



PHARMACOLOGY

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



MID | Past papers

ALL Material

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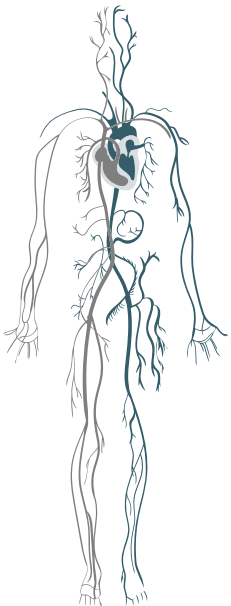
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وَلَقَدْ خَلَقْنَا الْإِنْسَانَ وَنَعْلَمُ مَا تُوَسْوِسُ بِهِ نَفْسُهُ وَنَحْنُ أَقْرَبُ إِلَيْهِ مِنْ حَبْلِ الْوَرِيدِ
اللهم إنا نعوذ بك من شرور أنفسنا ومن سيئات أعمالنا



Antihypertensive drugs

Q1: From a pharmacological point of view, which one of the following drug uses is considered correct?

- A. Beta blockers and verapamil
- B. Verapamil to patients with bradycardia
- C. ACEI to a pregnant woman
- D. None of the above

Q2: Which of the following drugs can cause hyperuricemia?

- A. Furosemide
- B. Hydrochlorothiazide (Thiazide diuretics)
- C. Amlodipine
- D. Verapamil
- E. A+B

Answer: E

Q3: Usage of which drug results in an increased diastolic volume?

- A. Atenolol
- B. Thiazide diuretics
- C. Minoxidil
- D. Captopril
- E. Losartan

Answer: A

Q4: Which drug is contraindicated in variant angina?

- A. Propranolol
- B. Nifedipine
- C. Isosorbide mononitrate
- D. Verapamil
- E. Diltiazem

Non-selective β -blockers worsen vasospasm → contraindicated in Variant Angina.

Answer: A

Q5: Which of the following antihypertensive drugs lowers blood pressure primarily through selective activation of dopamine-1 (D₁) receptors, leading to arteriolar vasodilation and increased renal blood flow?

- A. Nitroprusside
- B. Hydralazine
- C. Fenoldopam
- D. Minoxidil
- E. Labetalol

Answer: C

Q6: A 56-year-old man on long-term therapy for hypertension suddenly stops taking his medication. Two days later, he develops severe tachycardia and chest pain due to receptor supersensitivity. Which medication was he most likely taking?

- A. Lisinopril
- B. Hydrochlorothiazide
- C. Metoprolol
- D. Diltiazem
- E. Prazosin

Sudden withdrawal of β -blocker $\rightarrow$ The receptor is upregulated causing hypersensitivity after withdrawal

Answer: C

Q7: Which of the following adverse effects occurs with ACE inhibitors but NOT with angiotensin receptor blockers (ARBs)?

- A. Hyperkalemia
- B. Hypotension
- C. Dry cough
- D. Angioedema
- E. Renal impairment

Q8: Which of the following drugs has a withdrawal effect?

- A. Clonidine
- B. Atenolol
- C. Prazosin
- D. A + B

Answer: D

Q9: Which of the following is a correct drug–adverse effect match?

- A. Nifedipine – constipation
- B. Verapamil – reflex tachycardia
- C. Prazosin – first dose syncope
- D. ACEI (pril) – hypokalemia

Q10: Which is the best drug prescribed for hypertension during pregnancy?

- A. Labetalol
- B. Methyldopa
- C. Hydralazine
- D. Nifedipine
- E. Captopril

Answer: B

Lipid lowering agents, ischemic heart disease, heart failure drugs

Q1:Which drug modulates metabolism :

Ans : Trimetazidine

Q2 : Which drug is contraindicated in mild to moderate liver dysfunction:

- A) Ivabradine
- B) Ranolazine
- C) Trimetazidine
- D) Nicorandil

Answer: B

Q3: Which drug is contraindicated in variant angina :

- A) propranolol
- B) Nifedipine
- C) isosorbide mononitrate
- D) verapamil
- E) Diltiazem

Answer: A

Q4: A drug that needs 10-12 hours free interval at night

Ans : isosorbide dinitrate

Q5: Which of the following drugs causes hyperuricemia

- A) hydrochlorothiazide
- B) furosemide
- C) digoxin
- D) Atenolol
- E) A + B

Answer: E

Q6 : Depletion of serum K⁺ by diuretics therapy causes intoxication by which of the following drugs :

- A) Atenolol
- B) Fenoldopam
- C) Digoxin
- D) propranolol
- E) Esmolol

Answer: C

Anti-hypertensives Test Bank

Q1: A patient developed severe first-dose syncope after starting an antihypertensive. Which of the following is TRUE regarding the drug used?

- A. It blocks α_1 receptors on vascular smooth muscle
- B. It directly releases nitric oxide
- C. It suppresses renin release
- D. It dilates efferent arterioles
- E. It increases bradykinin

The drug is Prazosin

Answer: A

Q2: A patient developed dry cough two weeks after starting therapy for hypertension. Which of the following is TRUE about the used drug?

- A. It increases bradykinin levels
- B. It blocks AT1 receptors
- C. It reduces preload by NO donation
- D. It depletes norepinephrine stores
- E. It increases HR and renin

The drug is an ACEI

Answer: A

Q3: A patient reports lip swelling and eyelid swelling after starting an antihypertensive. Which is TRUE about this drug?

- A. It should be avoided in pregnancy
- B. It relaxes bladder neck smooth muscle
- C. It blocks calcium entry in vascular smooth muscle
- D. It increases renin via AT_1 blockade
- E. It requires slow IV infusion

The drug is either an ACEI or an ARB

Answer: A

Q4: A hypertensive patient with difficulty urinating + weak stream improved after adding a second drug. Which is TRUE about that added drug?

- A. It relaxes smooth muscle
- B. It releases NO in vascular smooth muscle
- C. It reduces HR directly
- D. It blocks renin secretion
- E. It inhibits ACE enzyme

Q5: A patient reports sedation and dry mouth after starting treatment. Which of the following is TRUE about the drug used?

- A. It reduces central sympathetic outflow
- B. It blocks α_1 receptors peripherally
- C. It releases nitric oxide rapidly
- D. It increases venous return
- E. It causes potassium retention

The drug is α_2 agonist

Answer: A

Q6: A patient on an antihypertensive experienced hyperkalemia (K^+ 5.8). Which statement regarding the drug used is TRUE?

- A. It decreases aldosterone levels
- B. It causes rapid venous dilation
- C. It relaxes the bladder neck
- D. It depletes norepinephrine stores
- E. It blocks calcium channels in arteries

The drug is an ACEI

Answer: A

Q7: A patient complains of constipation and urinary retention after starting an antihypertensive. Which statement about the drug is TRUE?

- A. It reduces both sympathetic and parasympathetic neurotransmission
- B. It directly relaxes vascular smooth muscle
- C. It blocks β_1 receptors
- D. It stimulates α_2 receptors
- E. It increases bradykinin

Q8: A patient develops mydriasis (pupil dilation) with loss of light reflex on a new antihypertensive. Which describes the drug?

- A. It doesn't block both sympathetic and parasympathetic ganglionic transmission
- B. It inhibits ACE
- C. It relaxes prostatic smooth muscle
- D. It reduces Aldosterone release
- E. It produces organ-specific effects depending on the predominant autonomic tone

Q9: A 32-year-old male presented to the emergency department on 7 October 2023 with severe headache, vomiting, blurred vision, and a blood pressure of 235/130 mmHg. Fundoscopy shows papilledema. His HR is 92 bpm, and he has no history of asthma or heart block. What is the MOST appropriate immediate drug category to manage his condition?

- A. ACE inhibitors
- B. β_1 -selective blockers
- C. IV nitric oxide–donating vasodilators
- D. Dihydropyridine calcium channel blockers
- E. α_2 -adrenergic agonists

Q10: A patient with uncontrolled hypertension on 3 drugs shows signs of fluid retention. What is the BEST class to add?

- A. ACE inhibitors
- B. α_1 -blockers
- C. Thiazide diuretics
- D. Calcium channel blockers
- E. Loop diuretics

Q11: A pregnant woman develops hypertension in the 2nd trimester. What drug class is safest?

- A. ACE inhibitors
- B. ARBs
- C. β -blockers (labetalol)
- D. Direct vasodilators (minoxidil)
- E. Clonidine

Answer: C

Q12: A hypertensive patient with migraine attacks needs BP control. What is the BEST drug category?

- A. ACE inhibitors
- B. ARBs
- C. β -blockers
- D. Thiazides
- E. α_1 -blockers

Answer: C

Q13: Reflex tachycardia is LEAST expected with?

- A. Nifedipine
- B. Minoxidil
- C. Hydralazine
- D. Amlodipine
- E. Atenolol

Q14: Which antihypertensive is MOST useful in African Americans with low-renin hypertension?

- A. Thiazide diuretic
- B. ARB
- C. ACE inhibitor
- D. β -blocker
- E. Central α_2 agonist

Answer: A

Q15: A 20 years old, arrives with BP 205/115, severe headache, and blurred vision. Dr. Alrawwash recommends using an oral vasodilator, while Dr. Osama Hamdan recommends an IV drug that works immediately by releasing NO. Which one of them actually studied the CVS module?

- A. Dr. Alrawwash
- B. Dr. Osama
- C. Both wrong
- D. Both correct

Lipid lowering agents, ischemic heart disease, heart failure drugs

Test Bank

Q1 : Which adverse effect is most commonly associated with statin therapy?

- A) Cough
- B) Constipation
- C) Myopathy
- D) Visual disturbances

Answer: C

Q2 : Which of the following lipid-lowering agents inhibits cholesterol absorption in the small intestine by blocking NPC1L1 transporters?

- A) Ezetimibe
- B) Fenofibrate
- C) Niacin
- D) Colesevelam

Answer: A

Q3 :Jordal, a 55-year-old male with a long history of consuming high-fat meals, presents for routine evaluation. His lipid panel reveals markedly elevated LDL at 195 mg/dL, low HDL at 32 mg/dL, and triglycerides at 160 mg/dL. He has no history of liver disease. As the clinical pharmacist, which medication would be the most appropriate first-line therapy for this patient?

- A) Gemfibrozil
- B) Cholestyramine
- C) Atorvastatin
- D) Niacin

Q4 :A 48-year-old female presents for follow-up after her recent lipid panel revealed an LDL of 165 mg/dL, triglycerides of 420 mg/dL, and HDL of 38 mg/dL. She is not currently on any lipid-lowering therapy and has no history of cardiovascular disease. As the clinical pharmacist, which medication would be the most appropriate initial treatment for her condition?

- A) Rosuvastatin
- B) Fenofibrate
- C) Niacin
- D) Colesevelam

Answer: B

Q5 :A patient with heart failure is prescribed a medication that inhibits the Na^+/K^+ ATPase pump, leading to increased intracellular calcium and enhanced cardiac contractility. Which drug is being described?

- A) Lisinopril
- B) Carvedilol
- C) Digoxin
- D) Furosemide

Q6 :A 65-year-old patient with severe heart failure develops gynecomastia after starting a potassium-sparing diuretic. Which drug is most likely responsible, and what is a suitable alternative?

- A) Furosemide; Bumetanide
- B) Spironolactone; Eplerenone
- C) Hydrochlorothiazide; Chlorthalidone
- D) Digoxin; Dobutamine

Q7 :A patient with heart failure is admitted with acute decompensation and requires intravenous inotropic support. Which drug is a selective β_1 agonist that provides inotropic support with minimal chronotropic effects and is commonly used for this purpose?

- A) Nesiritide
- B) Dobutamine
- C) Dopamine
- D) Milrinone

Answer: B

Q8 :Mr.Mahmood, a 38-year-old male with systolic heart failure, is currently on lisinopril (ACE inhibitor) and carvedilol (beta-blocker). He continues to experience fatigue and mild edema. His latest blood test shows serum $K^+ = 3.2$ mEq/L. Which additional medication would be MOST appropriate for his management?

- A) Furosemide
- B) Digoxin
- C) Spironolactone
- D) Dobutamine

قال رسول الله صلى الله عليه وسلم: إذا اجتمع أهل النار في النار ومعهم من شاء الله من أهل القبلة، قال الكفار للمسلمين: ألم تكونوا مسلمين؟ قالوا: بلى، قالوا: فما أغنى عنكم الإسلام وقد صرتم معنا في النار؟ قالوا: كانت لنا ذنوب فأخذنا بها، فسمع الله ما قالوا فأمر بمن كان في النار من أهل القبلة فأخرجوا. فلما رأى ذلك من بقي من الكفار قالوا: ياليتنا كنا مسلمين فنخرج كما خرجوا.

ثم قرأ رسول الله صلى الله عليه وسلم: أعوذ بالله من الشيطان الرجيم،

{الر تلك آيات الكتاب وقرآن مبين * ربما يؤد الذين كفروا لو كانوا مسلمين}

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Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
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V1 → V2			