

Test Bank

Subject:
CVS-Final

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Pharmacology

1-Supraventricular tachycardia may be safely treated by the following:

- a. Quinidine
- b. Carotid massage
- c. Adenosine
- d. Verapamil
- e. All of the above

2-All of the following antiarrhythmic drugs can be useful in the management of digitalis induced arrhythmias EXCEPT:

- a. Quinidine
- b. Lidocaine
- c. Phenytoin
- d. Magnesium
- e. Potassium salts

3-The antiarrhythmic drug which is least cardiotoxic, given only IV, doesn't increase the QT interval and acts selectively on ischemic areas is:

- a. Quinidine
- b. Xylcaine or Lidocaine
- c. Procainamide
- d. Propranolol
- e. Amiodarone

4-All of the following drugs can be used effectively to terminate attacks of supraventricular tachycardia EXCEPT:

- a. Lidocaine
- b. Cardioversion
- c. Adenosine
- d. Verapamil

e. Quinidine

5-A 58 year-old woman is being treated for chronic suppression of ventricular arrhythmia, after two months of therapy, she complained about feeling tired most of the time, Laboratory tests indicated low thyroxine and elevated thyroid-stimulating hormone levels, which of the following drugs is the likely cause:

- a. Amiodarone
- b. Bretylium
- c. Propranolol
- d. Quinidine
- e. Verapamil

6-Most antiarrhythmic drugs which prolong the QT interval could be pro-arrhythmic. However, the following drug will not precipitate TdP:

- a. Quinidine
- b. Flecainide
- c. Sotalol
- d. Amiodarone
- e. Verapamil

7-All the following drugs has more than one mechanism of action EXCEPT for one of them, choose the drug that has only one mechanism of action:

- a. Quinidine
- b. Flecainide
- c. Sotalol
- d. Amiodarone
- e. Verapamil

8-Constipation is the side effect of:

- a. Verapamil
- b. Flecainide

- c. Quinidine
- d. Disopyramide

9-A drug that is not proved to decrease mortality:

- a. Digitalis
- b. Metoprolol
- c. Propranolol
- d. Enalapril

10-Drug used in heart failure but doesn't increase cardiac output:

- a. Digitalis
- b. PDE inhibitors
- c. Diuretics
- d. Vasodilators

11-Main use of statin:

- a. Decrease LDL
- b. Hypertriglyceridemia
- c. Relieve pruritus in cholestasis

12-Old safe drug to increase HDL:

- a. Statins
- b. Niacin
- c. Ezetimibe

13-Matched correctly:

- a. Amiodarone – calcium channel blocker
- b. Lidocaine - sodium channel blocker
- c. Procainamide – potassium channel blocker

14-Best drug for supraventricular arrhythmia:

- a. Phenytoin

- b. Lidocaine
- c. Adenosine

15-Hypothyroidism is a side effect of which drug:

- a. Quinidine
- b. Procainamide
- c. Amiodarone
- d. Lidocaine

16-Effect of dopamine in low doses for cardiogenic shock:

- a. Increase heart contractility
- b. Increase renal flow to prevent renal shut down
- c. Vasoconstriction and elevation of blood pressure

17-Digoxin:

- a. Increase intracellular cAMP
- b. Increase intracellular Ca
- c. Increase myocardial O₂ consumption

18-Which of the following is used in chronic treatment to prevent post-myocardial infarction arrhythmia:

- a. Mexiletine
- b. Phenytoin
- c. Amiodarone

19-A side effect that distinguishes ACEi from ARBs?

- a. Hypotension
- b. Cough
- c. Hyperkalemia

20-Undesirable effect of B-blocker:

- a. Increases ejection time

- b. Decreases myocardial O₂ consumption
- c. Resensitization of B-receptors

21-The reason behind the use of angiotensin 2 receptor antagonist is:

- a. It completely blocks the angiotensin II

22-Patient with HF and suffer edema, which is the best to decrease his edema:

- a. Furosemide

23-Which is true:

- a. Digoxin should be taken 1-6 hrs from intake of bile acid binding resins to avoid interference of its absorption.

24-Hypokalemia increases the risk of:

- a. Digoxin

25-Digitalis still better for chronic congestive heart failure compared to other positive inotropic agents because it:

- a. Decreases oxygen consumption MvO₂

26-Mechanism of many antiarrhythmic drugs:

- a. Unidirectional block to bidirectional block

Answers

| | | | | | | | |
|--------------------------------------|---|----|---|----|---|----|---|
| 1 | E | 8 | A | 15 | C | 22 | A |
| 2 | A | 9 | A | 16 | B | 23 | A |
| 3 | B | 10 | C | 17 | B | 24 | A |
| 4 | A | 11 | A | 18 | A | 26 | A |
| 5 | A | 12 | B | 19 | B | - | |
| 6 | E | 13 | B | 20 | A | - | |
| <i>**Deleted by difficulty index</i> | | | | | | | |
| 7 | E | 14 | C | 21 | A | - | |

Microbiology

1-Human to human transmission occurs in viral hemorrhagic fevers EXCEPT:

- a. Rift Valley virus
- b. Crimean-Congo hemorrhagic fever

2-Which of the following is the most common cause of infective endocarditis in developing countries:

- a. Staphylococcus aureus
- b. Streptococcus viridans
- c. Fungi
- d. Haemophilus influenzae

3-Infection with subacute infective endocarditis is associated with the following:

- a. Abnormal valves
- b. Congenital deformities
- c. Rheumatic lesions
- d. A&B
- e. All A, B and C

4-All of the following regarding viral hemorrhagic fever are correct EXCEPT:

- a. Hantaviruses, Rift Valley fever and Dengue are not associated with person to-person transmission
- b. Arenaviruses are found in South America and Africa and are transmitted by Arthropods
- c. Yellow fever is associated with 2 types of infectious cycles
- d. Filoviruses cause the most lethal type of hemorrhagic fever
- e. Bleeding occurs frequently and is a common cause of death

5-All of the following regarding coxsackievirus B induced myocarditis are correct EXCEPT:

- a. Occurs mostly in average-aged men
- b. Clinical manifestations appear after 3-2 month of infection
- c. Immune-mediated inflammation is the main cause of pathogenesis
- d. Clinical manifestations vary from person to person
- e. Most cases of infection resolve spontaneously

6 -Not a predisposing factor for infective endocarditis:

- a. Prosthetic valves
- b. Diabetes
- c. Immunodeficiency

7 -Doesn't cause myocarditis :

- a. Cytomegalovirus
- b. Rubella virus
- c. Measles virus
- d. Coronavirus

8 -Wrong about hemorrhagic fever:

- a. Vaccines are available for most viral infections
- b. Passive immunization is a good choice for immunocompromised patients

9 -Wrong about Dengue fever:

- a. The vector is *Aedes aegypti*
- b. Incubation period is 3 to 4 weeks
- c. Has 4 serotypes

10-All of the following viruses cause hemorrhagic fever EXCEPT:

- a. Hantaviruses
- b. Bunyaviruses
- c. Polio virus

11 -Most common cause of acute endocarditis :

- a. S.aureus
- b. S.epidermidis
- c. Aggregatibacter

12-Wrong statement about hemorrhagic fever:

- a. Can be caused by arboviruses and non-arboviruses
- b. Most deaths occur due to severe bleeding

13 -Most common cause of subacute infective endocarditis:

- a. S.pyogenes
- b. Enterococcus
- c. Viridans streptococci

14 -Which of the following is associated with nosocomial infection:

- a. Hantaviruses
- b. Dengue fever
- c. Yellow fever
- d. Lassa virus
- e. Ebola virus

15 -Most common cause of endocarditis:

- a. Enterococcus
- b. Candida albicans
- c. Salmonella
- d. Viridans streptococci

Answers

| | | | | | | | |
|---|---|---|---|----|---|----|---|
| 1 | A | 5 | B | 9 | B | 13 | C |
| 2 | B | 6 | C | 10 | C | 14 | E |
| 3 | E | 7 | D | 11 | A | 15 | D |
| 4 | B | 8 | A | 12 | B | - | |

Pathology

1-Regarding abdominal aortic aneurysm, all are correct EXCEPT:

- a. Occurs mostly in men and above 50 years of age
- b. Marfan syndrome is one of its causes
- c. Bacteremia from Salmonella gastroenteritis could be one of the causes
- d. Occurs at the infra-renal level of the abdominal aorta
- e. Syphilitic aneurysms are the most common cause nowadays

2-The most common cause of aortic dissections is:

- a. Hypertension
- b. Connective tissue disorders
- c. Hypotension
- d. Hypercholesterolemia
- e. Obesity

3-All of the following regarding ischemic heart disease are correct EXCEPT:

- a. Associated with a severe substernal pain that can radiate to the left arm
- b. Variant angina is associated with coronary artery vasospasm
- c. Stable angina is also known as pre-infarction angina
- d. Chronic ischemic heart disease is usually associated with arrhythmias
- e. Typical angina can be relieved by rest and nitroglycerin

4-Regarding myocardial infarction, all are correct EXCEPT:

- a. Most cases of pre-hospital deaths are due to lethal arrhythmias
- b. Troponin I and T are the best indicators for MI
- c. 40-50% of cases are due to occlusion of the circumflex artery
- d. Coagulative necrosis and wavy fibers are seen within 24 hours of injury
- e. Most cases of in-hospital deaths are due cardiogenic shock

5-Aneurysms are most commonly due to:

- a. Ageing
- b. Syphilis
- c. Atherosclerosis
- d. Systemic hypertension
- e. Inflammation

6-Which of the following regarding infective endocarditis is TRUE:

- a. No fever can be seen during infection
- b. Is an auto-immune mediated disease
- c. Acute endocarditis is due to infection with a low virulent microorganism
- d. Can result in the formation of a septic infarct
- e. Recovery is very difficult and most cases end in death

7-The second most common valve to be affected by rheumatic after mitral is:

- a. Aortic
- b. Pulmonary
- c. Tricuspid
- d. Pulmonary and tricuspid

8-A 67 years old man with a history of hypertension was sent home 4 days after an MI. He returned to his normal activities, but died suddenly the next day. We expect to see:

- a. Arrhythmia
- b. Myocardial rupture
- c. Ventricular aneurysm

Note: Fatal arrhythmia would have occurred while he was going to the ER. We may see ventricular hypertrophy, but that would not lead to sudden death.

Remember he only had an MI 4 days ago, the walls are still very weak, any systole at any time may cause rupture.

9-A man who suffer from chest pain and breathlessness after climbing the stairs to the 3rd floor, he has:

- a. Stable angina

- b. Prinzmetal angina
- c. Unstable angina
- d. Myocardial infarction

10-Wrong about aortic aneurysm and aortic dissection:

- a. Hypertension is the most common cause for aortic dissection
- b. Atherosclerotic aneurysm occur more in men <50 years
- c. Marfan syndrome is the most common CT disorder for aortic dissection
- d. Syphilitic aneurysm is associated with obliterative end-arteritis
- e. Mycotic aneurysm is an infection of a major artery

11-Subacute endocarditis is often developed by presence of:

- a. Abnormal valves
- b. Congenital deformities
- c. Rheumatic lesions
- d. A&B is correct
- e. All are correct

12-True about syphilitic aortic aneurysm:

- a. Histological feature is obliterative endarteritis

13-Angina pectoris that occurs more frequently and of progressively longer period than other is:

- a. Crescendo
- b. Stable
- c. Variant
- d. Prinzmetal
- e. Effort angina

14-Stable angina has the following characters except:

- a. Appears with increased demand for blood
- b. Associated with depressed ST segment of ECG

- c. Basically there is fixed coronary narrowing by atherosclerosis
- d. Usually of a short period
- e. Being the least common

15-All of these factors modify the location and extent of MI, except:

- a. Patient's cardiovascular status
- b. Sex of the patient
- c. Vasospasm
- d. Duration of occlusion
- e. Collaterals

16-In right coronary dominant patients, the most frequent coronary artery occlusion causing MI is:

- a. Left main stem
- b. Right main stem
- c. Left circumflex
- d. Left anterior descending
- e. Right posterior descending

17-The microorganism responsible for rheumatic carditis is:

- a. Alpha streptococcus hemolyticus group A
- b. Human papilloma virus
- c. Staphylococcus aureus
- d. All of the above
- e. None of the above

18-Which of the following vegetations is most friable and hence liable for embolization:

- a. Marantic
- b. Rheumatic
- c. Infective endocarditis

- d. Non-bacterial thrombotic
- e. systemic lupus erythematosus

19-The following conform with aortic dissection, except:

- a. More common at distal than proximal segment of arch
- b. More frequent in hypertensives than normotensives
- c. Atherosclerosis has little or no influence in its production
- d. Might be confused with MI clinically
- e. Pregnant ladies are more at risk of its development

20-The most common cause of death in acute rheumatic carditis is:

- a. Serofibrinous pericarditis
- b. Mitral stenosis
- c. Thromboembolism
- d. Valve incompetence
- e. Myocarditis

21-The cardiac vegetations which fragment and embolize most are due to:

- a. Infective endocarditis
- b. Rheumatic carditis
- c. Systemic lupus erythematosus
- d. Non-bacterial thrombotic endocarditis
- e. Marantic endocarditis

22-The following statements conform with angina pectoris except:

- a. Prinzmetal is usually associated with elevated ST segment of ECG
- b. Stable angina is relieved by rest
- c. Unstable angina is considered a pre-infarction
- d. Typical angina is produced mainly on rest
- e. Variant angina is due to vasospasm

23-Maximal myocardial softness, hence possible rupture is most liable at:

- a. 1st minute
- b. Within the 1st week
- c. After 2 weeks
- d. 4th week
- e. Beyond 2 months

24-The valve most commonly affected by rheumatic carditis is the:

- a. Pulmonic
- b. Tricuspid
- c. Mitral
- d. Foramen ovale
- e. Aortic

25-Serum creatine kinase determination in cardiac infarction conforms with the following, except:

- a. Appears in 2-4 hours
- b. Does not elevate with angina pectoris
- c. Peaks in 24 hours
- d. Considered highly specific
- e. Disappears in 3 days

26-The heart specific enzyme/protein serum elevation indicative of myocardial infarction is:

- a. Lactic dehydrogenase
- b. Creative kinase index
- c. Troponin I
- d. Troponin C

27-Complications common to prosthetic cardiac valves are the following except:

- a. Malignancy
- b. Thrombi

- c. Infective endocarditis
- d. Structural/mechanical deterioration especially in bioprosthesis
- e. Leaks

28-The cardiac valve vegetations most frequently embolizing are those of:

- a. Limban sacks
- b. Rheumatic carditis
- c. Marantic
- d. Infective endocarditis
- e. Associated with cancer

29-Vulnerability of myocardium for rupture following MI is highest at about:

- a. Similar all times
- b. 1 week
- c. 1 hour
- d. End of 1 month
- e. 10 months

30-The following statements in cardiovascular disease are true except:

- a. Cardiac myxoma predominantly occurs in atrium
- b. Hemangiopericytoma runs a malignant course
- c. Bread and butter pericarditis is associated with acute rheumatism
- d. Constrictive pericarditis might interfere with cardiac filling
- e. Hemangioma has a high malignant potential

31-All of the following regarding rheumatic heart fever are correct EXCEPT:

- a. Aschoff bodies can be seen in acute rheumatic heart disease
- b. Chronic form of rheumatic heart fever is associated with stenosis
- c. Can affect the pericardium, myocardium or endocardium (including valves)
- d. The most important cause of acquired post-inflammatory valves scarring
- e. It's an infection due to group A – β hemolytic streptococci

32-The following conform with rheumatic carditis except:

- a. Incidence peaks during childhood
- b. Death in acute rheumatic carditis is most commonly due to mitral stenosis
- c. Considered of immunologic etiology
- d. Antibiotic prevention is possible
- e. All cardiac tissues can be involved

33-Major cause of death in (acute) Rheumatic Carditis:

- a. Acute Myocarditis.

34-An old man complains of chest and lower back pain. He has a history of chronic hypertension. His ECG was normal, blood pressure 70/50mmHg and upon auscultation, aortic regurgitation could be heard. What do we expect this man to have?

- a. Aortic dissection

35-An 11 years old girl suffered from acute pharyngitis and died shortly after. Her condition became worse before she died. What will we expect to see in a postmortem sample?

- a. Aschoff bodies (bcz its acute).

36-Risk of cardiac rupture following MI is most likely:

- a. 1 hour following MI
- b. 1 day
- c. 1 week
- d. 3-4 weeks
- e. > 8 weeks

37-Wrong pair:

- a. Atherosclerotic plaque rupture & Prinzmetal angina

38-The most common congenital valve disease:

- a. Bicuspid aortic valve

39-Not part of major Jones criteria:

- a. Fever

40-Which is wrong:

- a. aortic dissection is most common in pregnant ladies

41-Which of the following is a major risk factor of myocardial infarction:

- a. Smoking

42-About valvular disease, which is wrong:

- a. Rheumatic disease affects pulmonary valve.

43-Up to 50% of all MI are due to occlusion of:

- a. left anterior descending artery

44-Most common congenital valvular lesion:

- a. Bicuspid aortic valve

45-Wrong combination:

- a. Aschoff bodies & acute phase of infective endocarditis

46-Mycotic aneurysm:

- a. Has microbes in it

47-Major risk factor for aortic dissection is:

- a. Hypertension

48-Not one of the clinical forms of IHD:

- a. Endarteritis obliterans

49-Wrong complication of MI:

- a. Papillary muscle rupture/severe aortic regurgitation

50-Not a true aneurysm:

- a. Hemorrhage of renal graft

51-Wrong combination:

- a. Post-MI pericarditis/Staph aureus infection

52-Most systemic emboli results from:

- a. Acute myocardial infarction.

Answers

| | | | | | | | | | |
|----|---|----|---|----|---|----|---|----|---|
| 1 | E | 12 | A | 23 | B | 34 | A | 45 | A |
| 2 | A | 13 | A | 24 | C | 35 | A | 46 | A |
| 3 | C | 14 | E | 25 | D | 36 | C | 47 | A |
| 4 | C | 15 | B | 26 | C | 37 | A | 48 | A |
| 5 | C | 16 | D | 27 | A | 38 | A | 49 | A |
| 6 | D | 17 | E | 28 | D | 39 | A | 50 | A |
| 7 | A | 18 | C | 29 | B | 40 | A | 51 | A |
| 8 | B | 19 | A | 30 | E | 41 | A | 52 | A |
| 9 | A | 20 | E | 31 | E | 42 | A | - | |
| 10 | B | 21 | A | 32 | B | 43 | A | - | |
| 11 | E | 22 | D | 33 | A | 44 | A | - | |

Physiology & it's Lab

1-Which of the following is not a local vasodilator?

- a. Endothelin

2-Which of the following is mostly true? (I don't know why the word mostly is here)

- a. A few minutes after removal of the obstruction there will be increased blood flow (the answer is meant to describe reactive hyperemia)
- b. Another option said that reperfusion occurred after an hour.

3- Ligation of the carotid artery proximal to its bifurcation causes*** :

- a. Increased firing of the baroreceptors, decreased HR, and decreased TPR
- b. Decreased firing of the baroreceptors, increased HR, and increased TPR

Question 3 was also written as: A tie was stretched around the neck proximal to the carotid bifurcation.

Which of the following is true about the subsequent baroreceptor response?

4-Which of the following decreases after chronic blood loss?

- a. ANP

Question 4 was also written as: In a patient with hemorrhage and hypovolemia, the only molecule which does not have high levels is

5-After hemorrhage, which of the following will decrease?

- a. Number of impulses generated by baroreceptors.

6-Which of the following is most probably a cause of high pulse pressure*** ?

- a. Increased compliance
- b. Decreased compliance

7-A disease that results in decreased compliance of veins will result in:

- a. Rapid increase in MSFP

8-Which of the following increase the vascular tone of vessels?

- a. Increased levels of endothelin

9-Which is equal in both systemic and pulmonary circulation?

- a. Afterload
- b. Preload
- c. Blood volume
- d. Stroke work

10-Maximum flow in the left coronary artery occurs:

- a. During ejection
- b. At the beginning of diastole

11-What do baroreceptors not do?

- a. Decrease renin secretion

12-In case of sudden increase in the peripheral pressure, what happens to the afferent impulses from baroreceptors and the effect of the efferent vasoconstrictor?

- a. Increased afferent impulses from baroreceptors, decreased efferent vasoconstrictor effect.

13-In case the diameter of arterioles decreased, what would happen to flow, conductance and resistance?

- a. Decrease, decrease, increase
- b. Decrease, increase, decrease
- c. Increase, decrease, increase
- d. Increase, increase, decrease

14-True about left coronary arteries:

- a. Norepinephrine causes increased flow.

15-A woman increased her Na intake by 200% for two months. What decreased?

- a. Plasma renin

16-Increased right atrial pressure will lead to:

- a. Increased sodium loss

17-True about pulmonary circulation:

- a. Mean arterial pressure is one-sixth that of the systemic circulation.

18-What factors cause stimulation of peripheral chemoreceptors?

- a. Low O₂, high CO₂, low pH

19-Vessel L's volume increased by 10 mL while the change in pressure was 10 mmHg. It's original volume was 100 mL. Vessel S's volume increased by 0.1 mL with the same pressure change. It's original volume was 1 mL. Which of the following is true about vessels L and S?

- a. Compliance of L > Compliance of S. Their distensibility is equal.

20-An old man has a blood pressure of 180/100, A probable cause of his high pulse pressure is:

- a. Decreased arterial compliance

21-Increased tone of arteries and resistance vessels can be due to:

- a. Increased endothelin

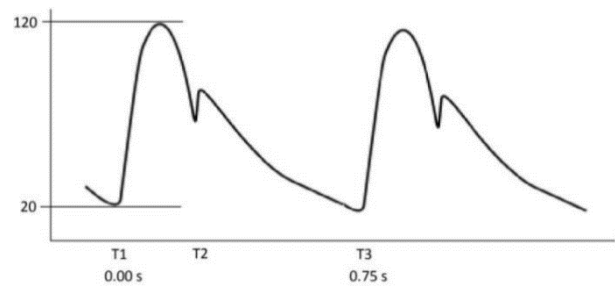
22-Pulse pressure increases in:

- a. Patent ductus arteriosus

23-The following graph represents aortic pressure changes. Which of the following is true?

- a. T1 indicates aortic valve opening.

- b. T2 indicates the first sound of the heart.
- c. This person has an increased afterload.
- d. There is ventricular bradycardia.
- e. This person has aortic regurgitation (incompetence).



24-All of the following regarding turbulence is correct except:

- a. It is associated with the sounds of the closure of heart valves.
- b. Turbulence is associated with more resistance than laminar blood flow.
- c. Turbulence is directly proportional to the cube root of the driving pressure.
- d. It is associated with very high velocity of the blood.
- e. It occurs normally in the aorta and narrowed blood vessels.

25-The major structure that contributes to peripheral resistance is:

- a. Aorta
- b. Arterioles
- c. Vena Cava
- d. Capillaries
- e. Venules

26-A 22 year old man had major arterial hemorrhage after an automobile accident and his blood pressure decreased. Which is expected to decrease?

- a. Carotid sinus impulse rate

27-Which of the following is true in case of hemorrhage?

- a. Decrease in activation of the vasodilation center and inhibitor vasoconstrictor center.

I believe what the professor meant is that when the blood pressure is low, this will decrease the impulses coming from the baroreceptors. These impulses, which increase during high blood pressure, act to inhibit the vasoconstrictor center. So if these impulses have decreased, then there is less inhibition of the vasoconstrictor center.

28-What doesn't increase peripheral blood flow?

- a. Increase in pH

29-Resistance to laminar flow is:

- a. Inversely proportional to the fourth power of the radius.

30- The angle of an individual's electrical axis is 119° . Which lead's angle is closest to this?

- a. aVL
- b. aVR
- c. Lead 2
- d. Lead 3

31-Vagal stimulation would increase:

- a. Contractility
- b. PR interval
- c. Ejection fraction
- d. Stroke work

***Any question followed by these asterisks had different answers in the pastpapers. The assumed correct answer was placed in the answer key.

Answers

| | | | | | | | |
|---|---|----|---|----|---|----|---|
| 1 | A | 9 | C | 17 | A | 25 | B |
| 2 | A | 10 | B | 18 | A | 26 | A |
| 3 | B | 11 | A | 19 | A | 27 | A |
| 4 | A | 12 | A | 20 | A | 28 | A |
| 5 | A | 13 | A | 21 | A | 29 | A |
| 6 | B | 14 | A | 22 | A | 30 | D |
| 7 | A | 15 | A | 23 | E | 31 | B |
| 8 | A | 16 | A | 24 | C | - | - |

Anatomy & it's Lab

1-Someone has very weak femoral pulse and chest x-ray shows that ribs have been notched, what is the cause?

- a. SVC obstruction
- b. Aortic coarctation
- c. Heart problem

2-Someone has MI with chest pain and epigastrium pain, the nerve causes this pain?

- a. T7,8,9
- b. T9,10,11
- c. Phrenic nerve

3 .MI patient has pain in the medial side of his left arm, the nerve that causes this?

- a. Supraclavicular
- b. Intercostobrachial
- c. Phrenic

4 .Which of the following supplies the anterior two third of the interventricular septum?

- a. Circumflex
- b. LAD
- c. Right coronary artery
- d. Posterior interventricular artery

5 .An idiot surgeon damaged the membranous part of the IVS, which of the following affected?

- a. SA node
- b. AV node
- c. Bundle of His

d. Bundle branch

6-A 3-year-old boy presents with cyanosis and shortness of breath that develops when he plays with friends. According to his mother, the boy was born cyanotic. The boy is very small and short for his age, and he squats on the floor next to his mother. Chest radiography reveals a boot-shaped heart, normal heart size, and a right aortic arch. Echocardiography reveals a large ventricular septal defect with an overriding aorta, pulmonary stenosis, and right ventricular hypertrophy. Which of the following is the most likely diagnosis?

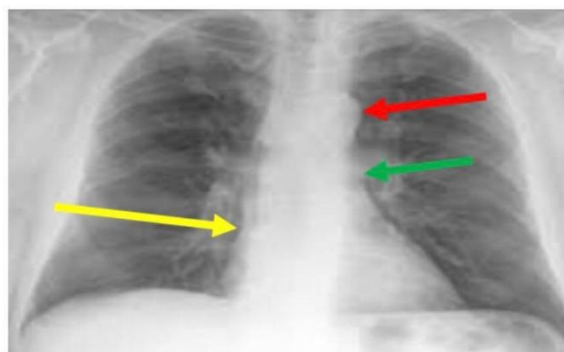
- a. Coarctation of the aorta
- b. Patent ductus arteriosus
- c. Rheumatic heart disease
- d. Tetralogy of Fallot
- e. Transposition of the great vessels

7-The green arrow represents

- a. Aortic knuckle
- b. Aortic window
- c. Descending aorta

8-What is the embryonic origin of yellow arrow

- a. Bulbus cordis
- b. Primitive ventricle+ bulbus cordis
- c. Sinus venosus+ primitive atrium
- d. Primitive atrium

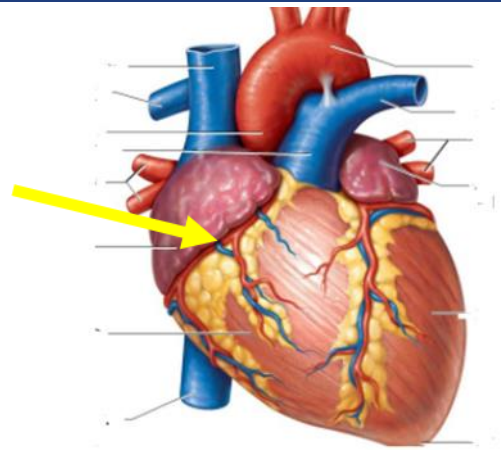


9-Which of the following originates from truncus arteriosus (picture is down)

- a. Red and yellow
- b. Red and Green
- c. Red and black

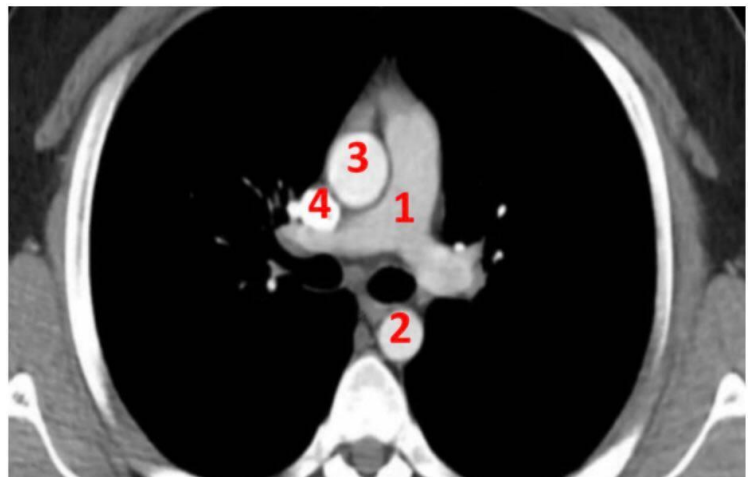
10-Name the yellow arrow:

- a. Left main coronary artery
- b. LAD
- c. circumflex artery
- d. Right coronary artery
- e. Posterior interventricular artery



11-Obstruction of which of the following causes pulmonary embolism

- a. 1
- b. 2
- c. 3
- d. 4

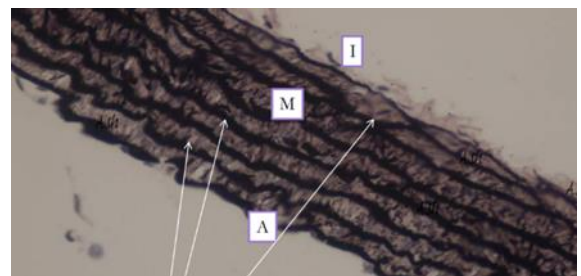


12-Arch of aorta is started by And ends by...

- a. 2,4
- b. 3,2
- c. 3,1

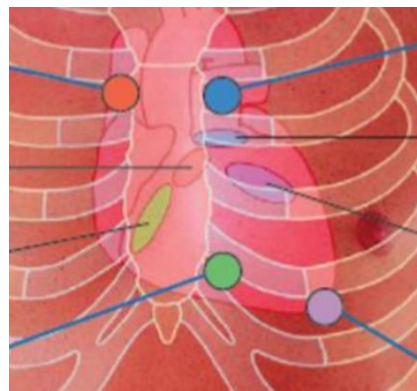
13-Choose the wrong statement

- a. These elastic fibers are made by smooth muscle
- b. They increase with age
- c. They have a role in resistance
- d. They are numerous in arterioles



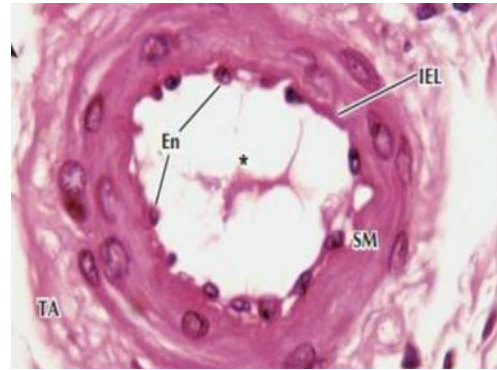
14-Where would you hear the mitral valve

- a. Green
- b. Blue
- c. Red
- d. Purple



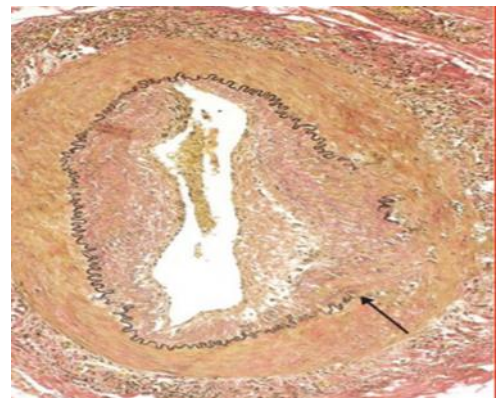
15-Determine from which this section has been taken

- a. Elastic Artery
- b. Muscular artery
- c. arteriole
- d. vein



16-Someone come with vision loss and , this section from temporal artery shows

- a. external elastic lamina fragmentation
- b. Internal elastic lamina fragmentaion
- c. Granuloma



17-Embryology question

- about left to right shunt, other about VSD, ventricular septum rupture leads to left to right shunt

18-Which is wrong:

- SA node is supplied by RCA in all people

19- A picture of auscultatory areas of heart valves: from which area blood is flowing out of the left ventricle:

- right 2nd intercostal space

20-The last event in conversion of foetal circulation into adult circulation:

- closure of ductus arteriosus due to increase in pulmonary oxygen tension

21-A newborn with transposition of the great vessels, the most likely associated heart abnormality is :

- ventricular septal defect

22-Wrong about apex of the heart:

- cannot be felt because it is covered by the left lung

23-Wrong about heart CT image:

- ascending aorta aneurysm causes dysphagia

24-Wrong about picture of posterior aspect of the heart:

- Connection between the two atria closes before birth

25-Wrong about foetal circulation:

- all shunt close at birth

26-Wrong about right pulmonary artery CT image:

- pulmonary artery blood flow increases in right ventricular heart failure

27-Wrong about surface anatomy of the heart:

- mitral valve auscultation site(apex) is behind cardiac notch

28-Wrong about heart x-ray:

- blood flow between aorta and pulmonary trunk stops immediately after birth

29-A child with a shunt between the two ventricles, later in life the shunt is reversed, what is that?

- VSD with pulmonary hypertension.

30-Wrong about the development of the heart:

- the smooth part of both ventricles is derived from the distal part of bulbus cordis

31-Wrong about portal vein:

- before its formation, ductus venosus connect between right umbilical and left vitelline veins

32-Wrong about coronary arteries:

- complete occlusion of LAD most likely will develop subepicardial infarction in the left ventricle

33-Wrong statement:

- equal pressure between pulmonary trunk and arch of aorta indicates coarctation of the aorta

34-Wrong about the heart:

- fixing ASD is likely to lead to complete AV block

35-Which event does not occur at or few hours after birth:

- decrease in systemic vascular resistance

36-CT scan: which is true:

- increase in the right atrial pressure decrease VR ,the left ventricle receives more blood during diastole

37-Ct scan: which is true:

- ascending aorta supplies blood to the heart, descending aorta supplies little blood to the lung

38-CT scan: which is true:

- one is the pulmonary trunk and its right branch (false : we see the beginning and the termination of the arch of the aorta at this level.)

39-CT scan: which is wrong:

- In Large ventricular septal defect blood flow to the ascending aorta increases

40-A Picture of opened right ventricle pointing at ant papillary muscle:

which is true:

- all of the above (attached by chordae tendinae to two cusps and its rupture result in acute heart failure)

41-A picture of the right atrium pointing at fossa ovale: which is true:

- none(floor is made of septum secundum and the upper margin is from septum primum.)

42-A picture of right atrium pointing at crista terminalis: which is true:

- All (in the embryo it separates the right horn of sinus venosus from the right atrium and at its upper end SA node is found)

43-A picture of left ventricle pointing at the membranous part of the IVS : which is true:

- none(it closes after birth and is related to AV node.

44-A picture of ligamentum arteriosum: which is true:

- if it was left patent the pressure inside the arch of the aorta and the pulmonary trunk would be equal due to right ventricular hypertrophy

45-A picture of coronary angiogram pointing at LAD

46-Histological section: what is found on this layer(pointing at tunica media):

- smooth muscle, collagen, tunica media.

Answers

| | | | | | | | |
|---|---|---|---|----|---|----|---|
| 1 | B | 5 | C | 9 | C | 13 | D |
| 2 | A | 6 | D | 10 | D | 14 | D |
| 3 | B | 7 | B | 11 | A | 15 | C |
| 4 | B | 8 | C | 12 | B | 16 | B |