopathy
e. None of the above

5. Which one is not suppurative complication of streptococcal conciliates
a. Otitis media
b. Acute glomerulonephritis
c. Quinsy
d. Retropharyngeal abscess
e. None of above

6. incidence of Acute epiglottitis is markedly decreased due to
a. Measles vaccination
b. HIB Vaccination
c. Hep B Vaccination
d. Pneumococcal vaccine
e. None of the above.

7.Which one is not clinical feature of acute epiglottitis?
a. Vomiting
b. Respiratory distress
c. Stridor
d. Drooling of saliva
e. All of the above

8. Barking cough is major clinical feature of
a. Pneumonia
b. Viral croup
c. Asthma
d. Acute epiglottitis
e. None of the above

9. What is the treatment of viral croup
a. O2
b. Mist therapy
c. Nebulised Adrenaline
d. Dexamethasone
e. All of the above

10. Sudden onset of cough without fever in a 2-year-old child could be due to
a. Asthma
b. Pneumonia
c. Foreign body
d. Viral croup
e. All of the above

11. Which one is latent, non suppurative complication of acute tonsillitis
a. Acute glomerulonephritis
b. Pneumonia
c. Lung abscess
d. Arthritis
e. None of the above

12. Appropriate antibiotics for acute tonsillitis should be continued for
a. 5 days
b. 7 days
c. 10 days
d. 14 days
e. None of the above

13. Fine crackles on the lung bases are feature of
a. Asthma
b. Bronchiectasis
c. Upper lobar pneumonia
d. Pulmonary Edema
e. All of the above

14. How many vaccinations are included in EPI to prevent respiratory diseases
a. 1
b. 2

c. 3
d. 4
e. None of the above

15. The most common pneumonia in children is
a. Lobar pneumonia
b. Interstitial pneumonia
c. Segmental pneumonia
d. Bronchopneumonia
e. Atypical pneumonia

16. The commonest pathogen causing pneumonia in children is:
a. H influenzae type b
b. Streptococcus pneumonia
c. E. coli
d. Staphylococcus
e. Streptococcus group B

17. Most important test for diagnosis of pneumonia is
a. Complete blood count
b. X ray chest
c. CT chest
d. Arterial blood gases
e. Oxygen saturation

18. According to IMCI severe pneumonia has
a. Grunting
b. Fast breathing
c. Chest indrawing
d. Fever
e. Stridor in a calm child

19. Drug of choice for mycoplasma pneumonia is
a. Cephalosporin
b. Benzyl penicillin
c. Gentamicin
d. Clarithromycin
e. Ciprofloxacin

20. A 30 years old female operated for Para umbilical hernia on elective list. A Redivac drain was placed for any collection. When this drain should be removed
a. After 24 hrs
b. 02 Days
c. 05 Days
d. 07 Days e. No use of drain

21. 20 years old female underwent excision biopsy for a 2×2 cm left breast lump. Wound is stitched with prolineO and stitch is removed on day 7. This wound is healed by
a. 1^{o} intension
b. 2^{o} intension
c. Skin grafting
d. Tertiary intention
e. Flap application

22. An elderly male who is diagnosed a case of carcinoma of prostate withpainful bone metastases admitted indoor for pain management. Which of the following is more likely to help this patient?
a. NSAIDs
b. Paracetamol
c. Tricyclic drugs
d. Codeine
e. Morphine

23.Which of the following is a good indicator of tissue perfusion?
a. Pulse b. Blood pressure
c. Urine output d. CVP e. GCS

24. A 25- year-old female presented with a history of flame burn 2 hrs ago. Examination revealed burned area involving both upper arms, front of chest, abdomen and head & neck. What is total body surface area involved
a. 35%
b. 45 %
c. 55 %
d. 25 %
e. 65 %

25. A 49 years old female having second degree burn brought to emergency room, which of the following formula is used for fluid resuscitation?
a. Curio
b. Barclays

c. Parkland
d. Wallace
e. Lund & browder

5. KIMS 2024

1. An 18 months old presents to ER with tachypnea. He was alright till yesterday except for a mild upper respiratory tract e. Stroke infection that was going on for 3 days. But since morning however, he got sick and developed ashen color. Clinically he has unstable vitals, is restless, irritable and poor pulses. His liver is palpable 3 cm below costal margin and pedal edema is positive. What is the best specific treatment choice for this patient?

a. Verapamil b. Adenosine
c. Synchronized DC cardioversion
d. B blocker e. Ablation therapy

2. A full term newborn with cyanosis and severe respiratory distress is brought to ER. On precordium auscultation, 2nd heart sound is single and loud and a soft systolic ejection murmur is heard. Echocardiography is done and confirms the diagnosis of transposition of great arteries. He is immediately given prostaglandin E 1 but shows minimal improvement. Next best step to do in this patient?

a. Shift to NICU and ventilate the patient
b. Immediately go for Rash kind balloon atrial septostomy
c. Arterial switch (Jantene) procedure
d. Mustard or senning operation
e. No surgical intervention, just supportive care

3. A previously well 18 months old child presents to ER with 2 days history of cough and rhinorrhea for which he was given cough medications by mother. Now for the last few hours patient has developed high grade fever and is looking toxic with saliva drooling through the mouth. Child had been given OPV drops and vaccinated only at birth. What is the most likely diagnosis?

a. Croup b. Epiglottitis
c. Foreign body ingestion
d. Tension Pneumothorax e. Laryngitis

4. A six years old girl is admitted in the pediatric ward for chest infection. Past history reveals recurrent chest infections. There is e. Laryngitis also a history of recurrent abdominal pain and passage of large offensive stools O/E Child has failure to thrive and all growth parameters of the child are below third centile. What is the most likely diagnosis?

a. Celiac disease
b. Cystic fibrosis
c. IgA deficiency
d. Autoimmune enteropathy
e. Fanconi's anemia

5. A 10 months old infant presents with respiratory distress to ER. He was alright 3 days back when he developed low grade fever, cough & runny nose. He was given antipyretics & syrup amoxicillin but his condition didn't improve. He is tachypniec with lower chest in-drawing & nasal-flaring. Auscultation reveals fine rhonchi Scattered throughout the chest. What is the most likely diagnosis?

a. Croup b. Asthma c. Bronchiolitis
d. Pneumonia e. Foreign body

6. A 3 years old presents to ER with 5 days' history of low fever and cough. Fever was initially low grade and intermittent but has increased over the last couple of days. He was taken to a local G.P who prescribed him paracetamol and co-amoxiclav. His condition didn't improve and he has developed respiratory distress. Clinical examination shows sick looking child with R/R of 45 /minutes, fever 102 F. Auscultation shows reduced air entry on the left side of the chest. What is the best management step?

a. Admit and start i.v antibiotics only
b. X-ray chest followed by chest tube insertion and iv antibiotics
c. Switch to 4th generation cephalosporin
d. Pleurocentesis only

e. Send blood cultures and pending reports start IV antibiotics

7. A 3-day neonate born full term SVD with immediate cry is admitted in NICU since morning. He has been vomiting after birth and has abdominal distention, He has not passed stool yet. Clinically he is sick looking, has patent anus but upper abdomen looks distended. Chest is bilaterally clear, although his elder brother is frequently sick with respiratory tract infections. Most likely diagnosis?

a. Hirschsprung disease
b. Anal stenosis
c. Cystic fibrosis
d. Intestinal atresia
e. Pyloric stenosis

8. A 2 years old child has been coughing for 3 days and has high grade fever. He was well before but gradually developed fever which responds to antipyretics but recurs back. He is also having cough. O/E he is tachypniec with a R/R of 48/mts, and has lower chest in drawing. What is the best step of management?

a. Admit and start IV ceftriaxone
b. Oral Amoxicillin 80 mg/kg/day
c. Refer urgently to tertiary care hospital
d. Do CXR, CBC and start IV Antibiotics
e. Continue supportive care only

9. A five years old child has been brought by his mother to OPD with complaints of frequent getting fevers and cough which eventually ends up in hospitalization or iv antibiotics. His mother states that he also has difficulty falling asleep, or wakes up in the middle of night and snores a lot. Previously he was taken to an ENT specialist who advised surgical intervention in a hope to provide relief from enlarged nasal polyps. He weighs 13 Kgs. What is the most likely diagnosis?

a. IgA deficiency
b. Cystic fibrosis
c. Bronchiectasis
d. Primary ciliary dyskinesia
e. Alpha 1 antitrypsin deficiency

10. A 12 years old child presents with cough which is productive for the past 2 years. He also has a history of recurrent chest infections for which he is put on antibiotics. Sputum is greenish with some reddish tinge off and on. Clinically he looks stunted and weighs 25 Kgs. His chest examination reveals scattered crypts and rales while also has digital clubbing. What is the most likely diagnosis?

a. Severe pneumonia
b. Pulmonary tuberculosis
c. Bronchiectasis
d. Kartagener syndrome
e. Hyper IgN

6. AMC 2024

Q1. A 3 years old child has been diagnosed with cystic fibrosis. What are the earliest chest x ray changes present in this patient?

a. Hyperinflation
b. Bronchiectasis
c. Peribronchial cuffing
d. Pleural effusion
e. Pneumothorax

Q2. Sweat chloride test was performed on a patient suspected of having Cystic Fibrosis. The result of chloride content was 45 meq/L. What information does this result convey?

a. Patient is not having Cystic Fibrosis
b. There is a high probability thar patient is having CF
c. There is low probability that patient is having CF
d. The test is inconclusive.
e. None of the above.

Q3. The majority of cases of bronchitis in children are caused by which virus?

a. Influenza virus
b. Respiratory syncytial virus (RSV)
c. Adeno virus
d. Corona virus
e. Rota virus

Q4. Which diagnostic test is commonly used to

confirm pneumonia in children?

a. Chest X-ray b. Blood culture

c. Throat swab d. Urine analysis

e. Complete Blood Count (CBC) & CRP

Q5. What is the most appropriate treatment for viral pneumonia in children?

a. Antibiotics

b. Antiviral medications

c. Bronchodilators

d. Fluids and supportive care

e. Cough suppressants

Q6. Which of the following is preventive measure for reducing the risk of bronchiolitis in children?

a. Annual influenza vaccination

b. Avoiding exposure to secondhand smoke

c. Frequent hand washing

d. Avoid over-crowding

e. All of the above

Q7.Whlch statement about pneumonia in children is true?

a. Pneumonia is a self-limiting condition and does not require treatment.

b. Pneumonia can be prevented by routine childhood vaccinations.

c. Pneumonia is more common in adolescents than in infants.

d. Pneumonia is always caused by bacterial infection.

e. Pneumonia Is always caused by viral Infection.

Q8.Which of the following features would indicate severe or very severe disease in a child with cough, according to IMNCI?

a. Vomit every thing

b. Cyanosis

c. Inability to breastfeed or drink

d. Stridor

e. All of the above

Q9. What is the duration of cough that is considered "persistent" in IMCI?

a. More than 3 days

b. More than 7 days

c. More than 14 days

d. More than 21 days

e. More than one month

Q10. What is the most common viral cause of croup?

a. Respiratory syncytial virus (RSV)

b. Influenza virus

c. Parainfluenza virus

d. Rhinovirus e. Rota Virus

Q11.Croup is a respiratory condition that primarily affects which part of the body?

a. Lungs b. Bronchi

c. Larynx and trachea

d. Nasal passages e. Epiglottis

7. KMC 2024

1. A 13 months old child has persistent fever, cough for the last 6 days and is pulling at left ear. On examination the left tympanic membrane is bulging and immobile the most appropriate therapy at this time is. Which of the following

a. Amoxicillin

b. Erythromycin

c. Ceftriaxone

d. Otorhinolaryngology consultation for drainage

e. Acetaminophen and fluids

2. A 67 year old man was brought to casualty with fever and confusion. X ray chest showed pneumonic consolidation. The attending physician stratified his disease as CURB-65 score of 3. What will be the 30 day mortality risk in this patient?

a. 0.60% b. 2.70% c. 6.80%

d. 14% e. 27.80%

3. Females with cystic fibrosis can have children. Males usually have infertility due to absence of the vas deferens. Unaffected carrier male and female can have children. A women who has cystic fibrosis marries and is pregnant. What is the most appropriate statement amongst the following?

a. About 1 in 200 people carry the CF gene mutation

b. About 1 in 4000 children are born with cystic fibrosis

c. If both parents carry the gene mutation there is a 50:50 chance that they will have an affected child

d. If both parents have CF then 3 in 4 children will have CF
e. If the mother has CF then the father should be offered carrier testing

4. A 12 years old girl with no improvement in asthma symptoms present to you in OPD. She is on inhaled corticosteroids, inhaled B2 agonist and oral leukotriene inhibitor. What is the most appropriate step that you should consider on follow-up?
a. Consider Increasing dosage of inhaled
b. Consider hospitalizing.
c. Check inhaler technique and adherence
d. Control environmental allergens
e. Consider add-on nonbiologic therapy

5. A 13 year old boy presented to OPD with a fever and cough for 15 days. His mother reports that he has not responded to co-amoxiclav, cefotaxmine, or ceftazidime, prescribed over the last 15 days. O/E his vitals are in normal range, he is lethargic and has bilateral fine scattered crepts . His x-rays shows changes in bilateral hilar area with peripheral extension. His gene-xpert from sputum and Monteux tests are negative. What is the most likely organism?
a. E.coli
b. H.influenza
c. C.Mycoplasma
d. D. Staph aureus
e. Strep pneumonia

6. A poorly controlled diabetic lady with a blood sugar of 450 mg/dl becomes unconscious. With a serum osmolality of 300 mosm/l .Her Arterial Blood Gases revealed pH of 72, and low HCO3 level. Which metabolic abnormality is present in this patient?
a. Metabolic alkalosis
b. Metabolic acidosis
c. Respiratory acidosis
d. Salicylate (aspirin) poisoning
e. Respiratory alkalosis

7. A 2 years old child suffering from croup, the most appropriate treatment for this child is?
a. Oxygen inhalation and antipyretic
b. Epinephrine nebulization and steroids
c. Antipyretic
d. Hospitalization and Anti tussive.
e. Hospitalization and observation

8. A 6 months old child is suffering from fever, cough, and difficulty in breathing. On examination he is tachypnic with subcostal recession, now he developed stridor. The most likely diagnosis of this child according to IMNCI is?
a. Cough and cold
b. Common cold
c. Pneumonia
d. Very severe pneumonia
e. Bacterial pneumonia

9. A 1-year-old child presented with fever cough rhinorrhea and acute onset stridor. His X ray neck AP view shows steeple sign, what is the most likely diagnosis?
a. Bronchiolitis
b. Epiglottitis
c. Bacterial Pneumonia
d. Croup
e. Tracheitis

10. 2 years old child presented to emergency department with 6 hours' history of high grade fever, dysphagia, cough and breathing difficulty. O/E He appear toxic with drooling of saliva, febrile and tachypneic with stridor. What is most likely diagnosis?
a. Croup
b. Epiglottitis
c. Pneumonia
d. Tracheitis
e. Foreign Body Inhalation

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11. An 18 month old infant presented to a bhu. He has a fever of 101 F. The medical officer has an IMNCI book let and wants to find out tachypnoea in this infant. The respiratory rate to label as tachypnoea is
a. 10 b. 20 c. 30 d. 40 e. 50

12. A 7 months old child suffering from fever cough difficulty in breathing. On examination he is tachypneic and having subcostal and intercostal recession. His x ray chest shows consolidation in right middle zone of lung.What is your diagnosis?

a. Lobar Pneumonia
b. Broncho Pneumonia
c. Aspiration Pneumonia
d. Loffler's Pneumonia e. Bacterial Pneumonia

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13. A 6 months old child presented with fever cough difficulty in breathing, his doctor is counting his respiratory rate for tachypnea, what will be the respiratory rate at this age leading to tachypnea?
a. Above 20 per min
b. Above 30 per min
c. Above 40 per min
d. Above 50 per min
e. Above 60 per min

14. An 18 month old presented to the Emergency department with fever (low grade) for 2 days and shortness of breath. O/E he has RR of 70 breaths/ min, HR- 160/ min, Saturation-87% on air, subcostal & intercostal recessions with noisy breathing. His CBC shows normal counts, normal TLC, and DLC. Chest X-ray shows bilateral hyperinflation with scattered nodular shadows. What is the most likely diagnosis?
a. Bronchiolitis b. Epiglottitis
c. LRTL d. Pneumonia
e. Pneumothorax

15. An 8 months old child presented in OPD with fever runny nose, hoarse voice, barking cough and stridor, the most common organism responsible for this condition is?
a. Parainfluenza and influenza virus
b. Streptococcal pneumonia
c. Adenovirus
d. Measles virus
e. Cocsache virus

16. A 12-year old asthmatic boy has developed an asthma exacerbation in the past few days. Asthma symptoms have continued to progress despite frequent salbutamol inhaler use at home. He comes to the emergency department with chest tightness, dyspnea , and wheezing and in moderate respiratory distress. In this setting, management should include
a. A Close monitoring, Supplemental oxygen , inhaled salbutamol, Theophylline
b. Close monitoring, Supplemental oxygen, Inhaled salbutamol Systemic glucocorticoids
c. Close monitoring , Supplemental oxygen ,Inhaled salbutamol, Inhaled glucocorticoids
d. Close monitoring, Supplemental oxygen, Inhaled salbutamol, inhaled ipratropium bromide
e.Close monitoring, Supplemental oxygen, Inhaled salbutamol, Montelukast

17. An infant 11months old; with respiratory symptoms and diarrhoea was diagnosed as cystic fibrosis. The infant in newborn period was operated for meconium ileus. He has poor growth with weight of 4.5kg. there is history of recurrent episodes of pneumonia and diarrhea. He is admitted this summer with hypernatremic dehydration. Looking at the above scenario and the complications what further needs to be considered on priority basis.
a. Meconium aspiration syndrome in about 1 in 10 babies with CF
b. Pancreatic disease with a risk of diabetes
c. Hypernatremia in hot weather due to salt acuumulation
d. Hypercholesterolemia due to fat absorption
e. Poor growth secondary to the need for high dose steroid therapy

8. NWSM 2024

1. A 15-year-old girl with short stature, neck webbing, and sexual infantilism is found to have coarctation of the aorta. A chromosomal analysis likely would demonstrate which of the following?
a. Mutation at chromosome 15q21.1
b. Trisomy 21
c. XO karyotype
d. Defect at chromosome 4p 16
e. Normal chromosome analysis

2. A 6-year-old child with a history of asthma presents with shortness of breath. On examination, there is audible wheezing and prolonged expiratory phase. Which of the following is the most appropriate next step in diagnosis?
a. Chest X-ray

b. Spirometry with bronchodilator response
c. Peak flow monitoring
d. CT chest
e. Sputum culture

3. A 2-year-old child presents with fever, cough, and respiratory distress. On examination, there are wheezing and crackles heard bilaterally. Diagnosis of acute bronchiolitis is made. What radiological findings will appear in his chest x-ray film?
a. Collapse consolidation
b. Hyperinflation and peribronchial cuffing
c. Pleural effusion
d. Ground glass haziness
e. Cavitation

4. A 4 month old child presents with cough, runny nose and dyspnea for the past 4 days. His older sister had a mild upper respiratory tract infection 5 days back. On examination the child has subcostal recessions with a respiratory rate of 64 breaths/min, temperature 100 degree f, SaO2 94% in room air, Bilateral wheeze on chest auscultation. Chest X-ray shows hyperinflation. What is the most likely diagnosis?
a. Acute Bronchiolitis
b. Childhood Asthma
c. Pneumonia
d. Allergic Rhinitis
e. Croup

5. A 3-year-old child presents with sudden onset of high fever, sore throat, and drooling. On examination, there is stridor and the child appears toxic. Chest X-ray reveals a widened mediastinum with a "thumbprint" sign. What is the most likely diagnosis?
a. Acute epiglottitis
b. Bacterial pneumonia
c. Bacterial trachealis
d. Acute phyrinigits
e. Peri tonsillar abscess

6. A 7 months old infant has presented to Emergency room with chief complaints of cough, fever and reluctance to feed since last 2 days. The mother states that he his color has gone blue over last few hours. On examination patient is tachypnea, cyanosed and having retractions. On Chest examination he is having hyper-resonant percussion note, markedly decreased breath sounds on right side. What is the most probable diagnosis?
a. Pneumothorax
b. Pleural effusion
c. Croup
d. Trachietis
e. Lung abscess

7. A 4 years old boy presents to you with high grade fever and shaking chills. The mother complains that he is also having cough and not taking feeds in appropriate amounts. On examination there is diminished movements on left side of chest, increased vocal fremitus, dullness on percussion and bronchial breathing in left lower zone. WBC count is 18000/mm3. What is the most probable diagnosis?
a. Bacterial pneumonia
b. Epiglottitis
c. Pneumothorax
d. Croup
e. Pleural effusion

8. An asthmatic child has daytime symptoms 3 to 4 days per week. He has had 2 exacerbations over the past 1 year for which he was admitted in the pediatric unit. What is the best management plan for him?
a. Low dose inhaled steroids plus short acting inhaled beta 2 agonists as needed
b. Short acting inhaled beta2 agonists as needed
c. Medium dose inhaled steroids
d. High dose inhaled steroids
e. Anti-histamines

9. A 4-year-old child presents with fever, cough, and difficulty breathing. On examination, there are decreased breath sounds and dullness to percussion

over the right lower lung field. Chest X-ray reveals a right lower lobe consolidation. What is the most likely causative agent of the pneumonia? What is the most common organism causing pneumonia in this age group children?

a. Staph aureus
b. Strep pneumonia
c. Group b streptococci
d. Klebsiella
e. Mycoplasma pneumonia

10. A 7 years old child presented to you with 4 days history of high grade, intermittent fever and cough. On examination sick looking child, sign of respiratory distress, temp 102F, bronchial breath sounds at right middle zone on auscultation. Rest of the examination is unremarkable. What is the most likely diagnosis?

a. Lobar pneumonia
b. Pleural effusion
c. Pneumothorax
d. Croup
e. Acute epiglottitis

11. A 7 year old child presented with recurrent episodic shortness of breath and night time cough. This is aggravated whenever he plays with the neighbors' cat. On examination No signs of respiratory distress, Chest Bilateral wheeze, CVS S1, S2, 0, No visceromegaly. You are suspecting a diagnosis of Childhood Asthma. You order a chest x-ray. What do you expect to see on the chest x-ray?

a. Consolidation
b. Hyperinflation
c. Pneumothorax
d. Miliary shadows
e. Pleural effusion

12. A 6 month old baby boy presented with recurrent respiratory tract infections and failure to thrive for the past 5 months. The mother is also concerned that the baby gets tired, sweaty and breathless while feeding. On examination there are signs of respiratory distress, CVS S1, S2, Grade 3/6 blowing pan systolic murmur at the left lower sternal border, Chest B/L equal air entry with B/L crepitation, Hepatomegaly on abdominal examination. You are suspecting a diagnosis of Ventricular Septal Defect. Which of the following investigations would you like to do to confirm your diagnosis?

a. Echocardiography
b. Chest X-ray
c. Electrocardiogram
d. Complete blood picture
e. Urine RE

13. A 5-year-old previously healthy child presents with fever, cough, and chest pain. On examination, there are decreased breath sounds and dullness to percussion over the left lung base. Chest X-ray reveals a left lower lobe opacification with a meniscus sign. What is the most likely diagnosis?

a. Lung abscess
b. Pneumothorax
c. Consolidations
d. Para-pneumonic effusion
e. Viral pneumonia

14. A 5 year old child presented to you with 5 days history of high grade intermittent fever, cough and right sided chest pain which is aggravated with coughing. On examination: Sick looking child, temperature 102 degree F, Respiratory rate 50 breaths/minute, signs of respiratory distress with subcostal in-drawing, Chest stony dull percussion note in right lower zone with absent air entry, rest of the examination is unremarkable. You are suspecting that the child has a pleural effusion. What initial investigation would you like to do to reach a diagnosis?

a. Pleural biopsy
b. Chest X-ray
c. Sputum culture

d. Sputum for AFB
e. Gastric Aspirate

15. A 5 month old child presents with cough, runny nose and dyspnea for the past 3 days. On examination the child has subcostal recessions with a respiratory rate of 64 breaths/min, temperature 100 degree f, SaO2 93% in room air, Bilateral wheeze on chest auscultation. Chest X-ray shows hyperinflation. You are suspecting that this is a case of acute bronchiolitis. Which of the following is the most common etiologic factor for acute bronchiolitis?

a. Respiratory syncytial virus
b. Influenza virus
c. Parainfluenza virus A
d. Parainfluenza virus B
e. Adenovirus