

Approved  
Head of the Department of Clinical  
Pharmacology BSMU  
Associate professor, MD, PhD



I.S. Romanova  
«30» August 2023

CLINICAL PHARMACOLOGY EXAM QUESTIONS  
FOR 6th COURSE STUDENTS  
for specialty 1-79 01 01 "General Medicine"  
2023-2024 academic year

1. Goals and objectives of clinical pharmacology. Clinical pharmacology as the basis for rational pharmacotherapy.
2. Principles of rational pharmacotherapy. The main types of pharmacotherapy: etiotropic, pathogenetic, symptomatic.
3. Nomenclature of medicines: international non-proprietary and trade names. Original and generic drugs.
4. Clinical pharmacokinetics: absorption, bioavailability, distribution, metabolism, elimination
5. Clinical pharmacodynamics of drugs. Targets of drugs: receptors, cytoplasmic ion channels, nonspecific proteins and lipids of the cytoplasmic membrane, enzymes.
6. Clinical pharmacodynamics of drugs: mechanism of action, pharmacodynamic effects of drugs.
7. Types of equivalence of medicines. Principles for the study of bioequivalence of generic drugs.
8. Drug interactions: types, mechanisms, clinical significance.
9. Clinical trials of medicines. Phases and types of clinical trials of drugs.
10. State registration of medicines.
11. The main provisions of evidence-based medicine, the concept of personalized drugs.
12. Features of the use of drugs in elderly patients.
13. Features of the use of drugs in patients with liver and kidney disease.
14. Features of the use of drugs in women during pregnancy and lactation.
15. Medicines of prescription and non-prescription dispensing. The procedure and rules for prescribing a doctor's prescription for drugs, including psychotropic and narcotic drugs.
16. Classification of unwanted (side) drug reactions. Prediction and prevention of unwanted (side) reactions. Identification and registration of unwanted (side) drug reactions. Notification of an identified (suspected) adverse reaction to a medicinal product.
17. Anaphylaxis, drug anaphylactic shock: pathogenesis, clinical manifestations, diagnosis. Anaphylaxis, drug-induced anaphylactic shock: emergency medical care. Prevention of drug anaphylactic shock.

19. Classification and clinical and pharmacological characteristics of H1-histamine blockers.
20. Classification, clinical and pharmacological characteristics of penicillins
21. Classification, clinical and pharmacological characteristics of cephalosporins.
22. Classification, clinical and pharmacological characteristics of carbapenems
23. Classification, clinical and pharmacological characteristics of macrolides.
24. Classification, clinical and pharmacological characteristics of aminoglycosides.
25. Classification, clinical and pharmacological characteristics of glycopeptides.
26. Classification, clinical and pharmacological characteristics of oxazolidinones.
27. Classification, clinical and pharmacological characteristics of tetracyclines.
28. Classification, clinical and pharmacological characteristics of nitroimidazoles.
29. Classification, clinical and pharmacological characteristics of fluoroquinolones.
30. Classification, clinical and pharmacological characteristics of nitrofurans.
31. Classification, clinical and pharmacological characteristics of fosfomycins
32. Classification, clinical and pharmacological characteristics of lincosamides
33. Classification, clinical and pharmacological characteristics of polymyxins
34. Classification, clinical and pharmacological characteristics of sulfonamides
35. Classification, clinical and pharmacological characteristics of rifamycin
36. Classification, clinical and pharmacological characteristics of chloramphenicol
37. The tactics of choosing antimicrobial drugs for the treatment of infectious and inflammatory diseases, taking into account the age characteristics of the patient, previous antibiotic therapy, the nature of the disease, the presence of concomitant diseases.
38. Antibiotic resistance of bacterial pathogens when using antimicrobial drugs, the reasons for the formation, ways of overcoming and prevention.
39. Principles of rational antibiotic therapy. Combined antibiotic therapy. Monitoring the effectiveness and safety of antimicrobial therapy.
40. Classification and clinical and pharmacological characteristics of antiherpetic drugs.
41. Classification, clinical and pharmacological characteristics of anti-influenza drugs.
42. Principles of treatment of acute respiratory viral infections, features of treatment of coronavirus infection COVID-19.
43. Clinical and pharmacological characteristics of drugs used to treat viral hepatitis B and C.
44. Classification, clinical and pharmacological characteristics of antifungal drugs.
45. Classification, clinical and pharmacological characteristics antiparasitic drugs.
46. Classification, clinical and pharmacological characteristics of antiprotozoal drugs
47. Classification, clinical and pharmacological characteristics anthelmintic drugs
48. Classification, clinical and pharmacological characteristics of interferons
49. Classification, clinical and pharmacological characteristics of antiseptics
50. Classification, clinical and pharmacological characteristics of glucocorticoids.
51. Classification, clinical and pharmacological characteristics of non-steroidal anti-inflammatory drugs.

52. Classification, clinical and pharmacological characteristics of antitussive drugs.
53. Classification, clinical and pharmacological characteristics of expectorant and mucolytic drugs, especially their use.
54. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (beta-2-adrenomimetics)
55. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (M-anticholinergics)
56. Classification, clinical and pharmacological characteristics of drugs used for the treatment of bronchial obstruction (methylxanthines)
57. Classification, pharmacological characteristics of drugs used for basic anti-inflammatory therapy of bronchial asthma (inhaled glucocorticoids, leukotriene receptor blockers, mast cell membrane stabilizers).
58. Classification, clinical and pharmacological characteristics of ACE inhibitors.
59. Classification, clinical and pharmacological characteristics of angiotensin II receptor antagonists (sartans)
60. Classification, clinical and pharmacological characteristics of slow calcium channel blockers
61. Classification, clinical and pharmacological characteristics of  $\beta$ -blockers
62. Classification, clinical and pharmacological characteristics of diuretics.
63. Classification, clinical and pharmacological characteristics of imidazoline receptor agonists.
64. Classification, clinical and pharmacological characteristics of nitrates and nitrate-like drugs
65. Classification, clinical and pharmacological characteristics of lipid-lowering drugs (statins and fibrates).
66. Clinical and pharmacological characteristics of class I antiarrhythmic drugs.
67. Clinical and pharmacological characteristics of class III antiarrhythmic drugs
68. Classification, clinical and pharmacological characteristics of antisecretory drugs (proton pump inhibitors, H<sub>2</sub>-histamine blockers)
69. Classification, clinical and pharmacological characteristics of antacids
70. Classification, clinical and pharmacological characteristics of laxatives
71. Clinical and pharmacological characteristics of drugs used in the schemes of eradication of *Helicobacter pylori*.
72. Classification, clinical and pharmacological characteristics of antiemetic drugs
73. Classification, clinical and pharmacological characteristics of drugs that affect the motor function of the gastrointestinal tract.
74. Classification, clinical and pharmacological characteristics of substitution therapy drugs for pancreatic pathology
75. Classification, clinical and pharmacological characteristics of choloretic drugs and hepatoprotectors
76. Classification, clinical and pharmacological characteristics of antidiarrheal drugs
77. Classification, clinical and pharmacological characteristics of drugs that regulate intestinal biocenosis.
78. Classification, clinical and pharmacological characteristics of platelet aggregation inhibitors

79. Classification, clinical and pharmacological characteristics of direct anticoagulants
80. Classification, clinical and pharmacological characteristics of indirect anticoagulants
81. Classification, clinical and pharmacological characteristics of thrombolytics
82. Classification, clinical and pharmacological characteristics of hemostatic drugs.
83. Classification, clinical and pharmacological characteristics of fibrinolytics
84. Clinical and pharmacological characteristics of drugs for the treatment of iron deficiency anemia.
85. Clinical and pharmacological characteristics of antianemic drugs (cyanocobalamin, folic acid).
86. Classification, clinical and pharmacological characteristics of drugs used to treat type 2 diabetes mellitus (sulfonylurea derivatives).
87. Classification, clinical and pharmacological characteristics of drugs used to treat type 2 diabetes mellitus (meglitinides, thiazolidinediones, incretins).
88. Classification, clinical and pharmacological characteristics of insulins.
89. Classification, clinical pharmacology of drugs used to treat hypothyroidism (levothyroxine, iodine preparations).
90. Classification, clinical pharmacology of drugs used to treat hyperthyroidism (antithyroid drugs).