

KONSPECTUS
FOR PHARMACOTHERAPY EXAM
FOR STUDENTS IN PHARMACY V-th COURSE, SESSION 2021/2022

Fundamentals of pharmacotherapy. General symptoms and syndromes.

1. Basic principles of rational pharmacotherapy. Contemporary therapeutic problems and therapeutic strategies.
2. WHO guidelines for rational pharmacotherapy. Criteria for selection of P-drug: efficacy, safety, convenience and price.
3. Clinical evaluation of therapeutic efficacy. Clinical and laboratory indicators. Biomarkers for assessing the effect of drug treatment.
4. Clinical trial of new drugs – principles of clinical and pharmacological research.
5. Design of the clinical trial – procedures, phases, indicators, data analysis and reporting documentation.
6. Monitoring of adverse reactions (ADRs) – types of ADRs and factors influencing the frequency, severity and severity of adverse reactions. Types of monitoring - examples.
7. Drug-induced pathological conditions – immunomediated reactions
8. Drug-induced toxicity to the liver, kidneys, cardiovascular system, nervous system and others.
9. Antimicrobial resistance and clinical signs of resistant infection. Antibiotic policy and therapeutic strategies.
10. Combination therapy – general principles and rational therapeutic combinations.
11. Pain and analgesia – types and mechanisms of the pain syndrome. Therapeutic strategies - non-opioid and opioid analgesics, adjuvant analgesics. Specific strategy for the treatment of pain in adult patients.
12. Therapeutic strategies for acute and chronic pain – drug choice. WHO stepwise scheme for the treatment of chronic / tumor pain.
13. Therapeutic strategies for inflammatory joint pain / painful osteoarthritis, rheumatoid arthritis, etc./
14. Headache – primary and secondary headache and clinical features. Migraine and antimigraine drugs – principles and rules of treatment.
15. Fever – a general characteristic of the febrile reaction, causes of fever. Temperature curves as a diagnostic sign. Therapeutic behavior in a state of fever.
16. Nausea and vomiting – etiological factors, pathogenesis and pharmacological control with antiemetic drugs.
17. Prevention and treatment of vomiting in cytostatic chemotherapy.
18. Diarrheal syndrome – etiological factors, general measures and pharmacological control with etiological and symptomatic antidiarrheal drugs.
19. Constipation - primary and symptomatic, prevention and treatment guidelines.
20. Insomnia – etiological factors, non-pharmacological, pharmacotherapeutic and alternative methods of treatment.

Skin and eye diseases

21. General dermatology – skin structure and types of rash units. Features of dermatological drugs in connection with their permeability and degree of systemic resorption.
22. Skin diseases – contact dermatitis, atopic dermatitis, seborrheic dermatitis and other eczema - clinical manifestations and guidelines for treatment.
23. Infectious dermatoses – types and directions of treatment.
24. Drug-induced skin reactions – non-allergic and allergic reactions, photosensitivity / phototoxic reactions.
25. Psoriasis – clinical manifestations and treatment.
26. Acne and rosacea – clinic and treatment.
27. Eye disorders and diseases of the orbit, eyelids, lacrimal system and conjunctiva - guidelines for treatment. Specifics of application of ophthalmic drugs.
28. Glaucoma - types, clinical manifestations and drug treatment.

Diseases and syndromes in internal medicine

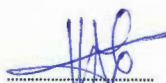
29. Acute inflammatory diseases of the upper respiratory tract with cough syndrome - etiological factors, types of cough and therapeutic behavior. Antitussive drugs and expectorants.
30. Types of pneumonia and therapeutic behavior depending on the cause and severity of the infection.
31. Tuberculosis – etiology, clinical forms and manifestations, guidelines for drug treatment and prevention.
32. Chronic obstructive pulmonary disease – types, etiological factors, clinical manifestations and possible complications. Therapeutic goals and National consensus for the treatment of COPD.
33. Bronchial asthma – main characteristics, etiological factors, pathogenesis, clinical manifestations and types of asthma.
34. Bronchial asthma – therapeutic goals and principles of pharmacological control in acute asthma attacks and chronic asthma.
35. Non-infectious-inflammatory syndrome – types of autoimmune diseases and directions for treatment – anti-inflammatory, analgesic and immunosuppressive therapy; disease-modifying antirheumatic drugs.
36. Allergic diseases – types, nature of the allergic reaction, exogenous etiological factors and genetic factors of atopy. Clinical manifestations and drug treatment – antihistamines, cromolyn, decongestants and corticosteroids.
37. Dyslipidemia – clinical significance, prevention and treatment.
38. Arterial hypertension – etiological factors, pathogenesis, stages and possible complications. Therapeutic goals and principles of antihypertensive treatment.
39. Drug treatment of arterial hypertension – pharmacological groups of drugs; rules and strategies for optimal blood pressure control.
40. Coronary vascular disease – pathogenesis, etiological factors and types of myocardial ischemia. Stable angina – clinical manifestations, therapeutic goals and treatment.
41. Unstable angina – clinical manifestations and drug treatment: anticoagulant, antithrombotic and antistenocardial therapy.
42. Acute coronary syndrome – pathogenetic nature, clinical manifestations and possible complications. Therapeutic goals and approaches to treatment - analgesia and sedation, thrombolysis, antiplatelets and anticoagulants, antiischemic drugs.
43. Heart failure – functional classification, therapeutic goals and approaches for the treatment of acute left ventricular and congestive heart failure.

44. Cardiac arrhythmia – etiological factors and mechanisms of occurrence, types and antiarrhythmic drugs for atrial, atrio-ventricular and ventricular arrhythmia. Basic principles, benefits and risks in antiarrhythmic therapy.
45. Thromboembolic syndrome: deep venous thrombosis and pulmonary embolism - nature, etiological factors, clinical manifestations and drug treatment.
46. Acid-peptic diseases – etiological factors, pathogenesis, clinical manifestations, therapeutic goals and treatment – H2 blockers, proton inhibitors and antihelicobacter therapy.
47. Dyspepsia and drug-induced erosive gastritis – antacids and cytoprotectors.
48. Goiter. Hypo- and hyperthyroidism. Hashimoto's thyroiditis.
49. Diabetes mellitus – epidemiology, etiological factors, pathogenesis, clinical and laboratory indicators and diagnosis, possible complications of the disease. Treatment of type-1 diabetes and insulin administration rules.
50. Type-2 Diabetes mellitus – therapeutic purposes, non-pharmacological and pharmacotherapeutic approaches – sulfonylureas, biguanides, thiazolidinediones, alpha-glucosidase inhibitors. Combined therapeutic regimens.
51. Therapeutic problems in hepatology. Viral hepatitis – causes, types and directions of treatment – antiviral drugs and hepatoprotectors.
52. Therapeutic problems in nephrology – importance of pain, problems with urination and changes in urine output. Kidney stone disease.
53. Therapeutic problems in nephrology – infectious-inflammatory diseases and autoimmune diseases with renal localization.
54. Therapeutic problems in hematology. Iron deficiency anemia – causes of iron deficiency and iron-containing antianemic drugs. Drug modulation of hematopoiesis.
55. Megaloblastic anemia – causes, symptoms and drug response.
56. Hemolytic anemias – types and drug response.

BASIC LITERATURE

1. Lecture course in pharmacotherapy, prof. L.Peychev – MU Plovdiv, 2021-2022.
2. Pharmacotherapy: A Pathophysiologic Approach, 11-th Edition 2020 by McGraw Hill.
3. www.pharmacotherapyonline.com
4. A Quantitative and Narrative Evaluation of Goodman and Gilman's Pharmacological Basis of Therapeutics. BJ Piper, AA Alinea, JR Wroblewski, SM Graha – Pharmacy, 2020 – mdpi.com
5. Textbook of Therapeutics. Drug and Disease Management. Eds. E.Herfindal, D.Gourley. 10th Ed.int., 2016.

Approved by: Head of Department



/ Prof. L. Peychev, MD, PhD /