**Questions ofpreviousyears: Pathophysiology**

Which of the following is wrong:

1. Posterior intervenricular artery is a branch of right coronary artey.
2. Anterior intervenricular artery is a branch of right coronary artery.
3. Circumflex artery is a branch of the coronary artery.

Most of the myocardial perfusion occurs in:

1. Systole b) diastole

Most important control mechanism of the coronary blood flow is:

1. Local metabolism b) nervous system regulation

The most common cause of IHD is:

1. Coronary spasm
2. Coronary atherosclerosis
3. Fat empolism

Athletes and old age have better prognosis in IHD because of:

1. They don't develop atherosclerosis
2. Have stronger vessels
3. Collateral circulation

Most common cause of death in western countries is:

1. IHD
2. Esophageal rupture
3. Lipoma

All of the following are risk factors for development of IHD, except:

1. Hypertension
2. Diabetes
3. Obesity
4. Increase HDL
5. Increase LDL

Acute coronary syndrome consist of the following:

1. Unstable angina
2. Stable angina
3. Myocardial infraction
4. a+c

Characteristics of stable angina include all of the following except:

1. occurs after exercise
2. relieved by rest
3. doesn't respond to nitroglycerin
4. lasts from 1-10 minutes
5. symptoms are predictable

All of the following sentences regarding ECG are correct except:

1. prolonged R-R interval in sinus tachycardia
2. prolonged P-R interval in first degree heart block
3. missed QRS every two or three heart beats in second degree heart block
4. F wave in Atrial flutter

Which of the following sentences regarding sinus arrhythmia is wrong:

1. Naturally occurring variation in heart rate
2. Heart rate increases with inspiration
3. Heart rate increases with expiration
4. Heart rate drop with expiration

Regarding heart arrhythmia, compensatory pause is seen in one of the

following:

1. Sinus tachycardia
2. Sinus bradycardia
3. Atrial ectopic beat
4. Atrial flutter

Saw toothed waves are seen in:

1. Atrial fibrillation
2. Ventricular fibrillation
3. Atrial flutter
4. Ventricular ectopic beat

Most common cause of post infectious glomerulnephritis:

1. Post streptococcal GN b) post staphylococcal GN

All of the following cause vasoconstriction, except:

1. Sympathetic nervous system
2. Adrenaline
3. Vasopressin
4. Bradykinin

 Angiotensin II has all of these effects expect:

1. Vasoconstriction
2. Blocks Bradykinin
3. Increase Aldosteron release
4. Decrease Na-water reabsorbtion

All of the following are physiological change seen in heart failure except:

1. Sympathetic stimulation
2. Peripheral vasoconstriction
3. Salt and water retention
4. Peripheral vasodilation
5. Cardiomegaly

Digoxin is characterized by all of the following except:

1. Increase the force of contraction
2. Decrease the heart rate
3. The therapeutic index is wide
4. In Digoxin toxicity we give antidote or immune fab

All of the following are true except:

1. Ischemic heart disease is the most common cause of heart failure
2. Left sided heart failure can lead to right sided heat failure
3. S3 is always a pathological sound
4. After load in left ventricle indicates for total peripheral resistance
5. After load in right ventricle indicates for pulmonary hypertension

All of the following are true regarding sympathetic nervous system except:

1. Originates from T1-L1
2. Stimulated when there's drop in blood pressure
3. It's activation leads to increase heart rate and cardiac output
4. It's activation leads to decrease in peripheral resistance

All of the following are true regarding shock except:

1. Alkalosis is expected
2. Hypovolemic shock can result from serve vomiting and diarrhea
3. Cardiogenic shock is due heart diseases
4. In neurogenic shock the sympathetic pathways are disrupted

All of the following are true regarding shock except:

1. Tachypnea and restlessness may be the earliest signs
2. Falling blood pressure is a late sign of shock
3. Pallor and slow capillary refill are noted signs
4. Leads to high urinary output

About baroreceptors what is false:

1. Mainly present in carotids and aortic arch
2. Adjust blood pressure in response to changes in position
3. Control blood pressure over hours
4. Send afferent signals to the brainstem

About blood pressure controls what is true:

1. In response to elevated pressure the vasomotor center mainly activates the parasympathetic system
2. Hypertension causes sympathetic stimulation
3. Long term control is achieved by the brain
4. In response to elevated pressure the vasomotor center mainly inhibits the parasympathetic system
5. Hypotension causes sympathetic stimulation

Sympathetic block causes all of the following except :

a) increase in heart rate   
 b) decrease in cardiac output   
 c) lowering blood pressure   
 d) decrease in contractility   
 e) all of the above  
  
about long term control of blood pressure what is true:

a) angiotensin I is the most potent vasoconstrictor  
 b) andiotensin II blocks aldosterone and stimulates bradykinin  
 c) decreased renal perfusion causes renin production  
 d) angiotensin I is converted to angiotensin II in the liver  
 e) ACE inhibitors are not used in treatment of hypertention

True about hypertension:  
 a) highly symptomatic disease  
 b) any transient elevation in blood pressure is considered hypertention  
 c) mainly idiopathic  
 d) blood pressure level does not correlate with age  
 e) malignant hypertention only occurs in cancer patients  
  
a controllable risk factor of hypertention  
 a) family history  
 b) age  
 c) race  
 d) stress   
 e) heredity  
  
about hypertention in pregnancy what is flase  
 a) preeclampsia includes hypertention edema and proteinuria   
 b) a prehypertensive woman dose not have increased risk of developing

preeclampsia   
 c) preeclampsia can progress to eclampsia  
 d) eclampsia has more serious complications  
 e) can cause death to the mother and the fetus  
  
regarding management of primary hypertention what is false   
 a) it is controllable but not curable   
 b) controlling it reduce the risk of CVA and MI  
 c) modification of risk factors is not important   
 d) diuretics are a first line treatment   
 e) resistant hypertention does not respond to the antihypertensive drugs

Regarding management of primary hypertenton what is true  
 a) calcium channel blockers increase heart rate and constrict blood vessels  
 b) ACE inhibitors cause impotence  
 c) hypertensive crisis can be treated without medical supervision   
 d) dietary modification is not important  
 e) blood pressure should be checked regulary

All are true except:  
 a) pulse pressure equals systolic\_diastolic  
 b) mean blood pressure for patient whose blood pressure is 140\80 equals 100  
 c) systolic blood pressure is caused by ventricular contraction   
 d) optimal blood pressure is below 140/90  
 e) in malignant hypertension the patient develops complication rapidly   
  
about heart anatomy what is false  
 a) located between 2nd and 5th ICS in the middle mediastinum   
 b) the right ventricle is less muscular and pumps against low pressure

pulmonary circulation   
 c) the presence of atrial and ventricular syncitia is attributed to the presence of

intercalated disks between myocytes   
 d) intercalated disks allow water to move freely between myocytes

About the conduction system of the heart what is true   
 a) the heart need continuous stimulation from the nervous system to keep

beating   
 b) the SA node emits the impulses at rate of about 70 per minute   
 c) the resting potential of conduction system cells is -80 mv   
 d) the AV node is the pacemaker of the heart

The action potential travels down the conduction system in the following

sequence  
 a) atrium,SAnode,bundle of his ,ventricles   
 b) SA node ,AV node ,bundle of his ,bundle branches , purckije fibers  
 c) AV node, SA node ,bundle of his ,purkinje fibers  
 d) venricles ,SA node ,AV node ,bundle branches

All of the following are true except:  
 a) Ca used in the cardiac muscle comes from the ECF  
 b) action potential of a cardiac myocyte is about 300 ms   
 c) the platue phase distinguishes cardiac from skeletal muscle fiber   
 d) ”the more the venous return the more the stroke volume” this is explained by

frank starling law   
 e) after load of the Rt ventricle is the systemic peripheral resistance

Every patient with elevated creatinine or urea have renal failure   
 a) true b) false

All of the following are characteristics of nephrotic syndrome “except”  
 a) proteinuria  
 b) generalized edema  
 c) hyboalbunimimia  
 d) hyperlipidemia  
 e) hypocoagulability

All of the following are causes of nephrotic syndrome “except”  
 a) minimal change disease  
 b) sarcoidosis  
 c) malaria  
 d) hepatitis A  
 e) hepatitis B&C

All of the following are not characteristics of nephrotic syndrome “except”  
 a) hematuria  
 b) hypertension  
 c) anemia  
 d) protein in urine less than 150 mg/day

Most common cause of acute renal failure (ARF)  
 a) acute tubular necrosis  
 b) interstitial nephritis  
 c) stones  
 d) tumors  
  
a patient developed acute renal failure ,then he developed a cardiac arrest

,the most probable cause is :  
 a) hyponatremia  
 b) hyperkalemia  
 c) hypokalemia  
 d) coronary spasm

The cause of tachypnea in patients with renal failure is   
 a) metabolic alkalosis   
 b) metabolic acidosis   
 c) respiratory alkalosis

“kussmaul breathing” is  
 a) rapid and shallow breathing  
 b) rapid and deep breathing  
 c) slow and shallow breathing  
 d) slow and rapid breathing

All of the following are characteristics of chronic renal failure ,except”  
 a) anemia  
 b) hypoparathyrodism  
 c) hypocalcemia  
 d) metabolic acidosis

In earlier stages of chronic renal failure (CRF) ,the nerve fibers which

affected are short fibers  
 a) true b) false

Most important clinical feature of nephrotic syndrome is :  
 a) proteinuria  
 b) hypercoagulability  
 c) hyperlipidemia  
 d) anemia

Most common cause of death in patients with MI:  
 a) ventricular fibrillation   
 b) pericarditis  
 c) rupture of the heart   
 d) stable angina

All of the followings are complications of stable angina except :

a) Unstable angina

b) MI

c) Arrhythmia

d) Hyperthyroidism

all of the following are characteristics of unstable angina exept :

a) supply led ischemia

b) demand led ischemia

c) occurs at rest

d) doesn’t respond to nitroglycerin

crescendo angina is the same as:

a) MI

b) stable angina

c) unstable angina

physical examination of acute coronary syndrome will have all of the

following except :

a) sweating

b) sinus tachycardia

c) red hot skin

d) shortness of breath

a 75 years old male come to the ER complaining of gastric pain , nausea,

vomiting, sweating, for this patient you have to do :

a) endoscopy

b) ECG

c) nothing

all of the following are causes of acute coronary syndrome except :

a) thrombosis

b) embolism

c) local spasm

d) slowly progressive atherosclerosis

most important biomarker in MI is :

a) creatinine

b) troponine

c) AST

d) myoglobin

least important biomarker of these in MI is:

a) troponine

b) creatine kinase

c) AST

all of the following are causes of polyuria except :

a) hypoglycemia

b) diabetes insipidus

c) diabetes mellitus

d) lithium

all of the following are causes of hematuria except :

a) kidney tumor

b) glomerular diseases

c) trauma in the urethra

d) eating beetroot

a marathon player who runs 13 Km in one day, then he developed dark urine

, the most probable cause is:

a) myoglobinurea from muscle damage from streaneous exercise

b) glomerulonephritis

c) nephritic syndrome

regarding orthostatic proteinuria, which of the following is wrong :

a) occurs only during the night

b) benign in the absence of renal disease

c) first morning urine sample contains no protein

allof the following are pathological causes of sinus tachycardia except :

a) anemia

b) hyperthyroidism

c) exercise

d) acute heart failure

**Please forgive us for any mistake! ☺**

**Done by: فريق العمل المستقل**

**Independent pharmacy work team 2012 ;)**

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