Pharmacology

General medicine - practical courses

Autumn semester 2014

SEMINARS

Day 1 (Mon)

Introduction, instructions. Distribution of co-talks.

1/ANALGESICS.

Opioid analgesics. Pharmacotherapy of pain. Opioid addiction therapy. Prescription and practical use of analgesic preparations.

2/NON-STEROIDAL ANTIINFLAMMATORY DRUGS, DRUGS USED IN GOUT, ANTIPYRETICS.

Mechanisms of action and classification of anti-inflammatory and anti- rheumatic drugs (NSAIDs and the 2nd-line agents). Drugs used in therapy of gout.

Getting ready for the next lesson: Central neurotransmitters and sites of drug effects in CNS. Basic psychical functions.

Revision: CNS neurotransmitters and receptors, Autonomic nervous system – catecholamines, atropine. Myorelaxants.

Day 2 (Tue)

3/PSYCHOTROPIC DRUGS.

Classification and terminology of psychotropics. Review of their mechanisms of action. Pharmacology of anxiolytics and hypnosedatives. Mechanism of action of benzodiazepines. Prescription of hypnosedatives and psychostimulants.

Co-talks.

4/GENERAL AND LOCAL ANAESTHETICS

Combined and balanced anaesthesia. Signs and stages of general anaesthesia. Inhaled and injected anaesthetics - classification and characteristics. Review of drugs used in premedication.

Co-talks.

Getting ready for the next lesson: Structure of bacterial cell, basis of antimicrobial therapy.

Day 3 (Wed)

5/ANTIMICROBIAL AGENTS I.

Classification, mechanisms of action, combinations of antibiotics and chemotherapeutics. **Co-talks.**

6/ANTIMICROBIAL AGENTS II., CHEMOTHERAPEUTICS, THERAPY OF INFECTIOUS DIARRHEAS AND UROINFECTIONS.

Drugs acting in intestinal and urinary infections.

Co-talks.

Getting ready for the next lesson: Allergic reactions – causes and mechanisms. Revision of PNS pharmacology - θ_2 mimetics, parasympatholytics. Glucocorticoids.

Day 4 (Thu)

REVISING TEST I (Overhead-test with subsequent discussion) Lesson 1 – 6.

7/CASE REPORTS I.

Selected case reports on drugs from previous lessons. (Including Pharmacology I lessons)

8/H₁ ANTIHISTAMINES, ANTIASTHMATICS.

Classification and clinical use of H_1 antihistamines. Pathophysiology of bronchial asthma, sites and mechanisms of action of antiasthma drugs. Prescription of antitussives, expectorants, antiasthmatics.

Co-talks.

Getting ready for the next lesson: Revision of praescription terminology, pathophysiology of gastric ulcers

Day 5 (Fri)

PRESCRIPTION TEST: DRUGS ACTING IN CNS, ATB, LOCAL ANAESTHETICS, H_1 ANTIHISTAMINES, ANTIASTHMATICS.

9/DRUGS USED IN ULCER DISEASE, ANTIEMETICS

Classification, mechanisms of action and clinical use of drugs in therapy of peptic ulcer and vomiting.

Co-talks.

10/ANTICOAGULANTS AND THROMBOLYTICS.

Fibrinolytics, haemostatics, therapy of haemopoietic disorders.

Co-talks.

Getting ready for the next lesson: Physiology of blood pressure regulation. Revision of PNS

pharmacology- α_1 sympatholytics, α_2 sympathomimetics, β sympatholytics.

Day 6 (Mon)

11/HYPOLIPIDEMICS, THERAPY OF OBESITY.

Therapy of hyperlipoproteinaemia and hypercholesterolaemia, review of drugs and their mechanism of action.

Co-talks.

12/ANTIHYPERTENSIVE AGENTS.

Introduction, classification, diuretics, beta blockers, ACE inhibitors, Ca²⁺ blockers.

Co-talks.

Getting ready for the next lesson: Revision of lessons from lessons 7-12; patophysiology of cancer disease.

Day 7 (Tue)

REVISING TEST II (Overhead-test with subsequent discussion). Lessons 7 - 12.

13/CASE REPORTS II.

Selected case reports on drugs from previous lessons. (Including Pharmacology I lessons)

14/PHARMACOLOGY OF ANTICANCER DRUGS.

Classification, mechanisms of action, side effects.

Getting ready for the next lesson: Revision of prescription of drug dosage forms for external use.

Day 8 (Wed)

FINAL PRESCRIPTION TEST (includes dermatology).

15/REVIEW OF DRUGS USED IN DERMATOLOGY AND OTORINOLANRYNGOLOGY.

CREDITS.

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