

# Test Bank



**Subject:**

**Final 017**



**Collected by:**

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## Labs

1) The green arrow represents:

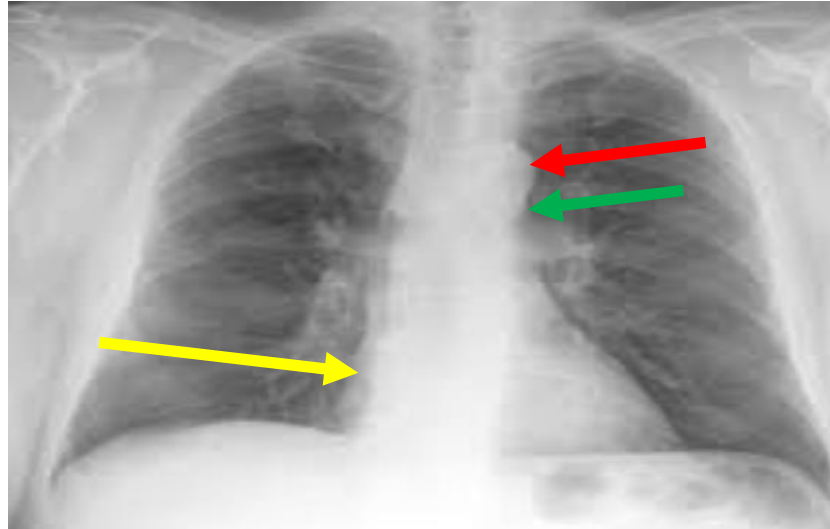
- A- Aortic knuckle
- B- Aortic window
- C- descending aorta

2) What is the embryonic origin of the structure indicated by the yellow arrow?

- A- bulbus cordis
- B- Primitive ventricle+ bulbus cordis
- C- Sinus venosus+ primitive atrium
- D- primitive atrium

3) Which of the following originates from truncus arteriosus? (figure is below)

- A- Red and yellow
- B- Red and Green
- C- Red and black



4) Name the artery indicated with yellow arrow

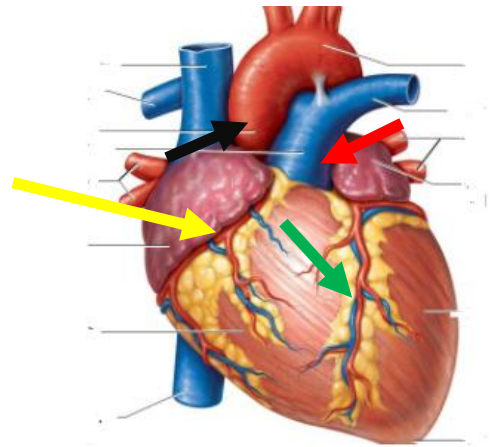
A- Left main coronary artery

B- LAD

C- circumflex artery

D- Right coronary artery

E- posterior interventricular artery



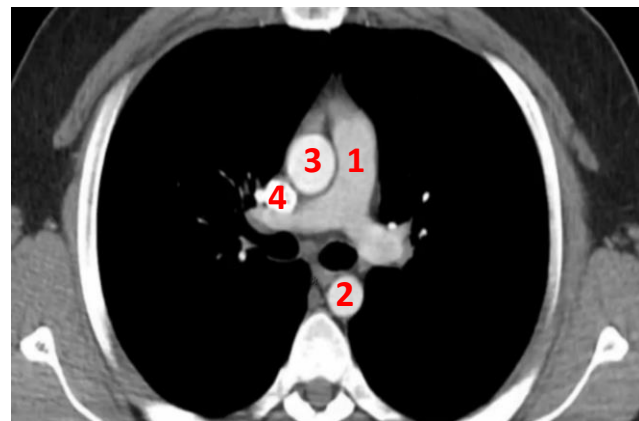
5) Obstruction of which of the following causes pulmonary embolism?

A- 1

B- 2

C- 3

D-4



6) Arch of aorta is started by .... And ends by ...

A- 2,4

B- 3,1

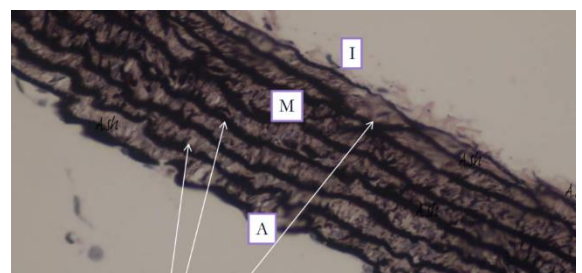
C- 3,2

7) Choose the wrong statement

A- These elastic fibers are made by smooth muscle

B- They increase with age

C- These vessels have a role in resistance



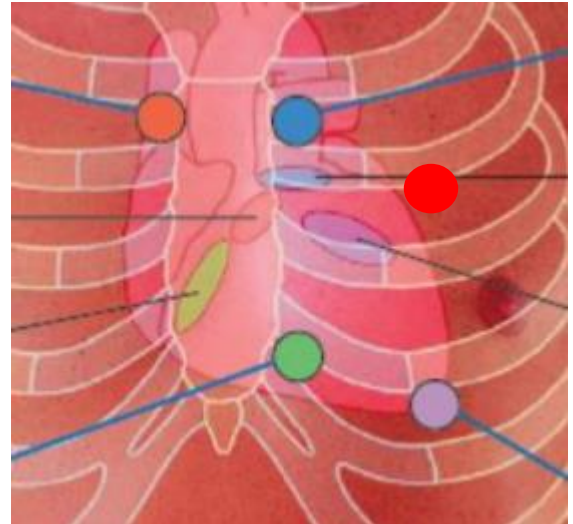
D- These fibers are a prominent feature of arterioles

8) At which point would you hear the mitral valve?

A- Green

B- Blue

C- Purple



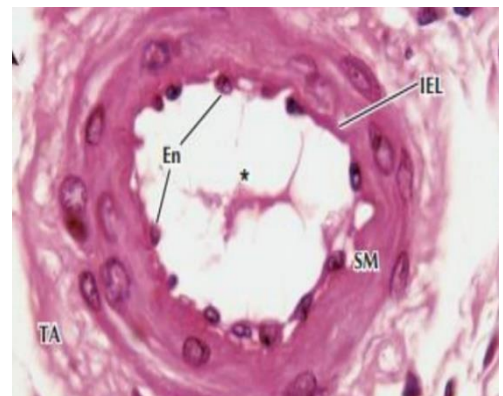
9) This section has been taken from:

A- Elastic Artery

B- Muscular artery

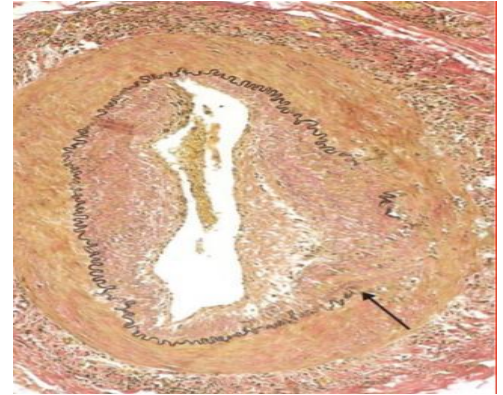
C- arteriole

D- vein



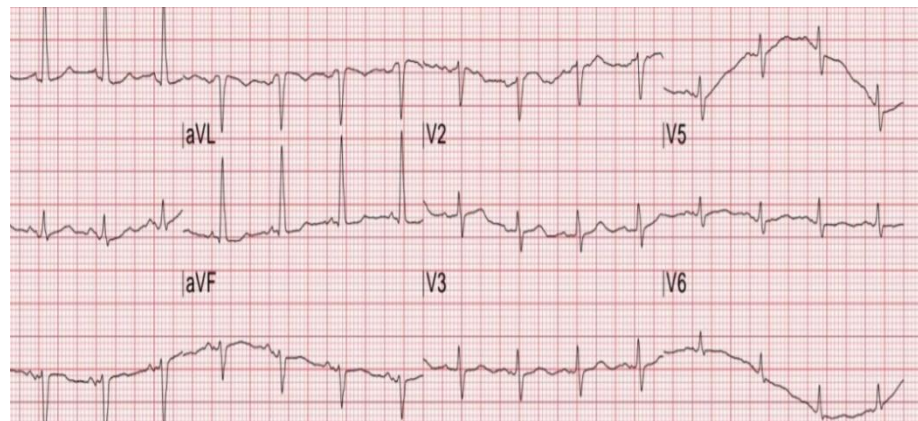
10) This section from temporal artery shows fragmentation of

- A- Loose connective tissue
- B- Internal elastic lamina
- C- Smooth muscle cells



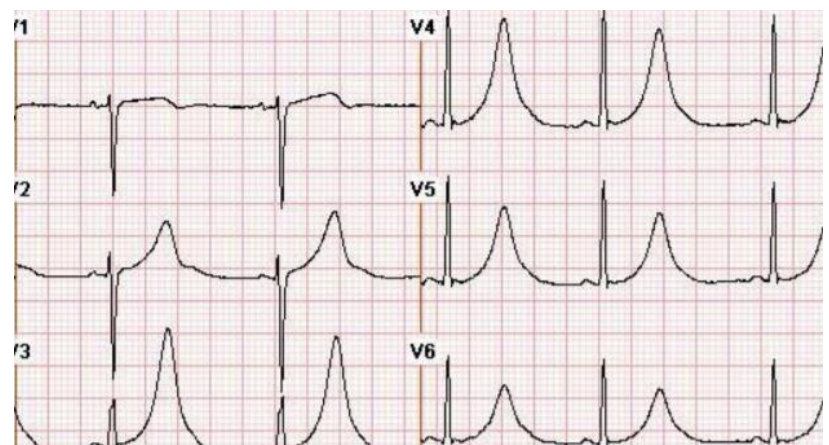
11) This abnormal ECG could be due to:

- A- Patient is talking while recording the ECG
- B- Patient is wearing or having metal
- C- Phone effect
- D- Loose electrodes



12) which of the following causes this ECG?

- A- Hyperkalemia
- B- Hypokalemia
- C- Ischemia



13) This ECG shows: (all normal calibration and speed)

A- Angina

B- Third degree heart block

C- Second degree heart block with conducted beats

D- Atrial flutter



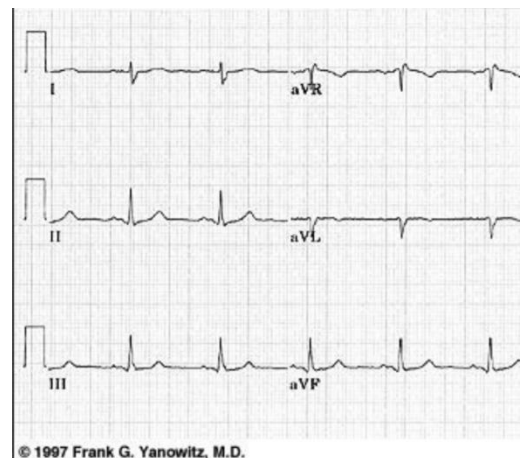
14) The cardiac axis in this ECG:

A- has left deviation

B- is normal

C- has right deviation

D- has severe deviation



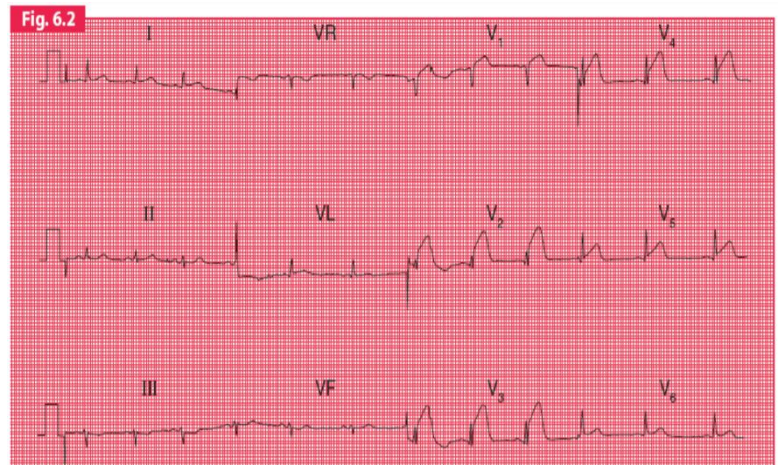
15) Which of the following is true regarding this ECG?

- A- The progression of R wave is abnormal in chest leads
- B- Heart rate is normal
- C- This patient is suffering from arrhythmia
- D- This patient may have a right axis deviation



16) This ECG shows:

- A- Acute MI
- B- Atrial flutter
- C- Atrial fibrillation
- D- Sinus tachycardia



## Microbiology

17) Which of the following doesn't transmit by direct contact between persons?

- A- Ebola virus
- B- Lassa virus
- C- Dengue virus
- D- Marburg virus

**18) Which of the following Ebola types doesn't cause disease in humans**

- A- Ebola Reston**
- B- Ebola Ivory Coast**
- C- Ebola Sudan**
- D- Ebola Zaire**

**19) Most common cause of myocarditis is:**

- A- Coxsacki B virus**
- B- Fungal infection**
- C- HIV virus**

**20) A patient came with endocarditis. He has had a prosthetic valve for 5 years. Investigations show catalase positive and coagulase negative bacteria. Which of the following is the cause?**

- A- Staph aureus**
- B- Staph epidermidis**
- C- Staph saprophyticus**
- D- Group A strep**

**21) Which of the following is wrong about VHF (Virus Hemorrhagic Fever)**

- A- It causes severe hemorrhage**
- B- Hanta virus needs vector to be transmitted**



**22) The main mechanism of rheumatic fever:**

**A- Bacterial or infectious cause**

**B- Autoimmune by antibodies against M protein**

## **Anatomy**

**23) 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**

**24) Someone has very weak femoral impulses and chest ray shows that ribs have been notched. What is the cause?**

**A- SVC obstruction**

**B- Aortic coarctation**

**C- Heart disease**

**25) A patient has MI and comes with Chest pain and epigastrium pain. The nerve that causes this is:**

A- T 7,8,9

B- T 9,10,11

C- Phrenic nerve

26) An MI patient has pain in the medial side of his left arm (cutaneous). The nerve that causes this is:

A- Supraclavicular

B- Intercostobrachial

C- Phrenic nerve

27) which of the following supplies anterior two thirds of IVS (interventricular septum)? **Not included**

A- Circumflex artery

B- LAD

C- Right coronary artery

D- Posterior interventricular artery

## Pathology

28) Papillary muscle rupture can lead to:

A- Aortic regurgitation

B- Mitral stenosis

C- Mitral regurgitation

D- Aortic stenosis

29) Marfan syndrome can cause:

- A- Aortic aneurysm
- B- Aortic dissection
- C- Valvular stenosis
- D- A+B

30) Post-MI ventricular wall rupture is an example of:

- A- False aneurysm
- B- Saccular aneurysm
- C- Fusiform Aneurysm
- D- True aneurysm regardless of the morphology

31) Which of the following conditions is caused by HHV-8 infection?

- A- Cavernous hemangioma
- B- Pyogenic granuloma
- C- Angiosarcoma
- D- Kaposi sarcoma

**Pharmacology not included unless : 39, 40, 41**

32) supraventricular tachycardia may be safely treated by the following:

- A- QUINIDINE
- B- Carotid massage
- C- Adenosine
- D- Verapamil
- E- All of the above

**33) 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 salt**

**34) 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**

**35) 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**

**36) A 58 year-old women 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**

**37) 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**

**38) 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**

39) Even though we have many inotropic agents, digoxin is still used because:

**Included**

A- It is considered safe

B- It can be used by patients who have supraventricular arrhythmias

40) Which of the following heart failure drugs can cause a decrease in the cardiac output? **Included**

A- ACEI

B- ARBS

C- digoxin

D- Diuretics

41) Which of the following is the least effective in the treatment of heart failure? **Included**

A- Calcium channel blockers

B- Vasodilators

C-  $\beta$  antagonists

D- ACE inhibitors

## Physiology

42) Which of the following does not increase pulse pressure?

A- Aortic regurgitation

B- Aortic stenosis

C- Arteriosclerosis

D- Patent ductus arteriosus

## **PBL**

**43) A patient came with triad disease (>70% stenosis) and needs CABG immediately. Where to take the graft from?**

**A- Great saphenous vein**

**B- Synthetic graft**

**44) Someone with hypertension and diabetes, smoker for 10year and had TIA (Transit ischemic attacks). His ejection fraction is 30%. After having a CABG, what is most important factor to affect his life and morbidity?**

**A- Smoking**

**B- Hypertension and diabetes**

**C- Ejection fraction**

**D- TIA**

**45) A patient with acute ischemic stroke with 200/100 blood pressure came to emergency. What should you do?**

**A- Give him oral antihypertensive**

**B- Need to do more investigation**

**C- Get him to ICU with IV antihypertensive**

**46) Someone with pain relieved by rest with no changes on ECG, negative troponin, and pain persists only for 10 minutes. What is the cause?**

**A- MI**

**B- Unstable angina**

**C- Stable angina**

**D- pericarditis**

**47) Which of the following drugs cannot be abruptly stopped preoperatively?**

**A- Atenolol**

**B- captopril**

**C- Isosorbide dinitrate**

**48) A patient came with 170/100 blood pressure (measured more than once at different times). What is the appropriate treatment?**

**A- life style modification**

**B- Diltiazem**

**C- One-drug therapy**

**D- hydralazine with diuretic**



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

48-D (The most accurate answer is: two drugs from different classes of ACE inhibitors, Diuretics, ARBs and CCBs)

Note: PBL answers are based on my readings so they are not guaranteed 100%

*Good Luck!!*

**Intravenous infusion of normal saline will shift the venous return curve that relates right atrial pressure to venous return toward:**

- a. Downward and to the left .
- b. Will not shift the curve anywhere
- c. Upward and to the right .
- d. Will not change the mean systemic filling pressure but will shift the curve downward .
- e. Will not change the mean systemic filling pressure but will shift the curve upward.

**Reflex sympathetic stimulation and thus reflex tachycardia is LEAST LIKELY to occur with the following calcium channel blockers:**

- a. Nifedipine.
- b. Nimodipine.
- c. Amlodipine.
- d. Verapamil.
- e. Nitrendipine.

**Which of the following statements is TRUE concerning cardiac output (co)**

- a. CO curve (related Rt. Atrial pressure to CO) is shifted to the right and downward by positive inotropic agents .
- b. CO Increases with decreasing the preload .
- c. CO decreases with elevation of afterload .
- d. CO curve (related Rt. Atrial pressure to CO) is shifted to the right when the intrapleural pressure becomes more negative .
- e. Co of the left ventricle is less than that of the right ventricle.

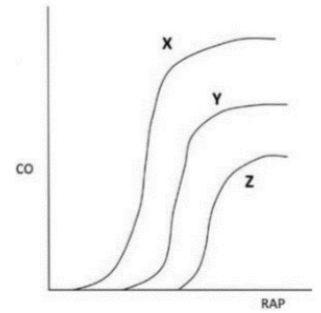
**The action of nitrate drugs in the treatment of ischemic heart disease is mainly due to :**

- a. Lowering of blood pressure .
- b. Dilation of all types of arteries .
- c. Increasing the heart rate .
- d. Systemic venous dilation .
- e. Direct coronary artery dilation.

c-d-c-d

Which of the following statements regarding the following curves is CORRECT:

- a. Curve X is associated with increased parasympathetic stimulation
- b. Curve Z is associated with hypertrophy of the ventricle
- c. Curve X is associated with increased sympathetic stimulation
- d. Curve X is associated with decreased preload
- e. Curve Z is the result of increased stroke volume



**A case that increases venous return**

- a. Obstruction of veins
- b. Decreased blood volume
- c. Anemia

**Highest flow with the same length**

- a. pressure (25mmHG) radius (4) viscosity (10)
- b. pressure (25mmHG) radius (4) viscosity(4)

**Sinus arrhythmia:**

- a. Causes prolonged Q-T interval
- b. Causes prolonged R-R interval
- c. Decreases with effort
- d. Increases with exercise
- e. Increases with hypertrophy of the heart

**A woman's ECG has shown a PR interval of 0.3s, with every P wave followed with a QRS and a T wave. If the time from one P wave to the next is 1.2s, what is she suffering from:**

- a. 1st degree incomplete heart block
- b. 2nd degree incomplete heart block
- c. 3rd degree complete heart block
- d. Ventricular bradycardia
- e. More than one is correct

c - c - b - b - e

What would increase cardiac output plateau

- a. sympathetic stimulation
- b. decreased stroke volume
- c. decreased heart rate

Which of the following is associated with the least increase in oxygen consumption:

- a. Increase in left ventricular pressure
- b. Aortic stenosis
- c. Increase in stroke volume
- d. Hypertension
- e. Atherosclerosis (decreased compliance)

True about Decrease in venous compliance

- a. immediate increase in systematic filling pressure
- b. due to parasympathetic stimulation

In the ECG reading

- a. 1st degree heart block
- b. 2<sup>nd</sup> degree heart block
- c. 3<sup>rd</sup> degree heart block



With fixed atrial pressure, increased cardiac output plateau involves:

- a. increased cardiac reserve
- b. increased aortic pressure

Doesn't directly increase venous return

- a. parasympathetic stimulation
- b. pressure difference
- c. resistance

In case of decreasing diameter of arterioles, what happens to FLOW, CONDUCTANCE, and RESISTANCE respectively

- a. Increases, decreases, decreases
- b. Decreases, decreases, increases

a-c-a-a-a-a-b

**Which of the following increases VR (venous return)**

- a. Sympathetic block
- b. Parasympathetic stimulation
  
- c. Vigorous exercise

**In case of hemorrhage, VR curve will be shifted to?**

- a. Downward to the right
- b. Downward to the left
- c. Upward to the left
- d. upward to the right

**About CO curve, choose the right answer**

- a. Positive inotropic agents shift the curve upward
- b. When IPP (Intraperitoneal Pressure) is more negative, the curve is shifted to the right
  
- c. Cardiac tamponade will shift the curve upward to the right

c-b-a

**A phosphodiesterase that causes complications with nitroglycerin:**

- a. Sildenafil

**Thiazolide diuretics action after 3-4 weeks:**

- a. Decrease vascular resistance

**Central acting hypertensive drug safe in pregnancy:**

- a. alpha methyl dopa

**Antihypertensive drug given only IV and in emergencies:**

- a. sodium nitroprusside

**Vasodilators not effective alone as antihypertensive:**

- a. reflex tachycardia and vasoconstriction

**Effect of vasodilator in acute ischemic myocardial :**

- a. direct effect on coronary artery

**Nitroglycerine administered ligually:**

- a. faster effect

**Causes vasodilation in arteriole and venules**

- a. Nitroprusside

**Used in variant angina**

- a. Nifedipine

**Contraindicated in Variant Angina**

- a. B blocker

A patient with HF and suffer edema, which is the best to decrease his edema:

a. furosemide

In acute episodes of angina, sublingual dose of nitroglycerin is used to relief the pain

a. to ensure complete and rapid bioavailability

Main action of nitroglycerin in the treatment of CHF

a. reduction of venous pressure

A drug that causes headache, flushing, and ankle edema

a. Nifedepine

