

TOPICS IN PHARMACOKINETICS
for Pharmacy students 4rd course
Summer exam session, Academic years 2020/2021

Common part

1. Pharmacokinetics – basic principles and models.
2. Absorption of drugs.
3. Bioavailability and bioequivalence. Plasma protein binding of the drugs.
4. Distribution of drugs in the body. Passage of drugs through barrier systems – blood-brain barrier, placenta.
5. Drug metabolism.
6. Elimination of drugs.
7. Pharmacokinetic approaches for optimization and individualization of drug therapy – dose regimens and therapeutic drug monitoring.
8. Drug interaction and adverse drug reactions.
9. Factors influencing the pharmacokinetic behavior of drugs: childhood, old age, pregnancy, genetic factors.
10. Factors influencing the pharmacokinetic behavior of drugs: pathological condition, bad habits, etc.

Special part

11. Pharmacokinetic features of drugs acting on the CNS – antiepileptic drugs.
12. Pharmacokinetic features of drugs acting on the CNS – hypnotics.
13. Pharmacokinetic features of drugs acting on the CNS – neuroleptics and anxiolytic.
14. Pharmacokinetic features of drugs acting on the CNS – antidepressants.
15. Pharmacokinetic features of beta blockers.
16. Pharmacokinetic features of digitalis glycosides.
17. Pharmacokinetic features of calcium antagonists.
18. Pharmacokinetic features of antiarrhythmic drugs.
19. Pharmacokinetic features of antianginal drugs.
20. Pharmacokinetic features of ACE-inhibitors and sartans.
21. Pharmacokinetic features of nonsteroidal anti-inflammatory drugs and analgesics.
22. Pharmacokinetic features of drugs affecting the respiratory system – antiasthmatic and antitussives.
23. Pharmacokinetic features of antibiotics and chemotherapeutics.
24. Pharmacokinetic properties of anticoagulants and antiplatelet agents.
25. Pharmacokinetic features of diuretics.
26. Pharmacokinetic features of drugs that lower serum lipids.
27. Pharmacokinetic features of antiulcer drugs.

Approved of Head of Department
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