

Control questions to seminars

Drugs affecting cholinergic neurotransmission – parasympatholytics

- Metabolism of acetylcholine – biosynthesis, biodegradation
- Muscarinic receptors – types, localization, physiological function, biochemical effects associated with their activation
- Nicotinic receptors – types, localization, physiological function, biochemical effects associated with their activation
- Physiological effects of parasympathetic NS
- Localization of parasympathetic NS

Drugs affecting adrenergic neurotransmission – sympatholytics

- Metabolism of catecholamine's – biosynthesis, biodegradation
- Alpha-adrenergic receptors – types, localization, physiological function, biochemical effect associated with their activation
- Beta-adrenergic receptors – types, localization, physiological function, biochemical effect associated with their activation
- Physiological effects of sympathetic NS
- Localization of sympathetic NS

Treatment of ulcer disease and inflammatory bowel diseases

- Regulation of hydrochloric acid secretion in the stomach
- Regulation of GIT motility
- Peptic ulcer disease (etiology, symptoms and differential diagnosis)
- Etiology, pathomechanism and clinical symptoms of non-specific inflammatory bowel diseases (Crohn's disease, ulcerative colitis).

Hormones of pancreas

- Insulin - synthesis and regulation of its release
- Glucagon - synthesis and regulation of its release
- Somatostatin - synthesis and regulation of its release
- Metabolic effects of insulin
- Metabolic effects of glucagon

Hormones of suprarenal gland

- Suprarenal gland anatomy
- Synthesis and degradation of suprarenal hormones
- Physiological effects of suprarenal cortex hormones
- Pathological conditions associated with hypersecretion or hyposecretion of suprarenal cortex hormones
- Regulation of production and release of suprarenal cortex hormones

Sex hormones

- Classification of sexual hormones
- Synthesis and degradation of sexual hormones
- Physiological and metabolic effects of sexual hormones
- Regulation of synthesis and release of sexual hormones
- Ovarian and menstruation cycles

Hormones of thyroid gland, hypothalamus and pituitary gland

- Synthesis, regulation and principal effects of thyroid hormones
- Synthesis, regulation and principal effects of hypothalamic hormones
- Synthesis, regulation and principal effects of pituitary gland hormones
- Pathological conditions accompanied by malfunction of thyroid gland
- Pathological conditions associated with malfunction of hypothalamus and pituitary gland

Pharmacology of autacoids, Treatment of allergy, Treatment of migraine

- Autacoids, review, effects
- Histamine, effects, metabolism
- Pathomechanism of an allergic reaction
- Serotonin, CGRP, effects, metabolism
- Pathomechanism of migraine

Drugs influencing homeostasis of minerals, bone metabolism and vitamins.

- Calcium metabolism – sources, absorption, principal physiological functions, elimination and regulation (influence of the main hormones, mediators and vitamins).
- Phosphate metabolism – sources, absorption, principal physiological functions, elimination and regulation (influence of the main hormones, mediators and vitamins).
- Physiological role of fat-soluble vitamins (A, D, E, K)
- Physiological role of B group vitamins
- Vitamin C – sources, metabolism and physiological functions