

PHARMACOLOGY SEMIFINAL QUESTIONS (ENGLISH MEDICINE)

2019/2020 1st semester

A

1. Pharmacodynamics I (Molecular targets of drugs. Drug receptors. Receptor theory.)
2. Pharmacodynamics II (relation between drug dose and clinical response, therapeutic index, tolerance, pharmacodynamic drug interactions). The process of drug development.
3. Drug absorption, distribution and bioavailability. Membrane transport mechanisms.
4. Drug biotransformation, linear and non-linear kinetics. Enzyme inhibition and induction. Clearance, half-life, loading and maintenance dose. Elimination. Pharmacokinetic drug interactions
5. Local anesthetics.
6. Glucocorticoids for oral and parenteral use
7. Mineralocorticoids. Topically applied glucocorticoids
8. Androgens, anabolic steroids, antiandrogens. Agents affecting the sexual activity
9. Estrogens and antiestrogens
10. Progestins and antiprogestins
11. Contraceptives
12. Thyroid and antithyroid drugs. Hypothalamic and pituitary hormones
13. Pancreatic hormones and parenterally applied antidiabetic drugs. Pharmacotherapy of IDDM.
14. Oral antidiabetics. Pharmacotherapy of non-insulin dependent diabetes mellitus.
15. Agents affecting bone mineral homeostasis (calcium, vitamin D, parathyroid hormone, calcitonin, etc.).
Pharmacotherapy of osteoporosis.
16. Drugs used in coagulation disorders I: Antiplatelet agents
17. Drugs used in coagulation disorders II: Anticoagulant drugs
18. Drugs used in coagulation disorders III: Fibrinolytic drugs. Drugs used in bleeding disorders
19. Agents used in anemias
20. Special aspects of pediatric and geriatric pharmacology
21. Biological Drugs. Orphan Drugs (CP) Advanced Therapy Medicines
22. Pharmacovigilance (reporting adverse effects), drug registration, ATC code, generics, biosimilar drugs).
Drug formulations.

B

1. Cholinergic transmission and its presynaptic modification.
2. Adrenergic transmission and its presynaptic modification
3. Cholinomimetics
4. Muscarinic receptor blocking drugs
5. Catecholamines
6. Indirect sympathomimetics. Selective α_2 -agonists and drugs acting on the imidazoline receptors
7. α -receptor antagonists
8. β -receptor antagonists
9. Centrally acting skeletal muscle relaxants (spasmolytics). Dantrolene. Botulinum toxin
10. Skeletal muscle relaxants acting on the neuromuscular junction
11. Selective β_2 -stimulants and other bronchodilators. Pharmacotherapy of bronchial asthma and COPD.
12. Antiinflammatory agents used in bronchial asthma. Antitussive agents and expectorants
13. Drugs used for the treatment of peripheral vascular diseases. Therapy of migraine
14. Drugs used for treatment of heart failure I: Drugs decreasing the load on the heart. Drugs of acute cardiac failure. Pharmacotherapy of chronic heart failure.
15. Drugs used for treatment of heart failure II: Positive inotropic agents. Pharmacotherapy of acute heart failure.
16. Antiarrhythmic agents
17. Drugs used for the treatment of hypertension I: Classification of antihypertensive agents and their mechanisms of action. Pharmacotherapy of hypertension.
18. Drugs used for the treatment of hypertension II: Ca^{++} -channel blockers and other vasodilators
19. Drugs used for the treatment of hypertension III: Drugs acting on the renin-angiotensin-aldosterone system
20. Drugs used for treatment of angina pectoris. Pharmacotherapy of ischemic heart disease.
21. Agents used in dyslipidaemias.
22. Potassium excreting (wasting) diuretics
23. Potassium sparing diuretics, ADH antagonists, osmotic diuretics
24. Histamine and antihistamines.