

DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

Faculty of Pharmacy, Comenius University

832 32 Bratislava 3, Odbojárov 10

Garrant: Assoc.Prof. Stankovičová T., MD., CSc.

Subject: **Pathology** (obligatory)

Year: 2nd Term: Winter 2013

Weekly hours: 2/2(E)

Credits: 5

Lecturers: doc. MD. Stankovičová T., CSc., doc. PharmD. Klimas J., PhD.,
PharmD. Hrabovská A., PhD., PharmD. Foltánová T., PhD.,
prof. PharmD. J.Kyselovič, CSc.

Educational period: 23.9.2013-20.12.2013

Examination period: 7.1.2014-14.2.2014

Syllabus of the Lectures

Introduction to pathology. Concept of disease and illness – etiology, pathogenesis, clinical manifestations, classification, and incidence of diseases. Laboratory methods used in diagnostic pathology in clinical practice (clinical chemistry, cytogenetic, cytopathology, hematology, histopathology, immunology, microbiology). Autopsy

Etiology and pathogenesis of cellular injury - causative agents (mechanical, chemical, physical, biological injury) and mechanism of injury. Disorders of metabolism and homeostasis. Genetic abnormalities, developmental disorders.

General symptomatology – causes, mechanisms (swelling, dyspnoe, cough, temperature, fever, weightloss, bleeding, cyanosis, diarrhoe, scrapie, vomiting). Pain – etiopathogenesis, symptomatology, consequences, prophylaxis

Diseases of the arteries. Atherosclerosis. Hypertension. Etiopathogenesis, symptomatology, compensatory mechanisms, sequelae

Ischemic disease of the heart. Myocardial Infarction. Etiopathogenesis, symptomatology, compensatory mechanisms, complications.

Rhythm disturbances. Heart failure. Etiopathogenesis, symptomatology, compensatory mechanisms, sequelae.

Selected disorders of the nervous system. Etiopathogenesis, symptomatology consequences. Disturbances in the sleep, memory disturbances, anxiety and personality disorder, depression, bipolar disorder, schizophrenia

Pathophysiology of the respiratory system. Cough. Astma. Bronchitis, Obstructive airways disease. Respiratory insufficiency.

Alterations of the digestive function. Basic manifestations of GIT disorders. Peptic ulceration. Inflammatory bowel. Liver diseases - jaundice, hepatitis, cirrhosis, failure.

Pathophysiology of renal disorders. General symptomatology, Glomerular diseases. Tubulointerstitial disorders. Renal Failure. Etiopathogenesis, symptomatology, compensatory mechanisms, sequelae.

Basic concepts of tumor pathology. Definitions and epidemiology. Classification. Benign and malignant neoplasia. Clinical manifestation, Metastasis, prognosis

Consciousness. Shock. Collapse, hypotension.

30/8/2013 Bratislava

Doc. MD. T. Stankovičová, PhD.
Guarantor

Literature:

CM. Porth: *Essentials of Pathophysiology*, 2nd edition, Ed. Lippincott and Wilkins, Philadelphia, 2007

James C.E. Underwood.: *General and Systemic Pathology*, 4th edition, ISBN 0443073341/9780443073342 Ed. Churchill Livingstone, NY, 2004

Syllabus of the Seminars and Practical Training Pathology 2013/2014

Educational period: 23.9.2013-20.12.2013

Examination period: 7.1.2014-14.2.2014

Teachers: PharmDr. Foltánová T., PhD. (3x), PharmDr. Kiliánová. Z., PhD.(2x), PharmDr. Kráľová E., PhD.(3x), PharmDr. Jankyová, S., PhD.(3x), PharmD. Čorejová A., PhD. (1x)

Disorders of the differentiation and morphogenesis. Endocrine, nutritional, environmental factors.

Disorders of the growth. Hypertrophy, hyperplasia, atrophy, hypoplasia, metaplasia, dysplasia, neoplasia.

Causes and mechanisms of cellular Injury. Dystrophy, necrosis, apoptosis, repair, regeneration.

Aging. Death – etiopathogenesis, manifestations.

Mechanisms of disturbances in vascular circulation - thrombosis, embolism, ischemia, infarction, shock

Inflammation . acute, chronic, etiology, pathomechanisms. Mediators. Local (rubor, calor, tumor, dolor, functio laesa) and General Characteristics. Temperature. Oedema

Test

Disorders of the Sensory Systems, Diseases of the Eyes, Ear.

Seminar: glaucoma, cataracts
retinopathy
errors of refraction
otitis, vertigo, Meniere disease

Hematologic Disorders. Disorders of Blood Coagulation and Haemostasis

Seminar: coagulopathies
trombocythopathies
vasculopathies
anaemias.

Diseases of the Nervous System.

Seminar: epilepsy
neurodegenerative disorders (Alzheimer Disease, Parkinson Disease)

Test

Respiratory Diseases

Seminar: flu, tonsillitis
Bronchial Asthma,
Pneumonia – Atypical Pneumonia, Aspiration

Pathology of GIT

Seminar: Disturbances of the Gastric Juice Production. Role of Helicobacter pylori
Reflux oesophagitis
Nausea, vomiting
Dysphagia, intestinal gas
Altered Nutritional Balance, diets.

Metabolic and Nutritional Bone Alterations.

Seminar: disorders of calcium homeostasis (endocrine disturbances)
osteoporosis, osteomalacia,
Paget disease

Alterations of the Hormonal Regulation.

Seminar: Diabetes Mellitus, type I and II.
Disorders of the Thyroid Function.

Immunopathology, Alterations in Immune function.

Seminar: hypersensitivity
autoimmune diseases (lupus)
Immunodeficiency (primary, acquired – AIDS)

Test

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CM. Porth: *Essentials of Pathophysiology*, 2nd edition, Ed. Lippincott and Wilkins, Philadelphia, 2007

James C.E. Underwood.: *General and Systemic Pathology*, 4th edition, ISBN 0443073341/9780443073342 Ed. Churchill Livingstone, NY, 2004

Thewes G., Mutschler E., Vaupel P.: *Human Anatomy, Physiology, and Pathophysiology*. Ed. Amsterdam, Elsevier, 1985, 812pp.

doc. T. Stankovičová, MD., PhD.
Guarantor