

Block

KEY





PAPER
CODE
C

Exam Roll No.:

KHYBER MEDICAL UNIVERSITY, PESHAWAR
FINAL PROFESSIONAL MBBS ANNUAL EXAMINATION 2024
BLOCK O (CARDIOPULMONARY-3)

Name:

Time Allowed: 120 min.

Max. Marks: 120

Note: Attempt all questions. Select the best answer from given choices. Handover response sheet along with question paper after attempting

- Use BLUE / BLACK ink only. Do not use RED Color. Filling of more than one option shall not be considered
- Possession of mobile phone and other electronic accessories are strictly prohibited.

1. A 50-year-old male with a history of myocardial infarction and an implantable cardioverter-defibrillator presents to the emergency department with sustained ventricular tachycardia and hemodynamic instability, including a blood pressure of 80/40 mmHg and a heart rate of 180 beats per minute. His ECG shows a wide-complex, monomorphic VT. What is the most appropriate initial management approach to stabilize his cardiac rhythm and restore hemodynamic stability?
 - a. Amiodarone Infusion Therapy
 - b. Digoxin infusion
 - c. Cardioversion Procedure with synchronized shocks
 - d. Lidocaine Bolus Therapy
 - e. Procainamide Infusion Therapy
2. A 20-year-old male presents with hypertension, headache, and leg fatigue. Physical examination reveals a blood pressure difference between upper and lower limbs. Imaging confirms coarctation of the aorta. What is the most appropriate approach to investigation?
 - a. Percutaneous Angiography
 - b. Cardiac MRI Scan
 - c. Chest X-Ray Alone
 - d. CT Angiography Scan
 - e. Echocardiogram Alone
3. A 60-year-old male presents with sudden onset of chest pain at rest, radiating to his left arm. ECG shows ST-segment depression and T-wave inversion. What is the most appropriate initial medical treatment for unstable angina?
 - a. Antiplatelet Therapy
 - b. Beta-Blocker Therapy
 - c. Glycoprotein Inhibitors
 - d. Morphine and Nitrates
 - e. Statin Therapy
4. A 28-year-old pregnant woman at 30 weeks gestation is newly diagnosed with hypertension. Her blood pressure is 150/100 mmHg. What is the most appropriate initial management approach to control her blood pressure?
 - a. Bed Rest
 - b. Calcium Channel Blocker
 - c. Labetalol
 - d. Low-Dose Aspirin
 - e. Methylodopa
5. A 40-year-old male with a history of transient ischemic attack (TIA) and lung cancer presents with left leg swelling, pain, and warmth. His creatinine is 5mg/dl. Ultrasound confirms deep vein thrombosis in the left femoral vein. What is the most appropriate initial management strategy for this patient?
 - a. Antiplatelet therapy
 - b. Compression Stockings
 - c. Enoxaparin Therapy
 - d. Inferior Vena Cava Filter
 - e. Observe only

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6. A 30-year-old male presents with chest pain, fever, and fatigue. His Blood pressure is 100/80mmHg. ECG shows persistent ST-segment elevation in all leads. Echocardiogram reveals a moderate pericardial effusion. Chest X-ray shows a "water bottle" heart. What is the most appropriate initial treatment?
- Antivirals
 - Colchicine
 - Corticosteroids
 - Noradrenaline
 - Pericardiocentesis**
7. A 55-year-old male patient presents to the emergency department with symptoms of chest pain and shortness of breath. His ECG shows persistent ST-segment elevation in the anterior leads, consistent with an acute anterior MI. Which of the following is the most appropriate initial management step?
- Administer thrombolytic therapy
 - Perform primary percutaneous coronary intervention**
 - Start medical therapy with aspirin, beta-blockers, and ACE inhibitors
 - Order a cardiac MRI to confirm the diagnosis
 - Provide oxygen therapy and monitor the patient's condition
8. A 72-year-old man presents with exertional dyspnea, chest pain, and dizziness for the past several months. He reports near-fainting episodes while climbing stairs. On examination, a harsh systolic murmur is heard at the right upper sternal border, radiating to the carotids. Echocardiography reveals severe aortic stenosis with an aortic valve area of 0.7 cm² and a mean gradient of 55 mmHg. Select the most appropriate next step in management.
- Medical therapy with beta-blockers and ACE inhibitors
 - Balloon aortic valvuloplasty
 - Aortic valve replacement**
 - Diuretics to reduce preload
 - Observe and monitor
9. A 65-year-old male presents with progressive dyspnea NYHA III, fatigue, and bilateral leg edema. His blood pressure is 128/88mmHg. Echocardiography reveals a left ventricular ejection fraction (LVEF) of 30%. What is the most appropriate FIRST management strategy for this patient with congestive heart failure.
- ACE inhibitor
 - Beta-blockers
 - Diuretics**
 - Inotropes
 - Oxygen
10. A 68-year-old woman with a history of chronic heart failure presents to the clinic with increasing shortness of breath over the past month. She reports that she feels comfortable at rest but experiences significant shortness of breath and fatigue when walking up the stairs or doing light housework. She is unable to perform activities like jogging or walking long distances without feeling exhausted. Select the NYHA class in which does this patient most likely fall into.
- Class I: No limitation of physical activity
 - Class II: Mild limitation of physical activity
 - Class III: Severe limitation of physical activity**
 - Class IV: Symptoms at rest
 - Patient does not fall in any of the class
11. A 72-year-old man with a history of heart failure and ischemic heart disease presents with increasing difficulty breathing over the past few weeks. He reports that he has been unable to walk more than 50 meters without feeling breathless and fatigued. He avoids climbing stairs and doing household chores due to his symptoms. At rest, he feels fine, but any exertion, even minimal, triggers significant shortness of breath. Based on this information, which NYHA class does this patient most likely fall into?
- Class I: No limitation of physical activity
 - Class II: Mild limitation of physical activity
 - Class III: Severe limitation of physical activity**

For NYHA-III (Diuretics)

Confirmed

- d. Class IV: Symptoms at rest
 - e. Patient does not fall in any of the class
12. A 45-year-old male presents with chest pain, fever, and dyspnea after a viral infection. On clinical examination there is pericardial rub, and he is suspected of pericarditis. Which of the following is the most characteristic ECG finding in acute pericarditis?
- a. Diffuse ST-segment elevation and PR depression
 - b. T-wave inversion and Q waves in lead V1-V3
 - c. ST-segment depression and QT prolongation
 - d. Tall, peaked T waves and short PR intervals
 - e. Wide QRS complex with absent P waves
13. A 60-year-old man presents with sudden-onset chest pain and shortness of breath. His ECG shows a ST-segment elevation in leads II, III, and aVF, with reciprocal ST-segment depression in leads I and aVL. Which of the following is the most likely diagnosis based on these ECG findings?
- a. Anterior myocardial infarction
 - b. Inferior myocardial infarction
 - c. Pericarditis
 - d. Atrial fibrillation
 - e. Pulmonary embolism
14. A 58-year-old male with a history of hypertension presents to the emergency department with severe chest pain radiating to his left arm. His ECG shows ST-segment elevation in leads V1-V4, with reciprocal ST-segment depression in leads II, III, and aVF. What is the most likely diagnosis based on these ECG findings?
- a. Inferior myocardial infarction
 - b. Anterior myocardial infarction
 - c. Lateral myocardial infarction
 - d. Pericarditis
 - e. Right ventricular infarction
15. A 60-year-old male with a history of hypertension presents with crushing chest pain and diaphoresis. His ECG shows ST-segment elevation in leads V1-V4, and ST-segment depression in leads II, III, and aVF. Which coronary artery is most likely involved in this patient's myocardial infarction?
- a. Left anterior descending artery
 - b. Right coronary artery
 - c. Left circumflex artery
 - d. Posterior descending artery
 - e. Branch of the left main coronary artery
16. A 68-year-old male with a history of hypertension and hyperlipidemia presents with chest pain and sweating. He is diagnosed with an occlusion of the left circumflex artery. Select the most likely ECG finding in this patient.
- a. ST-segment elevation in leads V1-V4 and reciprocal depression in II, III, aVF
 - b. ST-segment elevation in leads I, aVL, V5, V6 and reciprocal depression in II, III, aVF
 - c. ST-segment elevation in leads II, III, aVF and reciprocal depression in V1-V4
 - d. ST-segment elevation in leads V1-V3 and reciprocal depression in V5, V6
 - e. ST-segment elevation in leads V4R-V6R and reciprocal depression in I, aVL
17. A 55-year-old female presents with dizziness and occasional lightheadedness. Her ECG shows a second-degree atrioventricular (AV) block, Type II, with a dropped QRS complex. What is the most likely next step in management for this patient?
- a. Observation with no immediate intervention
 - b. Administer atropine to increase heart rate
 - c. Immediate placement of a temporary pacemaker
 - d. Oral beta-blockers for rate control
 - e. Cardioversion to restore normal rhythm
18. ECG of a patient shows progressively increasing PR intervals followed by dropped beat. What is the condition?
- a. Third degree heart block
 - b. Mobitz Type I
 - c. Sinus Arrhythmia

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- d. Mobitz Type 2
e. First Degree AV Block
19. A 30-year-old healthy male presents with palpitations and an increased heart rate. His ECG shows a heart rate of 115 bpm, normal P waves, and normal QRS complexes with a regular rhythm. What is the most likely diagnosis?
a. Atrial fibrillation
b. Sinus tachycardia
c. Ventricular tachycardia
d. Supraventricular tachycardia
e. First-degree AV block
20. A 45-year-old male is diagnosed with first-degree atrioventricular (AV) block based on his ECG, which shows a long PR interval of 320 ms. He is asymptomatic and has no history of cardiac disease. What is the most appropriate management for this patient?
a. Initiate a permanent pacemaker
b. Start beta-blockers to reduce heart rate
c. No specific treatment required, observe regularly
d. Administer atropine to improve conduction
e. Prescribe an antiarrhythmic drug for symptom control
21. A 40-year-old man from a socially deprived background presents to your clinic for a routine check-up. He has a history of smoking 20 cigarettes per day, a sedentary lifestyle, and a total cholesterol level of 6.8 mmol/L (normal <5.2 mmol/L). His blood pressure is 148/92 mmHg. He is asymptomatic but is concerned about his risk of cardiovascular disease. According to current guidelines, which of the following is the most appropriate next step in his management?
a. Advise lifestyle modifications only and reassess in 6 months
b. Initiate a statin and antihypertensive therapy based on his absolute risk
c. Order a coronary artery calcium (CAC) score before deciding on treatment
d. Reassure him that his absolute risk is low, and no intervention is needed
e. Start aspirin therapy to reduce his cardiovascular risk
22. Which of the following is the most common causative organism of permanent pacemaker infections?
a. Streptococcus viridans
b. Pseudomonas aeruginosa
c. Staphylococcus aureus
d. Escherichia coli
e. Enterococcus faecalis
23. An elderly patient presents with acute left leg swelling and pain for the past 24 hours. On examination, the affected limb is warm, swollen, and tender with a calf circumference difference of 4 cm. Select the next best step in the management of this case.
a. Measure ankle-brachial index
b. Order a D-dimer test
c. Perform a Doppler ultrasound
d. Start empirical antibiotics for cellulitis
e. Perform contrast-enhanced CT angiography
24. Which of the following is the most characteristic chest X-ray finding in a patient with congestive cardiac failure?
a. Hyperinflated lungs with flattened diaphragms
b. Widened mediastinum and double aortic knob sign
c. Cardiomegaly with Kerley B lines and pulmonary edema
d. Honeycombing pattern in the lower lung zones
e. Tram-track opacities and bronchial wall thickening
25. A 65-year-old male presents five days after an anterior myocardial infarction (MI) with acute hypotension, dyspnea, and a new holosystolic murmur at the left sternal border. Which of the following is the most likely diagnosis?
a. Ventricular free wall rupture
b. Papillary muscle rupture
c. Ventricular septal rupture
d. Dressler's syndrome
e. Left ventricular aneurysm

* repeat K&MC!

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26. A 2-day-old newborn baby is brought to the emergency department with a history of difficulty breathing and turning blue from birth. On examination, the baby is centrally cyanotic, with a single loud second heart sound. Oxygen saturation is 70% on room air. What is the most likely diagnosis?
- Tetralogy of Fallot
 - Transposition of the Great Arteries**
 - Ventricular Septal Defect
 - Atrial Septal Defect
 - Patent ductus arteriosus
27. A 5-year-old child is brought to the pediatric clinic for a routine check-up. During the physical examination, a continuous machine-like murmur is heard best at the left infraclavicular area. The child is asymptomatic and has no other significant medical history. Select the most likely congenital heart defect in this case.
- Patent Ductus Arteriosus**
 - Aortic Stenosis
 - Ventricular Septal Defect
 - Atrial Septal Defect
 - Coarctation of Aorta
28. A 10-year-old athletic boy presents with exertional dyspnea and a systolic murmur heard best at the left lower sternal border. Echocardiogram reveals asymmetric septal hypertrophy with left ventricular outflow tract obstruction. What condition is most likely causing these symptoms?
- Dilated Cardiomyopathy
 - Hypertrophic Cardiomyopathy**
 - Restrictive Cardiomyopathy
 - Ventricular Septal Defect
 - Patent ductus arteriosus
29. A 6-week-old infant is brought to the emergency department with a history of poor feeding and irritability. The mother reports that the baby suddenly became restless and started breathing rapidly. On examination, the infant's heart rate is 280 beats per minute, with a narrow QRS complex on the ECG. What is the most likely diagnosis?
- Atrial Fibrillation
 - Ventricular Tachycardia
 - Supraventricular Tachycardia**
 - Atrial Flutter
 - Sinus tachycardia
30. A 10-year-old boy with a history of congenital heart disease presents with a 2-week history of fever, fatigue, and joint pain. On physical examination, he has a new heart murmur and multiple small, painless lesions on the soles of his feet. Which of the following is a major Duke criterion for the diagnosis of infective endocarditis in this patient?
- Splinter hemorrhages
 - Roth spots
 - Osler nodes
 - Janeway lesions
 - New Valvular Regurgitation**
31. A 10-year-old child is present with fever and joint pain following a recent throat infection. On examination, there is Erythema Marginatum. What is the likely diagnosis?
- Kawasaki Disease
 - Systemic Lupus Erythematosus
 - Rheumatic Fever**
 - Henoch-Schoenlein Purpura
 - Infective Endocarditis
32. A 12-year-old girl presents with a 2-day history of high-grade fever, migratory polyarthritides, and a characteristic rash on her trunk. She had a sore throat 2 weeks ago. On examination, there is evidence of carditis. What is the likely diagnosis?
- Kawasaki Disease
 - Systemic Lupus Erythematosus
 - Rheumatic Fever**
 - Henoch-Schoenlein Purpura

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- e. Infective Endocarditis
33. A 4-year-old child presents a history of frequent respiratory tract infections, failure to thrive, and easy fatigability. On physical examination, there is a harsh pansystolic murmur heard best at the right upper sternal border. Chest X-ray showed cardiomegaly and increased pulmonary vascular markings. What is the likely diagnosis?
- a. Ventricular Septal Defect
 - b. Atrial Septal Defect
 - c. Patent Ductus Arteriosus
 - d. Tetralogy of Fallot
 - e. Tricuspid Regurgitation
34. A 4-month-old infant presents with a 3-day history of difficulty breathing, poor feeding, and lethargy. On examination, there is tachycardia, muffled heart sounds, and decreased peripheral pulses. ECG shows electrical alternans. Select the confirmatory investigation for this condition.
- a. Cardiac MRI
 - b. Echocardiography
 - c. Heart enzymes
 - d. Chest X-rays
 - e. Endomyocardial Biopsy
35. A 4-year-old girl with a history of unrepaired Tetralogy of Fallot presents to the hospital with a 3-day history of fever, fatigue, and decreased appetite. Her parents also noticed that she has become more irritable and lethargic. On physical examination, a new grade 3/6 diastolic murmur is heard along the left sternal border. Blood cultures are positive for *Streptococcus viridans* after 24 hours of incubation. Select the most likely initial diagnosis in this case.
- a. Infective Endocarditis
 - b. Myocarditis
 - c. Pericarditis
 - d. Rheumatic Fever
 - e. Cardiac Abscess
36. A 4-year-old girl with a history of unrepaired Tetralogy of Fallot presents with a 3-day history of fever, fatigue, and decreased appetite. Her parents report increased irritability and lethargy. On examination, a new grade 3/6 diastolic murmur is noted along the left sternal border. Blood cultures grow a pathogen after 24 hours of incubation. Which of the following is the most likely causative organism of infective endocarditis in this patient?
- a. *Staphylococcus aureus*
 - b. *Streptococcus viridans*
 - c. *Enterococcus faecalis*
 - d. *Pseudomonas aeruginosa*
 - e. *Candida* species
37. A 10-year-old girl with a history of acute rheumatic fever presents symptoms of heart failure, including shortness of breath, fatigue, and swelling of the legs. Echocardiogram shows mitral stenosis and regurgitation. What is the most likely long-term complication of rheumatic heart disease in this patient?
- a. Aortic Aneurysm
 - b. Mitral Valve Calcification (bottle neck) valve.
 - c. Pulmonary Hypertension
 - d. Tricuspid Valve Regurgitation
 - e. Cardiac Arrhythmias
38. A 9-month-old infant is brought by his parents to the pediatric clinic with a history of cyanosis, poor feeding, and failure to thrive. The parents report that the infant becomes cyanotic during feeding and crying. Physical examination reveals a harsh grade 3/6 systolic ejection murmur heard loudest at the left upper sternal border. Chest X-ray shows a "boot-shaped" heart with decreased pulmonary vascular markings. Echocardiogram confirms the presence of a ventricular septal defect, pulmonary stenosis, right ventricular hypertrophy, and an overriding aorta. Select the most likely diagnosis.
- a. Tetralogy of Fallot
 - b. Transposition of the Great Arteries
 - c. Tricuspid Atresia
 - d. Hypoplastic Left Heart Syndrome
 - e. Truncus arteriosus
39. A 2-month-old infant is noted to have difficulty feeding, poor weight gain, and sweating while feeding. On examination there's is systolic murmur radiating all over precordium. What congenital heart defect is most likely present?
- a. Patent Ductus Arteriosus
 - b. Atrial Septal Defect
 - c. Ventricular Septal Defect

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- d. Coarctation of the Aorta
 - e. Aortic stenosis
40. A 10-year-old child presents with a 1-week history of migratory polyarthritides. Investigations show no evidence of cardiac involvement (carditis). According to current guidelines, how long should this child receive prophylactic treatment for rheumatic fever?
- a. Until 12 years of age
 - b. **Until 15 years of age**
 - c. Until 11 years of age
 - d. Until 40 years of age
 - e. Lifelong
41. A 10-year-old child presents with a 1-week history of fever, joint pain, and swelling. Which additional finding would be most significant in diagnosing the underlying condition?
- a. Elevated ESR
 - b. Elevated CRP
 - c. **Elevated ASO titer**
 - d. Elevated Total Leukocyte Count
 - e. Low Hemoglobin
42. A 5-year-old boy presents to the emergency department with a 2-hour history of rapid heart rate, palpitations, and shortness of breath. ECG shows a narrow QRS complex tachycardia with a heart rate of 240 beats per minute. What is the first-line treatment for acute episodes of supraventricular tachycardia (SVT) in this patient?
- a. Amiodarone
 - b. **Adenosine**
 - c. Metoprolol
 - d. Verapamil
 - e. Propranolol
43. A one-year-old child presents with history fast breathing, and excessive sweating for 2 days, after he had a viral infection. You find him to be tachypneic and tachycardiac with hepatomegaly 5cm. you suspect diagnosis of myocarditis. What initial investigation with help you in making this diagnosis?
- a. Arterial blood gases
 - b. **Troponin I**
 - c. CK MB
 - d. Chest X ray
 - e. MRI
44. A 9-year-old boy presents with a 2-day history of high-grade fever, joint pain, and swelling in the knees and elbows. Physical examination reveals erythema marginatum on the trunk and migratory polyarthritides. ECG shows a prolonged PR interval. What other major criterion is required for the diagnosis of acute rheumatic fever in this patient?
- a. Subcutaneous nodules
 - b. Elevated erythrocyte sedimentation rate
 - c. Positive throat culture for Streptococcus pyogenes
 - d. **Carditis (e.g., new heart murmur)**
 - e. Raised CRP
45. A premature infant born at 32 weeks gestation presents with a systolic murmur and widened pulse pressure. Select the congenital heart defect is most likely responsible for these clinical findings.
- a. Tetralogy of Fallot
 - b. Atrial Septal Defect
 - c. **Patent Ductus Arteriosus**
 - d. Ventricular Septal Defect
 - e. Transposition of the Great Arteries
46. A 2-month-old infant is diagnosed with a moderate-sized Patent Ductus Arteriosus (PDA). The infant is asymptomatic and has no signs of heart failure. What is the most appropriate initial management strategy for this infant?
- a. Immediate surgical ligation of the PDA
 - b. Pharmacological closure with indomethacin
 - c. **Watchful waiting with regular echocardiographic monitoring**
 - d. Catheter-based closure with an Am Platzer duct occluder
 - e. Initiation of diuretics to manage potential heart failure
47. A 10-year-old child presents with symptoms of exertional dyspnea, chest pain, and syncope. Echocardiogram confirms the diagnosis of Hypertrophic Cardiomyopathy with asymmetric septal hypertrophy. What is the most appropriate initial pharmacological management to reduce symptoms and prevent sudden cardiac death?
- a. **Beta-Blockers**

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- b. ACE inhibitor
 - c. Anti-arrhythmic medications
 - d. Diuretics (e.g., furosemide)
 - e. Calcium channel blockers
48. A patient with prosthetic heart valve is at increased risk of infective endocarditis. What is the recommended prophylactic antibiotic regimen before dental procedures?
- a. Amoxicillin
 - b. Ceftriaxone
 - c. Vancomycin
 - d. Azithromycin
 - e. clarithromycin
49. A 12-year-old child develops chorea following a streptococcal throat infection. What is the term for this movement disorder associated with rheumatic fever?
- a. Myoclonus
 - b. Athetosis
 - c. Hemiballismus
 - d. Sydenham Chorea
 - e. Dystonia
50. A newborn exhibits cyanosis, respiratory distress, and a single loud second heart sound. The chest X-ray shows a "snowman" or "figure-eight" heart. What is the most likely diagnosis?
- a. Tetralogy of Fallot
 - b. Transposition of the Great Arteries
 - c. Tricuspid Atresia
 - d. Total Anomalous Pulmonary Venous Return
 - e. Truncus arteriosus
51. A 50-year-old male presents with a one-week history of fever and dry cough, followed by progressive shortness of breath and vomiting over the last 48 hours. His past medical history is significant for hypertension and ischemic heart disease. On physical examination, he is febrile (102°F), with respiratory rate 25/min and oxygen saturation 82% on room air. Bilateral crackles and scattered wheezes are noted on chest auscultation. Which of the following diagnoses is most likely given the patient's clinical presentation and physical examination findings?
- a. Acute severe asthma
 - b. Acute exacerbation of chronic obstructive pulmonary disease
 - c. Community-acquired pneumonia
 - d. Adult respiratory distress syndrome
 - e. Acute pulmonary edema
52. A 30-year-old, 15 days postpartum woman presents with a 4-day history of palpitations, cough, and hemoptysis. Physical examination reveals signs of deep vein thrombosis in the left leg, confirmed by Doppler ultrasound. Her electrocardiogram shows right axis deviation. Given her symptoms and findings, which of the following diagnostic tests is most appropriate to confirm the suspected diagnosis?
- a. D-Dimer assay
 - b. Electrocardiography
 - c. Chest X-ray (PA view)
 - d. CT pulmonary angiography
 - e. Ventilation-perfusion scan
53. A 40 years old man presented 5 days' history of pain right side of the chest which increases with inspiration. He also complains of fever with chills and cough with blood-stained sputum. Chest examination shows bronchial breathing on the right side. Which one of the following is the most likely diagnosis in this patient?
- a. Pleural effusion
 - b. Pneumonia
 - c. Pericarditis
 - d. Acute bronchitis
 - e. Pulmonary embolism
54. A 50-year-old lady presented with 6 years' history of recurrent productive cough and occasionally blood in the sputum. She had history of pulmonary tuberculosis 10 years back and has taken full course of anti-tuberculous drugs. On examination, she has clubbing and bilateral coarse crackles on auscultation. Which one of the following is the most appropriate investigation for her current condition.
- a. Sputum for AFB
 - b. X ray chest PA view

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- c. High resolution CT-scan chest
 d. Sputum for culture and sensitivity.
 e. Pulmonary function tests
55. A 20-year-old lady presented with three months' history of low-grade fever, dry cough and right sided chest pain which increases with inspiration. Clinical examination shows a pale and wasted lady with dull percussion note and decreased breath sounds on the right-side chest. Which one of the following tests is the most appropriate for diagnosis in this patient?
- a. X ray chest PA view
 b. Diagnostic Pleural tap
 c. CT Scan thorax.
 d. Sputum for AFB.
 e. Erythrocyte sedimentation rate
56. A 23-year-old woman presents to the emergency department with a 10-year history of recurrent shortness of breath and audible wheezing. Over the past 2 days, her symptoms have worsened, with severe breathlessness, cough, and inability to complete sentences. Her vital signs are notable for a respiratory rate of 25/min, and her physical examination reveals a silent chest at the bases wheezing in the upper zones. Her oxygen saturation is 92% on room air. What is the most appropriate immediate diagnostic test to guide her management?
- a. Arterial blood gases
 b. Spirometry
 c. Chest X-ray
 d. Peak flow meter
 e. Pulse oximetry
57. A 56-year-old farmer is complaining of shortness of breath and wheezes in the chest mostly after returning from the fields. His daughter, who is married, has history of pulmonary tuberculosis. Clinical examination shows, otherwise normally built, no clubbing or cyanosis. Chest examination shows few scattered wheezes. X ray chest is normal. Which one of the following is the most likely diagnosis?
- a. Extrinsic allergic alveolitis
 b. Pulmonary edema
 c. Pulmonary TB
 d. Episodic asthma
 e. COPD
58. A 16-year-old boy presented with 3 weeks' history of left side chest pain which increases with deep inspiration. X ray chest PA view shows left side pleural effusion. His pleural tap was done which shows the following results: Protein-3.3gm/dl, glucose-47mg%, total cells-176/cmm, 80% lymphocytes, 13% neutrophils, and 7% RBCs. Which one of the following is the most likely diagnosis?
- a. Pulmonary tuberculosis
 b. Para pneumonic effusion
 c. Extrapulmonary tuberculosis
 d. Mesothelioma
 e. Viral pleurisy
59. A 55-year-old woman presents with a persistent dry cough lasting for the past 4 months. She denies fever, weight loss, or hemoptysis. She has no history of asthma or smoking. Her medical history includes hypertension, for which she has been taking ramipril for the past 6 months as well as on off use of antacids. Physical examination is unremarkable, with normal respiratory findings. A chest X-ray is performed and is normal. Pulmonary function tests, including methacholine challenge, are also normal. Which of the following is the most likely cause of her chronic cough?
- a. Gastroesophageal reflux disease
 b. Angiotensin-converting enzyme inhibitor-induced cough
 c. Chronic obstructive pulmonary disease
 d. Bordetella pertussis infection
 e. Postnasal drip syndrome
60. Which of the following is a component of the CURB-65 score used to assess the severity of community-acquired pneumonia (CAP)?
- a. Blood glucose >200 mg/dL
 b. White blood cell count >15,000/mm³
 c. Oxygen saturation <90%
 d. BP <90 mmHg systolic or ≤60 mmHg diastolic
 e. Hematocrit <35%
61. A 45-year-old woman presents with a 1-month history of dry cough, fever, and worsening shortness of breath. She has a history of chronic chest problems and is currently taking steroids, azathioprine, and a steroid plus long-acting beta-

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- agonist inhaler. Her pulmonary function tests (PFTs) show a preserved FEV1/FVC ratio, but with reduced lung volumes. What is the most likely diagnosis?
- Chronic obstructive lung disease
 - Extrinsic allergic alveolitis
 - Fibrosing alveolitis**
 - Chronic asthma
 - Bronchiectasis
62. A 40-year-old woman presents with a 3-day history of sharp, left-sided chest pain that exacerbates with deep breathing, coughing, and movement. The pain is localized to the left lower hemithorax and is accompanied by mild dyspnea. She recently recovered from a viral upper respiratory tract infection 2 weeks ago. Her medical history includes hypertension and hyperlipidemia. Physical examination reveals a normal heart rate, blood pressure of 140/90 mmHg, and unremarkable lung auscultation. Chest radiography shows a small left-sided pleural effusion. What is the most likely diagnosis based on the characteristics of her chest pain and the additional clinical findings?
- Angina pectoris
 - Musculoskeletal chest pain
 - Myocardial ischemia
 - Myocarditis
 - Pleurisy**
63. A 39-year-old man presents to the emergency department with acute onset of chest pain and dyspnea, precipitated by a stressful argument. The pain is described as tightness in the chest, accompanied by throat constriction and paresthesia around the mouth. Notably, his vital signs are within normal limits, and there are no signs of respiratory distress or hypoxemia. What is the most likely diagnosis for this patient's presentation?
- Acute coronary syndrome
 - Panic disorder with panic attack**
 - Pulmonary embolism
 - Esophageal spasm
 - Hyperventilation syndrome
64. An 80-year-old woman presents with chronic dyspnea, dry cough, supraclavicular lymphadenopathy, and bilateral parotid gland enlargement. Chest X-ray reveals bilateral hilar lymphadenopathy and diffuse pulmonary infiltrates. Laboratory results show hypercalcemia, mild leukocytosis, and elevated serum angiotensin-converting enzyme (ACE) levels. Which diagnostic test would most likely confirm the diagnosis?
- Bronchoscopy with biopsy
 - Serum vitamin D level
 - Bone marrow biopsy**
 - Sputum acid-fast bacilli smear
 - CT scan of the CHEST
65. Which of the following imaging findings is most characteristic of aspergilloma?
- Diffuse bilateral ground-glass opacities
 - Multiple small centrilobular nodules
 - Cavitary lesion with an intracavitary mobile fungal ball**
 - Tree-in-bud pattern in the lung fields
 - Hilar lymphadenopathy with perihilar consolidation
66. A 65-year-old man with COPD is brought to the emergency department with severe dyspnea, confusion, and drowsiness. His arterial blood gas analysis shows:
- pH: 7.25 (Normal: 7.35–7.45)
PaCO₂: 65 mmHg (Normal: 35–45 mmHg)
PaO₂: 55 mmHg (Normal: 75–100 mmHg)
HCO₃⁻: 30 mEq/L (Normal: 22–26 mEq/L). What is the most likely type of respiratory failure?
- Type 1 respiratory failure
 - Type 2 respiratory failure**
 - Type 3 respiratory failure
 - Type 4 respiratory failure
 - Acute metabolic acidosis

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preserved FEV1/FVC ratio, but with reduced lung volumes.

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67. A 62-year-old male with a 45-year smoking history presents with progressive fatigue, weight loss, and bone pain in the lower extremities. He also reports headaches, confusion, and new onset seizures. Physical examination reveals finger clubbing, shin tenderness, and mild edema. Radiographic studies show subperiosteal new bone formation, multiple small brain lesions, and a large right upper lobe mass with hilar lymphadenopathy. Select the most likely explanation for the patient's clinical presentation? (Abbreviations: NSCLC=non small cell lung carcinoma, SCLC= squamous cell carcinoma)
- a. Hypertrophic pulmonary osteoarthropathy and metastatic brain disease secondary to NSCLC
 - b. Paraneoplastic syndrome with cerebellar degeneration and finger clubbing associated with SCLC
 - c. Metastatic liver disease causing seizures and bone pain in the setting of NSCLC
 - d. Hypercalcemia and digital clubbing associated with parathyroid hormone-related peptide secretion
 - e. Epilepsy is secondary to metastatic brain lesions and paraneoplastic myelopathy
68. A 55 years old young man presented with slowly and gradually increasing shortness of breath, weight loss and feeling unwell over the last 6 months. He has been working as plumber, working around insulating pipes in heating systems in construction company in Dubai for the last ten years. On clinical examination he is lean, tall person with no lymphadenopathy. Chest X-Ray shows right massive pleural effusion. Select the most likely cause of pleural effusion in this patient.
- a. Lung abscess
 - b. Pneumonia
 - c. Mesothelioma
 - d. Interstitial lung disease
 - e. Pneumoconiosis
69. A 54-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, and increasing breathlessness on exertion. He has experienced unintentional weight loss, fatigue, and anorexia over the past 6 months. 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 due to chronic hypoxemia and pulmonary hypertension
 - b. Pleural effusion, a potential complication of bronchiectasis
 - c. Massive hemoptysis, a life-threatening complication of bronchiectasis
 - d. Pneumothorax, a potential complication of chronic lung disease
 - e. Pulmonary hypertension, a complication of chronic hypoxemia
70. A Which of the following is the most immediate life-saving intervention for a tension pneumothorax?
- a. Chest X-ray to confirm diagnosis
 - b. Needle decompression
 - c. High-flow oxygen therapy
 - d. Intravenous fluid resuscitation
 - e. Antibiotic administration
71. A patient with respiratory failure is receiving oxygen therapy. Select the most appropriate oxygen delivery device for a patient with a high oxygen requirement.
- a. Nasal cannula
 - b. Simple face mask
 - c. Non-rebreather mask
 - d. Venturi mask
 - e. Tracheostomy collar
72. A 65-year-old man with a history of deep vein thrombosis presents with acute shortness of breath and pleuritic chest pain. He is diagnosed with pulmonary embolism. Intravenous unfractionated heparin is initiated. This patient come to OPD for follow up. Select the most appropriate laboratory test to monitor the effectiveness of heparin therapy.
- a. Prothrombin time (PT)
 - b. International normalized ratio (INR)
 - c. Activated partial thromboplastin time (aPTT)
 - d. Anti-factor Xa assay
 - e. Bleeding time

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73. A 45-year-old woman with a history of episodic wheezing and dyspnea undergoes pulmonary function testing. Which of the following PFT findings is most suggestive of asthma?
- Reduced FEV₁/FVC ratio with partial reversibility after bronchodilator administration
 - Reduced FEV₁/FVC ratio with no improvement after bronchodilator administration
 - Normal FEV₁/FVC ratio with reduced total lung capacity
 - Increased diffusing capacity of the lung for carbon monoxide
 - Reduced total lung capacity with a normal FEV₁/FVC ratio
74. Which ventilation-perfusion (V/Q) scan finding is most suggestive of pulmonary embolism?
- Normal ventilation with decreased perfusion in multiple lung areas
 - Both ventilation and perfusion decreased in the same areas
 - Normal ventilation and normal perfusion
 - Decreased ventilation and perfusion throughout both lungs
 - A single small area of decreased ventilation with normal perfusion
75. A 40-year-old man with a long history of asthma presents with increasing frequency of daytime symptoms, including wheezing and shortness of breath, despite using his inhaled corticosteroid (ICS) regularly. He has not required oral steroids. His doctor wants to step up his treatment. Which of the following is the most appropriate next step in his management?
- Increase the dose of his current ICS
 - Add a long-acting beta-agonist to his ICS regimen
 - Switch to a leukotriene receptor antagonist
 - Start oral corticosteroids
 - Discontinue ICS and start a short-acting beta-agonist alone
76. 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?
- Lambert-Eaton myasthenic syndrome and syndrome of inappropriate antidiuretic hormone secretion
 - Hypercalcemia due to parathyroid hormone-related peptide secretion and cerebellar degeneration
 - Carcinoid syndrome and polyneuropathy
 - Ectopic adrenocorticotrophic hormone secretion and hypertrophic pulmonary osteoarthropathy
 - Polymyositis and nephrotic syndrome
77. A 4-year-old child presents to you with 5 days history of high-grade fever and dyspnea. On examination there are signs of respiratory distress, on chest auscultation decreased air entry on right side, with hyper resonant percussion note and decreased vocal fremitus. What is the most likely diagnosis?
- Asthma
 - Pneumonia
 - Pneumothorax
 - Pleural effusion
 - Chylothorax
78. A 7-year-old child is admitted with a 3-day history of worsening cough, fever, and difficulty breathing. Chest examination reveals decreased breath sounds, dullness to percussion, and decreased vocal fremitus on the right side. A chest X-ray shows a homogeneous area of consolidation on the right side with a visible fluid level. Which of the following conditions is most consistent with these findings?
- Asthma
 - Pneumonia
 - Pneumothorax
 - Pleural effusion
 - Chylothorax
79. A 9-year-old child presents with a 2-week history of cough, fever, and weight loss. A chest X-ray shows a large pleural effusion on the left side. A diagnostic pleural tap is performed, and the pleural fluid analysis reveals. WBC count: 1000 cells/ μ L, Lymphocytes: 80%, Protein: 3.5 g/dL, Adenosine deaminase (ADA) level: 40 IU/L. Select the most likely diagnosis in this case.

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- a. Empyema
 - b. Tuberculous pleurisy**
 - c. Chylothorax
 - d. Malignancy
 - e. Parapneumonic effusion
80. An 8-year-old child is suspected to have a parapneumonic pleural effusion. A pleural fluid culture is sent to identify the causative organism. Which of the following bacteria is most commonly associated with parapneumonic pleural effusion in children?
- a. Streptococcus pneumoniae**
 - b. Staphylococcus aureus
 - c. Staphylococcus epidermitis
 - d. Mycobacterium tuberculosis
 - e. Mycobacterium Avium
81. A 5-year-old child presents with a 2-month history of chronic cough, low-grade fever, night sweats, and weight loss. The child has not received any vaccinations. What is the most appropriate initial step in the diagnostic workup for this child?
- a. Chest X-ray and Mantoux test**
 - b. Pleural tap
 - c. CT chest
 - d. Bronchoscopy
 - e. Sputum smear for Acid-Fast Bacilli
82. A 3-year-old child presents with a 1-month history of progressive dyspnea, cough, and cyanosis. The child had measles 1 month ago, which was complicated by a severe respiratory infection. Physical examination reveals signs of respiratory distress, clubbing, and bilateral crepitation. Chest imaging shows nonspecific opacities on X-ray and a "signet ring" appearance on high-resolution CT scan. What is the most likely diagnosis?
- a. Bronchiectasis**
 - b. Post-measles pneumonia
 - c. Pleural effusion
 - d. Pneumothorax
 - e. Cystic fibrosis
83. A 5-year-old boy presents with a history of recurrent respiratory infections, chronic diarrhea, and greasy stools since early infancy. He also had delayed passage of meconium. His parents notice a salty taste when they kiss him. Which of the following diagnostic tests would be most helpful in confirming the underlying condition?
- a. Sweat chloride test**
 - b. 72-hour fecal fat test
 - c. Genetic testing for CFTR gene mutations
 - d. Chest X-ray
 - e. Upper GI endoscopy
84. A 3-year-old girl is brought to the emergency department with sudden onset of cough and difficulty breathing. Her mother reports that she was playing with her older brother's toy blocks when she started choking. On examination, the child is distressed, with increased respiratory rate and wheezing heard on the left side. Chest X-ray shows left-sided hyperinflation. What is the most likely diagnosis?
- a. Foreign body aspiration**
 - b. Pneumonia
 - c. Congestive cardiac failure
 - d. Asthma
 - e. Acute Bronchiolitis
85. A 7-month-old infant presents with a 2-day history of rapid breathing, coughing, and difficulty feeding. The infant's mother reports having a similar respiratory infection. Physical examination reveals a temperature of 100°F, a respiratory rate of 60 breaths per minute, expiratory wheezing, and subcostal retractions. Chest X-ray shows hyperinflation, and the white blood cell count is normal. What is the most probable diagnosis?
- a. Bacterial pneumonia
 - b. Bronchiolitis**

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- c. Acute epiglottitis
 - d. Pneumothorax
 - e. Viral pneumonia
86. A 4-year-old girl presents with persistent cough, tachypnea, and recurrent episodes of wheezing since infancy. Her mother reports that two siblings also have a history of recurrent respiratory infections. Physical examination reveals nasal flaring, wheezing, and increased respiratory rate. Chest X-ray shows hyperinflation, flattened diaphragm, and a narrow, elongated heart silhouette. Complete Blood Count reveals eosinophilia. What is the most probable diagnosis?
- a. Bronchiolitis
 - b. Pneumonia
 - c. Pleural Effusion
 - d. Asthma
 - e. Tuberculosis
87. A 2-year-old girl is brought to the emergency department with a 12-hour history of worsening cough, hoarseness, and inspiratory stridor. Her mother reports that the child was exposed to a cousin with a similar illness. Physical examination reveals a distressed child with a barking cough, inspiratory stridor, and hoarse voice. The child is sitting upright, refusing to lie down. Chest examination reveals bilateral equal air entry with no signs of consolidation or effusion. A lateral neck X-ray shows the "steeple sign." What is the most probable diagnosis?
- a. Epiglottitis
 - b. Pneumonia
 - c. Croup
 - d. Pharyngitis
 - e. Tracheitis
88. A 2-year-old boy presents to you with sudden onset of respiratory distress. The mother narrates that the child was playing with very small blocks when he developed the distress. Chest X-ray shows unilateral hyperinflation. Select the next step in the management of this patient.
- a. Bronchoscopy
 - b. CT chest
 - c. Laryngoscopy
 - d. Give IV fluids
 - e. Give IV antibiotics
89. A 7-year-old child presents to you with recurrent respiratory tract infections. On examination his sinuses are tender to touch, there are bilateral crepitation on chest auscultation, and apex beat is on the right side. Select the most likely diagnosis.
- a. Cystic fibrosis
 - b. Primary Immunodeficiency
 - c. Acquired Immunodeficiency
 - d. Primary Ciliary dyskinesia
 - e. Foreign Body aspiration
90. You are suspecting that a 7-year-old child has pleural effusion. You perform a diagnostic pleural tap. Pleural fluid RE show 60000 WBCs, 90% neutrophils, protein 4g/dl. What is the most likely diagnosis?
- a. Empyema
 - b. Tuberculosis
 - c. Chylothorax
 - d. Malignancy
 - e. Hemothorax
91. A newborn baby at birth presents with respiratory distress immediately after birth, requiring supplemental oxygen. Physical examination reveals a scaphoid abdomen, bowel sounds audible in the right thoracic cavity, and decreased air entry on the same side. What is the most likely diagnosis?
- a. Diaphragmatic hernia
 - b. Tracheomalacia
 - c. Tracheoesophageal fistula
 - d. Respiratory distress syndrome
 - e. Meconium aspiration syndrome

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92. A 6-year-old child with a history of asthma presents to the emergency department with acute worsening of cough, wheezing, and difficulty breathing. His oxygen saturation is 90% on room air. On examination, he has intercostal retractions and audible wheezing. What is the first-line treatment for this acute exacerbation? (Metered-Dose Inhaler - MDI).
- Inhaled corticosteroids via nebulizer or MDI with spacer
 - Montelukast oral
 - Short-acting beta-agonist via nebulizer or MDI with spacer
 - Long-acting beta-agonist
 - Oral theophylline
93. A 10-year-old child with asthma undergoes spirometry. Which of the following findings is most characteristic of asthma?
- Normal FEV₁/FVC ratio
 - Increased FEV₁/FVC ratio
 - Decreased FEV₁/FVC ratio
 - Decreased FEV₁ with no change after bronchodilator
 - Increased FVC after bronchodilator
94. A child presented with gradual onset, dry cough, and mild symptoms despite abnormal chest X-ray findings. The pediatrician suspects atypical pneumonia. Which of the following atypical bacteria is a common cause of pneumonia in children?
- Streptococcus pneumoniae
 - Haemophilus influenzae
 - Mycoplasma pneumoniae
 - Staphylococcus aureus
 - Moraxella catarrhalis
95. Which of the following is the most common initial clinical feature of cystic fibrosis in infants?
- Recurrent urinary tract infections
 - Meconium ileus
 - Late-onset jaundice
 - Macroglossia
 - Hypoglycemia
96. A 20-year-old male is brought to the emergency department 50 minutes after being struck by a car. He appears distressed, pale, and clammy, with signs of respiratory distress. Vital signs reveal heart rate 148/bpm, hypotension 84/47 mmHg, and tachypnea (36 breaths/min). Physical examination shows bilateral air entry, engorged neck veins, and a large bruise on the central and right chest. Needle aspiration of the right chest does not yield free air. What is the most likely diagnosis?
- Cardiac tamponade
 - Compression asphyxiation
 - Diaphragmatic rupture
 - Rupture of thoracic aorta
 - Tension pneumothorax
97. An 18-year-old bike rider is brought to the emergency room after a road traffic accident, presenting with respiratory distress, cyanosis, and anxiety. Physical examination reveals a silent left lung with tracheal deviation to the right side, leading to a clinical diagnosis of tension pneumothorax. What is the best immediate management option?
- Chest intubation in the 5th intercostal space, mid-axillary line
 - Chest intubation in the 5th intercostal space, mid-clavicular line
 - Insertion of a wide-bore needle in the 2nd intercostal space, mid-clavicular line
 - Insertion of a wide-bore needle in the 7th intercostal space, mid-axillary line
 - Needle decompression followed by chest tube insertion
98. A 20-year-old male presents to the emergency department after a motor vehicle accident. He is conscious, but short of breath and has chest pain. His respiratory rate is 24 breaths per minute, and he has tachycardia. What is the first step in management according to the ABCs of trauma?

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- a. Administer analgesia for pain relief
- b. Perform a focused ultrasound for cardiac injury
- c. Secure the airway and provide supplemental oxygen
- d. Perform a chest X-ray
- e. Insert a central venous line for monitoring

99. A 60 years old patient is admitted with blunt trauma to the chest. He has severe right sided chest pain with labored breathing and dyspnoea. His ECG shows only tachycardia. Trachea is slightly deviated to left & on auscultation breath sounds are diminished on right side. Select the complications of trauma might have occurred in this case.

- a. Hemothorax
- b. Pneumothorax
- c. Tension pneumothorax
- d. Chylothorax
- e. Cardiac tamponade

100. A 40-year-old man presented in emergency with history of penetrating chest trauma that leads to tension pneumothorax. Select the type of shock is expected in this case.

- a. Endocrine
- b. Septic
- c. Anaphylactic
- d. Vaso-vagal
- e. Obstructive

101. A 60-year-old male with metastatic lung cancer presents with worsening dyspnea, chest discomfort, and fatigue. Echocardiography shows a large pericardial effusion with diastolic collapse of the right atrium. Despite fluid resuscitation, he remains hypotensive. What is the most appropriate next step in management to relieve the cardiac tamponade and stabilize his hemodynamics?

- a. Emergency percutaneous pericardiocentesis to drain the pericardial effusion
- b. Administration of high-dose corticosteroids to control inflammation
- c. Initiation of intravenous inotropes to support blood pressure
- d. Surgical pericardial window creation due to underlying malignancy
- e. Referral to palliative care for symptom management and end-of-life care

102. A 68-year-old woman with chronic heart failure, atrial fibrillation, and anticoagulant therapy presents with sudden-onset dyspnea and chest pain. Physical examination reveals unilateral leg swelling and warmth. What is the most plausible explanation for her symptoms?

- a. Acute pulmonary embolism is secondary to deep vein thrombosis
- b. Atrial fibrillation-induced thromboembolism leading to acute myocardial infarction
- c. Acute heart failure exacerbation causing right-sided heart strain and peripheral edema
- d. Fluid overload due to heart failure, worsened by inappropriate diuretic use
- e. Cardiac tamponade resulting from anticoagulant therapy

103. A 62-year-old woman with a history of systemic lupus erythematosus presents with worsening fatigue, dyspnea, and chest pain. Physical examination reveals a pericardial friction rub, and ECG shows diffuse ST-segment elevations. Which cardiovascular complication is most likely related to her underlying SLE?

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

104. A 65-year-old male presents with fever and a new heart murmur, raising suspicion for infective endocarditis. To confirm the diagnosis, which of the following approaches is the most accurate?

- a. Collecting two sets of blood cultures from a central line at intervals of ≥ 6 hours
- b. Collect 3-6 sets of blood cultures from peripheral sites at intervals of ≥ 6 hours
- c. Blood culture is not required and start antibiotics
- d. Delaying blood culture collection until the patient develops a fever
- e. Relying solely on clinical presentation and medical history for diagnosis

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105. A 25-year-old female presents to the emergency department with palpitations, dizziness, and shortness of breath. Her ECG shows a narrow QRS complex tachycardia with a heart rate of 180 beats per minute. She has a history of recurrent supra ventricular tachycardia (SVT). After initial stabilization, she is diagnosed with Atrioventricular Nodal Re-entrant Tachycardia (AVNRT). Which of the following is the most appropriate definitive management strategy for this patient?
- Oral β -blocker therapy
 - Permanent pacemaker
 - Catheter ablation
 - Oral flecainide therapy
 - Implantable cardioverter-defibrillator
106. 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?
- The discomfort is associated with palpitations and sweating.
 - The discomfort is not related to physical exertion.
 - The discomfort is relieved by rest or glyceryl trinitrate within 5 minutes.
 - The discomfort is sharp and localized to the left side of the chest.
 - The discomfort occurs at rest and lasts for more than 20 minutes.
107. A 50-year-old male patient with a history of hypertension and hyperlipidemia presents to the emergency department with sudden onset of severe chest pain radiating to the left arm, accompanied by diaphoresis and shortness of breath. What is the underlying condition that most likely contributed to this patient's acute presentation?
- Acute Coronary Occlusion
 - Acute aortic dissection
 - Pneumothorax
 - Herpes Zoster
 - Pulmonary Embolism
108. A 60-year-old male presents with severe chest pain for 1 hour, diaphoresis, and ECG changes consistent with ST-elevation myocardial infarction (STEMI). He has history of intracranial bleed previously. His troponin levels are elevated. What is the most appropriate management approach for this patient with acute Myocardial infarction?
- Antiplatelet and anticoagulant therapy
 - Beta-blockers and Tenecteplase
 - Primary percutaneous coronary intervention
 - Intravenous thrombolysis and heparin
 - Urgent coronary artery bypass grafting
109. A 75-year-old female presents with symptoms of shortness of breath and fatigue, accompanied by an irregularly irregular pulse of 100 bpm. Electrocardiography confirms atrial fibrillation, characterized by the absence of P waves, fibrillatory waves, and irregular QRS complexes. What is the most suitable initial management strategy for this patient?
- Anticoagulation therapy and beta-blockers for rate control
 - Antiplatelet therapy and cardioversion to restore sinus rhythm
 - Cardioversion followed by catheter ablation to maintain sinus rhythm
 - Rate control using calcium channel blockers to alleviate symptoms
 - Rhythm control with amiodarone therapy to restore and maintain sinus rhythm
110. A 60-year-old male presents with symptoms of syncope, dizziness, and fatigue, and electrocardiography reveals a third-degree atrioventricular (AV) block with a junctional escape rhythm. What is the most suitable long-term management strategy for this patient with complete heart block?
- Temporary pacing and pharmacological management with atropine
 - Cardiac catheterization and angiography to rule out underlying coronary artery disease
 - Implantation of a dual-chamber permanent pacemaker to restore normal cardiac conduction
 - Observe only
 - Pharmacological management with epinephrine and aminophylline to augment cardiac conduction
111. A 65-year-old male presents with symptoms of advanced heart failure, including significant dyspnea (NYHA III), fatigue, and bilateral leg edema, alongside a reduced left ventricular ejection fraction (LVEF) of 30%. What is the

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- most appropriate initial pharmacological management strategy for this patient with heart failure with reduced ejection fraction?
- a. **Initiation of an angiotensin-converting enzyme (ACE) inhibitor to reduce afterload and slow disease progression**
 - b. rate limiting calcium channel blockers to reduce sympathetic tone and improve cardiac function
 - c. Diuretics to alleviate volume overload and symptoms
 - d. Inotropes to enhance contractility and improve cardiac output
 - e. Oxygen therapy to alleviate hypoxia and dyspnea
112. A 40-year-old male with a prosthetic heart valve presents with fever, fatigue, and a new heart murmur. Blood cultures reveal *Streptococcus viridans*. What is the most appropriate medication for bacterial endocarditis in this patient?
- a. **Amoxicillin and gentamicin**
 - b. Ceftriaxone and vancomycin
 - c. Ciprofloxacin and rifampin
 - d. Penicillin and streptomycin
 - e. Vancomycin and gentamicin
113. A 60-year-old female is diagnosed with acute deep vein thrombosis of the left leg. What is the most appropriate initial anticoagulation management strategy for this patient?
- a. Fondaparinux and warfarin
 - b. Heparin and aspirin
 - c. **Low molecular heparin**
 - d. Aspirin monotherapy
 - e. Clopidogrel
114. A 45-year-old lady who is 6-month postnatal presents with 2 months' history of exertional dyspnea, orthopnea and paroxysmal nocturnal dyspnea. On examination, she is tachycardic with raised JVP and pedal edema. On cardiac examination, her apex beat is displaced and there is gallop rhythm with pan-systolic murmur at mitral area. Chest examination shows bilateral pleural effusion. Select the diagnosis in this case.
- a. Acute Rheumatic Fever
 - b. Infective Endocarditis
 - c. **Peripartum Cardiomyopathy**
 - d. Acute Pericarditis
 - e. Streptococcal Pneumonia
115. A 55-year-old male presents with newly diagnosed hypertension, necessitating a comprehensive assessment of his cardiovascular risk factors. When taking his history, which of the following questions is most crucial to elicit information about potential heritable predispositions that may influence his cardiovascular risk profile?
- a. Alcohol consumption history
 - b. **Family history of cardiovascular disease**
 - c. Medication usage
 - d. Occupational stress levels
 - e. Smoking history
116. A 30-year-old female presents to the emergency department with palpitations, shortness of breath, and lightheadedness. She has past history of asthma. Her ECG shows a narrow complex tachycardia with a rate of 180 beats per minute. Which of the following is the most appropriate initial management step?
- a. Administer adenosine 6mg IV
 - b. **Perform carotid massage**
 - c. Insert a pacemaker
 - d. Prepare for electrical cardioversion
 - e. Administer metoprolol 5mg IV
117. A 60-year-old male patient presents with symptoms of chest pain and shortness of breath. His coronary angiography reveals a 90% blockage in the left anterior descending (LAD) artery. Which of the following cardiac interventions is most appropriate for this patient?

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- a. Electrophysiology study
 - b. Percutaneous coronary intervention with stenting
 - c. Mitral valve repair/replacement
 - d. Cardiac resynchronization therapy
 - e. Implantable cardioverter-defibrillator implantation
118. A 65-year-old male patient presents with symptoms of palpitations, shortness of breath, and fatigue. His ECG shows an irregularly irregular ventricular rhythm without P waves. Which of the following is the most appropriate initial management step?
- a. Electrical cardioversion
 - b. Electrophysiological study
 - c. Rate control with beta-blockers
 - d. Rhythm control with amiodarone
 - e. Coronary angiography
119. A 70-year-old male patient presents with symptoms of dizziness and fatigue. His ECG shows a third-degree heart block with a ventricular rate of 40 beats per minute. Which of the following is the most appropriate management step?
- a. Implant a permanent pacemaker
 - b. Administer atropine to increase the heart rate
 - c. Use a temporary pacemaker until the condition resolves
 - d. Observe only
 - e. Digoxin to improve cardiac contraction
120. A 40-year-old male presents with palpitations and dizziness. His ECG shows a regular rhythm with a narrow QRS complex and a heart rate of 250 beats per minute. What is the most likely classification of his arrhythmia?
- a. Atrial Fibrillation
 - b. Atrial Flutter
 - c. Atrioventricular Reentrant Tachycardia
 - d. Sinus Tachycardia
 - e. Supraventricular Tachycardia

