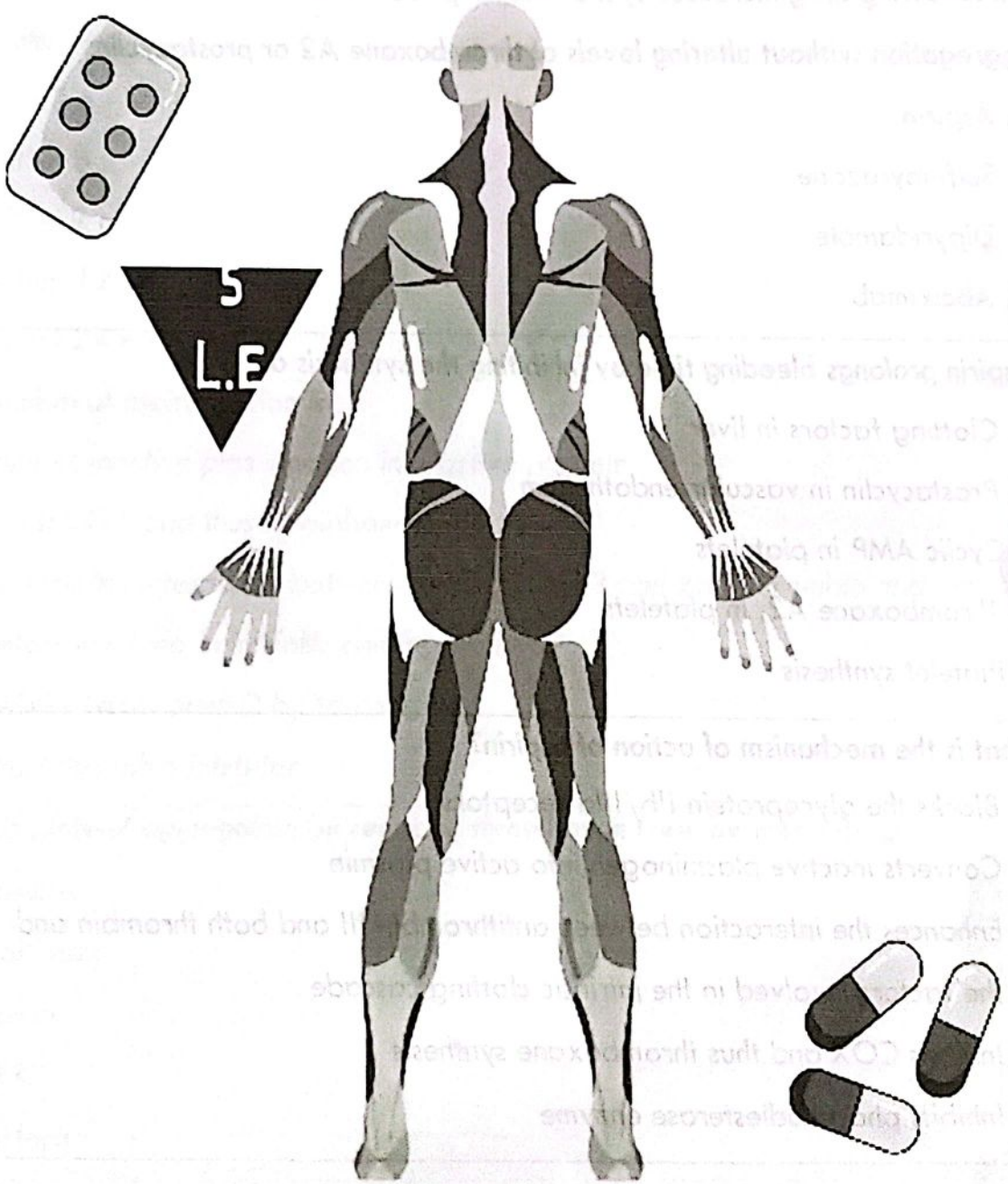
PHARMACOLOGY

His MCQ 3

LEVEL 1 · SEMESTER 2



Dr. M. M.

MCQ Pharma HIS 3

1. The preferred route of administration of streptokinase in acute myocardial infarction is: A. Intravenous B. Subcutaneous C. Intracoronary D. Intracardiac	**A**
2. The following drug increases cyclic-AMP in platelets and inhibits their aggregation without altering levels of thromboxane A2 or prostacyclin: A. Aspirin B. Sulfinpyrazone C. Dipyridamole D. Abciximab	**C**
3. Aspirin prolongs bleeding time by inhibiting the synthesis of: a. Clotting factors in liver b. Prostacyclin in vascular endothelium c. Cyclic AMP in platelets d. Thromboxane A2, in platelets e. Platelet synthesis	**D**
4. What is the mechanism of action of aspirin? a. Blocks the glycoprotein IIb/IIIa receptors b. Converts inactive plasminogen into active plasmin c. Enhances the interaction between antithrombin III and both thrombin and the factors involved in the intrinsic clotting cascade d. Inhibits COX and thus thromboxane synthesis e. Inhibits phosphodiesterase enzyme	**D**

5. The ..... drug inhibits platelets aggregation by binding to integrin receptor GPIIb/IIIA and inhibit the interaction of fibrinogen and Von Willebrand factor to the integrin receptor A. Aspirin B. Abciximab C. Clopidogrel D. Warfarin	**B**
6. Alteplase is first line agent administrated for maximum treatment rate following stroke, this agent must be administrated in which of the following intervals: a) With 3 h b) Within 6 h c) Within 9 h d) Within 12 h e) Within 24 h	**A**
7. Mechanism of aspirin action is : a) Convert inactive plasminogen into active plasmin b) Inhibit COX and thus thromboxane synthesis c) Enhance the interaction between antithrombin 3 and both thrombin and the factors involved in intrinsic clotting pathway d) Inhibit glycoprotein 2 b/3a complex e) Direct thrombin inhibitor	**B**
8. Reduce platelet aggregation by reducing thromboxan level by which drug: a) Heparin b) Urokinase c) Aspirin d) Vit K e) warfarin	**C**

9. 57 year old woman present to emergency department with crushing chest pain . the doctor administrate fibrinolytic drugs . her symptoms resolve but later she begin to vomit blood . which would be appropriate medication to be given now : a) Abciximab b) Aminocaproic c) Anistreplase d) Clpodigrel e) Urokinase	**B**
10. The following statements about platelet activity are correct EXCEPT: a) Intact vascular endothelium does not attract platelets because it synthesizes PGI2. b) TXA2 is synthesized mainly by platelets. c) Injured vascular endothelium attract platelets by activating receptors of collagen on the platelet. d) Clopidogrel blocks platelet ADP receptors. e) Aspirin is a reversible inhibitor of TXA2.	**E**
11. Which of the following statements is true regarding the parenteral administration of alteplase? a) It increases the formation of plasminogen. b) It is less effective than streptokinase when given after a myocardial infarction. c) It causes a high incidence of thrombocytopenia. d) It may cause bleeding reversible by aminocaproic acid. e) It activates free plasminogen.	**D**

12. Thromobolytic agent synthesized by kidney is : a) heparin b) urokinase c) aspirin d) vit K e) warfarin	**B**
13. Which of the following compounds is most likely to block ADP receptors and prevent platelet aggregation? a) Clopidogrel b) Aspirin c) Prostacyclin d) Abciximab e) Montelukast	**A**
14. Which of the following bind P2Y21 ADP receptor irreversibly antagonizing this receptor? a) Clopidogrel. b) Absiximab. c) Asprine. d) Enoxaparin e) Dalterparin.	**A**
15. Which is considered "fibrin selective" because it rapidly activates plasminogen that is bound to fibrin? a) Alteplase. b) Fondaparinux. c) Streptokinase. d) Urokinase.	**A**

16. Which drug belong to fibrinolytic inhibitors : a) *Aminocaproic acid* b) *Ticlopedine* c) *Streptokinase* d) *Vit K* e) *Alteplase*	**A**
Match : a) *Warfarin* b) *Heparin* c) *Vit K* d) *Urokinase* e) *Aspirin* **17. Anticoagulant in vivo and vitro** **18. Antagonize the action of oral anticaoagulant** **19. Anticoagulant in vivo** **20. Reduce platelet aggregation by decreasing thromboxane synthesis** **21. Thromolytic agent synthesized in kidney**	**17-b** **18-c** **19-a** **20-e** **21-d**
22. She is given an intravenous dose of alteplase. Characteristics of this agent include which of the following? a. *High antigenicity* b. *Acts on free plasminogen* c. *Success at clot resolution* d. *Low fibrin specificity* e. *Long half-life*	**C**
23. Which of the following is used to degrade an established thrombus? A) *Aspirin* B) *Clopidogrel* C) *Ticlopidine* D) *Tranexamic acid* E) *Urokinase*	**E**

24. The most important complication of streptokinase therapy is: *a. Hypotension* *b. Bleeding* *c. Fever* *d. Anaphylaxis* *e. Tinnitus*	**B**
25. What is the drug belonging to fibrinolytic inhibitors? *a. Aminocapronic acid.* *b. Ticlopidine* *c. Streptokinase* *d. Vitamin K* *e. Alteplase*	**A**
26. Which of the following pharmacological agents alter plasminogen after binding to fibrin? *a) Streptokinase* *b) Urokinase* *c) Alteplase (tPA)* *d) Antiplasmin* *e) Aminocaproic acid*	**C**
27. One of the following drugs is an inhibitor of platelet glycoprotein IIb/IIIa receptors: *a) Aspirin* *b) Clopidogrel* *c) Ticlopidine* *d) Abciximab* *e) Dipyridamole*	**D**

28. He is given a prescription for a drug that binds platelet ADP receptors to prevent their aggregation. Which drug is this? a) Clopidogrel b) Enoxaparin c) Eptifibatide d) Tirofiban e) t-PA	**A**
29. What is the mechanism of action of alteplase? a) Binds to glycoprotein receptor IIb/IIIa b) Blocks ADP receptors c) Converts plasminogen to plasmin d) Inhibits COX-1 & COX-2 e) Inhibits thrombin	**C**
30. Which of the following drugs accelerates the conversion of plasminogen to plasmin? a) Aminocaproic acid b) Heparin c) Argatroban d) Reteplase e) Warfarin	**D**
31. Which of the following is a common side effect of ticlopidine? a) Gastric ulcers b) Neutropenia c) Osteoporosis d) Seizures e) Tinnitus	**B**

32. Which fibrinolytic agent(s) selectively activate(s) fibrin bound plasminogen rather than circulating plasminogen: a) Urokinase b) Streptokinase c) Alteplase d) Both A and C	C
33. A 20-year-old woman presents to her primary care physician with heavy menstrual bleeding. An endometrial biopsy revealed no cellular atypia. Her physician prescribes tranexamic acid. What is tranexamic acid's mechanism of action? a) Activates plasminogen b) Activates platelets c) Blocks cyclooxygenase d) Inhibits plasmin e) Suppresses LH surge	D
34. doctor administers a fibrinolytic drug. Her symptoms resolve, but later she begins to vomit up blood. Which would be an appropriate medication to give now? a) Abciximab b) Clopidogrel c) Aminocaproic acid d) Urokinase e) Anistreplase	C
35. Tranexaemic acid is a specific antidote of: a) Fibrinolytic drugs b) Organophosphates c) Barbiturates d) Heparin	A

36. The following drug increases cyclic-GMP in platelets and inhibits their aggregation without altering levels of thromboxane A2 or prostacyclin: a) Aspirin b) Sulfinpyrazone c) Dipyridamole d) Abciximab	**C**
37. Choose the correct statement about ticlopidine: a) It blocks GP IIb/IIIa receptors on platelet membrane b) It prevents ADP mediated platelet receptors c) It inhibits thromboxane A2 synthesis in platelets d) It has less incidence of side effects than clopidogrel	**B**
38. Which of the following statements about antiplatelet drugs is false? a- Abciximab is a monoclonal antibody that binds to the glycoprotein IIb/IIIa receptor b- Decreased formation of thromboxane underlies the antiplatelet action of aspirin c- Ticlopidine is a thrombin antagonist d- Dipyridamole inhibits phosphodiesterase enzyme e- Clopidogrel decreases binding to ADP receptors on platelets	**C**
39. A cardiac patient was replaced clopidogrel for aspirin due to development of allergy to aspirin. Which of the following is the mechanism of action of the newly prescribed drug? a- It binds to the active site of cyclo-oxygenase by acetylation b- It blocks binding of plasminogen to fibrin c- It hinders the production of TXA2 d- It antagonizes action of platelet ADP, thus preventing fibrinogen binding to platelets e- None of the above	**D**

40. The following statements about alteplase are correct EXCEPT: *a- It rapidly activates plasminogen bound to a thrombus* *b- It is superior in dissolving old clots* *c- It is fibrin selective* *d- It has minimal allergic reaction* *f- It is used orally*	***E***
41. Which of the following is a thrombolytic agent: *a- Alteplase* *b- Abciximab* *c- Enoxaparin* *d- Carvedilol* *e- Baclofen*	***A***
42. Anti-platelet drugs include which of the following: *a- Nimodipine* *b- Clopidogrel* *c- Neostigmine* *d- Pirenzepine* *e- Nicardipine*	***B***
43. A 58-year-old businessman is brought to the emergency room 2 hours after the onset of severe chest pain. ECG changes confirm the diagnosis of myocardial infarction. Th following fibrinolytic drug is used to open his occluded coronary: *a- Aminocaproic acid.* *b- Heparin.* *c- Lepirudin.* *d- Reteplase.* *e- Warfarin.*	***D***

44. Streptokinase is used to: a- *Dissolve recent blood clots (<6 hours)* b- *Treat digestive disorders* c- *Treat muscle injuries* d- *Replace pepsin* e- *Promote carbohydrate degradation*	**A**
45. Mechanism of eptifibatide is : a- *Activate antithrombin III.* b- *Inhibit vitamin K epoxide reductase enzyme.* c- *Inhibit thromboxane A-2 synthesis.* d- *Block irreversibly platelet ADP receptors.* e- *Block reversibly platelet glycoprotein IIb/IIIa receptors.*	**E**
46. A 65-year-old man with history of cerebral thrombosis. To prevent recurrence of this disease, the patient is most likely to be treated indefinitely with following antiplatelet drug: a- *Aminocaproic acid.* b- *Aspirin* c- *Enoxparin.* d- *Lepirudin.* e- *Warfarin.*	**B**
47. A patient is unable to tolerate aspirin as an antiplatelet drug; he may be treated with clopidogrel. Clopidogrel acts through: a- *Inhibition of synthesis of TXA-2.* b- *Blocking of platelet ADP receptors.* c- *Blocking of GP IIb/IIIa platelet receptors.* d- *Inhibition of phosphodiesterase enzyme.* e- *Blocking of platelet 5-HT receptors.*	**B**

48. Regarding fibrinolytics: a. *All thrombolytics act to convert free plasminogen to plasmin - tPA works on bound* b. *Urokinase is a human product* c. *tPA and APSAC lack the streptococcal antigen* d. *Reactions to tPA and anistreplase are preparation related* e. *tPA does not occur naturally*	**B**
49. Which of the antiplatelet drug is a prodrug: *A. clopidogrel* *B. Dypyramidole* *C. Tirofiban* *D. Aspirin*	**A**
50. All of the following are gpiib/iila antagonist, except: *A. Abciximab* *B. Clopidogrel* *C. Tirofiban* *D. Epitifibatide*	**B**

Case Scenario

- ***A 62-year-old obese man presents to the ER with crushing, central chest pain which began three hours ago at rest . he has had minor chest pain in the past.***
- ***His ECG showed ST segment elevation (arrow) & the diagnosis of acute coronary syndrome (STEMI) was established.***

A. <u>What is the immediate antiplatelet drug should be given & its dose?</u>

✓ *Aspirin 300 mg chewable tablets.*

B. <u>Is this patient is indicated to receive Thrombolytic drugs? Explain in detail.</u>

✓ *Yes, as the patient within the time limit of thrombolytics since the onset of symptoms (<6 hours). The patient will need thrombolysis with Reteplase*