M.Sc. Cardiology Exam.

Pharmacology Department

Faculty of Medicine Tanta University

Date: 26-8-2021

Time allowed: 1.5 hours Number of Questions: 4

Total: 30 marks



Answer all the following questions

1. Give short notes on: (6 marks)

- a. Fibrinolytic drugs (types ,mode of action).
- b. Amiodarone (uses ,adverse effect).
- c. Dopamine (mode of action ,uses).

2. Mention the lines of treatment of the following: (6 marks)

- a. Infective endocarditis "specific antibiotic therapy"
- b. Hypertensive emergency.
- c. Acute attack of myocardial infarction.

3. Give reason: (3 marks)

- a- Na nitroprusside is not used for long time therapy.
- b- Loop diuretics could precipitate digitalis toxicity.
- c- \$tatins are administered at bed time.

4. M.C.Q.: (15 marks)

1. The therapeutic efficacy of antihypertensive drugs is blunted by NSAIDs because they:

- a. Cause sodium excretion
- b. Increase the clearance of antihypertensive drugs
- c. Decrease the absorption of antihypertensive drugs
- d. Decrease the synthesis of vascular prostacyclin

2. All the following statements regarding adenosine are true **EXCEPT**:

- a. Dipyridamole potentiates its action
- b. Used to produce controlled hypotension
- c. Administered by slow I.V. injection
- d. Administered by rapid I.V. injection

3. True statement about trimetazidine is:

- a. It is a novel sodium channel blocker
- b. It improves tissue perfusion by modifying rheological property of blood
- c. It is an inhibitor of fatty acid oxidation
- d. Both (a) and (b) are correct

- 4. Drugs that reduce myocardial remodeling in CHF include all of the following <u>EXCEPT</u>:
 - a. Carvedilol
 - b. Digoxin
 - c. Enalapril
 - d. Spironolactone
- 5. Coronary steal phenomenon is seen with:
 - a. Dipyridamole
 - b. Diltiazem
 - c. Propranolol
 - d. Verapamil
- 6. Choose the drug which is used as a short-term inotropic in severe congestive heart failure and has selective adrenergic $\beta 1$ agonistic activity but no dopaminergic agonistic activity:
 - a. Dopamine
 - b. Dobutamine
 - cl Amrinone
 - d. Salmeterol
- 7.Glyceryl trinitrate is given by sublingual route because of :
 - a Short t1/2 in plasma
 - b High hepatic first pass metabolism
 - c High bioavailability by oral route
 - d Extensive protein binding
- 8.Steady-state drug concentration (Css) refers to :
 - a. Time to eliminate 50% of a given amount of the drug
 - b. Plasma concentration of the drug at which the rate of administration equals the rate of elimination.
 - c. Elimination of fixed fraction of the drug per unit time
 - d. The volume of plasma from which the drug is completely removed in a unit time
- 9. Which term describes "The combined effect of both drugs equals the algebraic sum of each drug effect":
 - a. Synergism
 - b. Addition
 - . Potentiation
 - d. Antagonism
- 10.Drug with low therapeutic index indicates:
 - a. Can be used IV
 - b. Can be used oral
 - c. Given in very tiny doses
 - d. Potentially toxic substance
- 11. Digoxin is contraindicated in:
 - a. Supraventricular tachycardia
 - b. Atrial fibrillation
 - c. Congestive heart failure
 - d. Hypertrophic obstructive cardiomyopathy

| 12.Which of the following is an IV Antiplatelet agent : |
|--|
| a. Aspirin |
| b. Eptifibatide (Integrilin) |
| c. Clopidrogel (Plavix) |
| d. Ticlopidine (Ticlid) |
| 13.Time taken for slow digitalization is: |
| a. 36 hours |
| b. 12 hours |
| c. 5 day |
| d. 7 day |
| 14.An elderly hypertensive has diabetes mellitus and bilateral renal artery stenosis. The best management is: |
| a. Enalapril. |
| b. Verapamil. |
| c. Beta blockers |
| d. Thiazides . |
| 15.Which of the following solutions is preferred for the initial treatment of most patients presenting with acute circulatory insufficiency caused by hypovolemia: |
| a. Normal saline |
| b. 5% dextrose |
| c. 25% albumin |
| d. 3% sodium chloride |
| الشفوىالسبت 2021-8-28 بالقسم مع مراعاة الاجراءات الاحترازيه. |
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GOOD LUCK

Tanta University

Pharmacology Written Examination

Faculty of Medicine

Number of Questions: 4

Pharmacology Department

Time Allowed: 1 Hour

Date: 22/8/2021

Total: 30 Marks



I- Give a short account on the following:

(6 marks)

- a- Cephalosporins (Classification and adverse effects).
- b- Salicylates (Uses and contraindications).
- c- Pharmacological management of deep vein thrombosis.

II- Discuss each of the following:

(7 marks)

- a- Pharmacological treatment of ulcerative colitis.
- b- Preoperative management of thyrotoxicosis.

III- Give reason why?

(2 marks)

- a- Atracurium can be used in patients with hepatic or renal impairment.
- b- Meropenem is preferred than imipenem in treatment of bacterial infections.

IV- Multiple Choice Questions (15 marks):

| 1- | Biotransformation | of | a | medicinal | substance | results | in: |
|----|-------------------|----|---|-----------|-----------|---------|-----|
|----|-------------------|----|---|-----------|-----------|---------|-----|

- a. Faster urinary excretion
- b. Slower urinary excretion
- c. Easier distribution in the body
- d. Higher binding to membranes

2- A drug used for management of post-operative urine retention:

- a. Mivacurium.
- b. Ephedrine.
- c. Neostigmine
- d. Phenylephrine.

3- Which of the following agents is hepatic microsomal enzyme inhibitor?

- a. Isoniazid.
- b. Tobacco smoking.
- c. Phenytoin.
- d. Phenobarbitone.

4- Serotonin receptor antagonist that is used for treatment of post-operative nausea and vomiting:

- a. Aprepitant
- b. Ondansetron.
- c. Nimesulide.
- d. Domperidone.

5- Which of the following is a selective cyclo-oxygenase 2 (COX 2) inhibitor?

- a. Ibuprofen.
- b. Meloxicam.
- c. Ketorolac.
- d. Diclofenac.

- 6- The immunosuppressive effect of corticosteroids plays a role:
 - a. In treatment of chronic Addison's disease
 - b. In treatment of adreno-genital syndrome
 - c. After organ transplantation
 - d. In treatment of hypervitaminosis D
- 7- The therapeutic efficacy of angiotensin converting enzyme inhibitors as antihypertensive agents is blunted by NSAIDs because NSAIDs:
 - a. Cause sodium excretion
 - b. Increase the clearance of antihypertensive drugs.
 - c. Decrease the absorption of antihypertensive drugs.
 - d. Decrease the synthesis of vascular prostacyclin.
- 8- Which of the following statements best describes why surgeon should consider prescribing zinc supplementation during wound healing?
 - a. It is a part of the system that provides oxygen to the site of the wound.
 - b. Insufficient dietary zinc is exacerbated by zinc loss from excess wound drainage.
 - c. Produces vasodilation and inhibition of the inflammatory mediators.
 - d. It is needed even if there is no zinc deficiency.
- 9- Side effects of corticosteroids include:
 - a. Weight loss
 - b. Bleeding tendency
 - c. Hyperglycemia
 - d. Hypotension
- 10- Baclofen acts as a skeletal muscle relaxant by:
 - a. Potentiates Glutamate activity in the CNS.
 - b. Potentiates GABA activity in the CNS.
 - c. Competes with acetylcholine for nicotinic receptors of skeletal muscles.
 - d. Produces initial depolarization followed by block of nicotinic receptors of the skeletal muscles.

- 11- Which of the following insulin preparations exhibits a longer duration of action?
 - a. Glulisine
 - b. Lispro
 - c. Glargine
 - d. Aspart
- 12- Clopidogrel acts as antiplatelet agent by:
 - a. Inhibits thromboxane A2 synthase enzyme.
 - b. Inhibits the binding of adenosine diphosphate to its platelet P2Y12 receptors.
 - c. Blocks the uptake of adenosine by the platelets.
 - d. Inhibits binding of fibrinogen to glycoprotein IIb/IIIa receptors on the platelets.
- 13- A 34-year-old patient of hyperthyroidism complaining of tremors, palpitations, and anxiety. Which of the following drugs may be used to quickly relieve these symptoms?
 - a. Radioactive iodine
 - b. Propylthiouracil
 - c. Methimazole
 - d. Propranolol
- 14- Which of the following antimicrobial agents may have a chondrolytic effect?
 - a. Clarithromycin
 - b. Ciprofloxacin
 - c. Gentamicin
 - d. Chloramphenicol
- 15- The most important reason for the highly restricted use of benzyl penicillin is:
 - a. Neurotoxicity
 - b. Narrow spectrum activity
 - c. Short duration of action
 - d. The potential to cause hypersensitivity reaction

انتهت الأسئلة GOOD LUCK

تنبيه هام: سيتم بمشيئته تعالى عقد الإمتحان الشفوى بقسم الفارماكولوجى يوم السبت الموافق 28 أغسطس 2021 الساعة التاسعة صباحا مع الإلتزام بكافة الإجراءات الإحترازية.

Pharmacology Written Exam for M.Sc. Chest August 2021

Tanta University

Pharmacology Written Examination

Faculty of Medicine

Number of Questions: 4

Pharmacology Department

Time Allowed: 1 Hour

Date: 24/8/2021

Total: 30 Marks



I- Give a short account on the following:

(6 marks)

- a- Quinolones (Classification & adverse effects).
- b- Leukotriene antagonists (Types & uses).
- c- Theophylline (Dynamics & adverse effects).

II- Discuss in details each of the following:

(7 marks)

- a- Stepwise management of bronchial asthma.
- b- New anti-tuberculosis drugs.

III- Give reason why?

(2 marks)

- a- Low molecular weight heparin is preferred than unfractionated heparin in treatment of thromboembolic diseases.
- b- Cilastatin is added to imipenem but not added to meropenem in treatment of bacterial infections.

Pharmacology Written Exam for M.Sc. Chest August 2021

IV- Multiple Choice Questions (15 marks):

- 1- Contraindications of streptokinase include:
 - a. Pulmonary embolism
 - b. Recent surgical incisions
 - c. Deep venous thrombosis.
 - d. Acute myocardial infarction
- 2- Ketotifen is a useful drug for prophylaxis of asthma & rhinitis which acts by:
 - a. Stabilizing the mast cells
 - b. Increasing cyclic AMP
 - c. Reducing cyclic AMP
 - d. Blocking leukotrienes receptors
- 3- Optic neuritis and decreased visual acuity may occur as adverse effects of:
 - a. Isoniazid
 - b. Pyrazinamide
 - c. Ethambutol
 - d. Rifampin
- 4- Exaggerated normal action in response to a small therapeutic dose of a certain drug refers to:
 - a. Hypersensitivity.
 - b. Supersensitivity.
 - c. Habituation.
 - d. Idiosyncrasy.
- 5- Atropine substitute that is frequently used for treatment of chronic obstructive pulmonary disease:
 - a. Emepronium
 - b. Pirenzpine
 - c. Ipratropium
 - d. Benzotropine