

Control questions on the topics of practical exercises and seminars

Prevention and treatment of CVD diseases: antithrombotics-antiplatelet agents, hypolipidemics, treatment of obesity

1. Platelet receptors.
2. The distribution of lipids and their importance in the body.
3. Lipid metabolism.
4. Lipoproteins - structure, distribution, function, significance.
5. Effect of hormones on body weight (+ leptin, ghrelin, obestatin, nesfatin, etc.).

Pharmacology of CVD: anticoagulants, thrombolytics

1. The process of blood clotting - the external system.
2. The process of blood clotting - the internal system.
3. Fibrinolysis and natural anticoagulant mechanisms.
4. Vitamin K metabolism.

Pharmacology of CVD: treatment of angina pectoris, peripheral vasodilators

1. Mechanisms of smooth muscle contraction/relaxation of the CVS.
2. Pathophysiology of ICHS.
3. Calcium and potassium ion channels of cardiomyocytes - types, effects, biochemical effects associated with activation.
4. PDE and vascular smooth muscle - physiological role of PDE, isoforms.
5. Prostaglandins and vascular smooth muscle, contractile-acting PGs, prostacyclin.

CNS pharmacology: sedatives, anxiolytics, hypnotics, psychostimulants

1. Pathophysiology and molecular mechanisms of anxiety.
2. Gabaergic neurotransmission in the CNS.
3. Adrenergic neurotransmission - synthesis of mediators, storage, decomposition.
4. The biological role of serotonin and melatonin in the CNS and psychiatric disorders associated with changes in serotonin levels.
5. Sleep physiology.

CNS pharmacology: antiepileptics, antiparkinsonics

1. CNS neurotransmitters and the control of mental function.
2. Dopaminergic neurotransmission in the CNS - mediator synthesis, metabolism, functions.
3. Cholinergic neurotransmission in the CNS - mediator synthesis, metabolism, functions.
4. The biological role of dopamine and acetylcholine in the CNS and psychiatric disorders associated with changes in their levels.

5. The biological role of dopamine in the CNS and psychiatric disorders associated with alterations dopamine levels.

CNS pharmacology: treatment of addictions, toxicomania

1. Factors contributing to the development of addiction.
2. The impact of substances on the CNS in to the risk of addiction.
3. Classification of addictions.
4. Addiction treatment- general principles.

CNS pharmacology: drugs used in anaesthesiology

1. General anesthesia - phases.
2. Methods of local anaesthesia.
3. Neuromuscular transmission of excitement
4. Gabaergic neurotransmission in the CNS.

Pharmacology of pain and inflammation: non-opioid analgesics, NSAIDs, antirheumatic drugs, antirheumatic drugs

1. Pain perception - receptors and neurotransmitters.
2. Pain management - pain pathway.
3. Inflammatory mediators, cytokines and chemokines.
4. Physiological anti-inflammatory mechanisms.
5. Uric acid metabolism - synthesis, excretion and pathologies associated with metabolic disorders

ATBs and chemotherapeutic agents: antituberculotics and antifungals:

1. Characterization of the causative agents of tuberculosis.
2. Typical clinical symptomatology of the pulmonary form of tuberculosis.
3. Specification and characterization of the most common causative agents of mycotic infections.
4. Characterization of superficial and systemic mycoses.

Toxicology and treatment of poisoning

1. General principles of first aid for poisoning.
2. A review of the pharmacology of the most common intoxications.
3. Basic clinical symptoms of the most serious and common intoxications.
4. Antidotes - principles of administration and mechanisms of action.