The exam in Propedeutics of internal medicine/Internal medicine I – 2nd Dpt. Of Internal Medicine, school year 2021/2022

Practical exam:

Student should have a white coat, stethoscope and a pen and should bring a form "Examination record"

The exam consists of the examination of a patient, i.e. obtaining the history and performing physical examination.

The examiner will write the evaluation on the form "Examination record" and, thereafter, the student will put the form in the office of 2nd Dpt. Of Internal Medicine.

Theoretical exam (3 questions and 1 ECG recording)

- 1/1 question on Propedeutics of internal medicine
- 2/1 question on Cardiovascular medicine
- 3/1 question on Pneumology and varia

4/1 ECG recording

I. PROPEDEUTICS OF INTERNAL MEDICINE

1. Approach to the patient. Medical history - structure and importance.

2. Principles of physical examination (inspection, palpation, percussion, auscultation), general and regional examination.

3. Overall condition of the patient, level of consciousness, examination of the skin. Measurement of body temperature, temperature curves.

4. Physical examination of the head and neck.

5. Medical history in respiratory disease, physical examination of the chest and lungs. Pulmonary syndromes

6. Medical history in cardiac diseases, physical examination of the heart.

7. Physical examination of the heart – pathologic findings.

8. Medical history in abdominal diseases, physical examination of the abdomen and abdominal organs.

9. Medical history in rheumatic disease. Physical examination of the upper and lower limbs and spine. Laboratory and imaging tests in rheumatology.

10. Medical history in the diseases of peripheral vessels, physical examination of peripheral vessels. Laboratory and imaging tests in angiology.

11. Measurement of blood pressure and heart rate, home blood pressure measurement, 24 hour ambulatory blood pressure monitoring, central and peripheral pulses, pulse deficit.

12. Noninvasive cardiac tests – the basics of echocardiography, cardiac exercise stress testing. Laboratory tests in cardiology.

13. Electrocardiography – electrophysiological principles, ECG recording, description of normal ECG curve, ECG monitoring with holter monitor.

14. ECG – deviation of heart axis, left and right ventricle hypertrophy.

15. ECG patterns in coronary heart disease.

16. ECG – Arrhythmias.

17. Invasive cardiac tests – coronary angiography, left heart ventriculography, right heart catheterisation, electrophysiological testing, myocardial biopsy

18. Laboratory, functional and imaging tests in pneumology.

19. Examination in diabetology - basic types of diabetes, laboratory tests in diabetology, diagnosis of organ complications of diabetes.

20. Examination in nephrology - medical history, physical examination, laboratory and imaging tests in nephrology.

21. Examination in endocrinology - symptoms and signs of the most common endocrine diseases, laboratory and imaging tests in endocrinology.

22. Examination of bone metabolism - symptoms and signs of the diseases of skeleton, laboratory and imaging tests in osteology.

23. Examination in gastroenterology - laboratory and imaging tests in gastroenterology, endoscopic examination.

24. Laboratory and imaging tests in the diseases of the liver, gallbladder, biliary tract and pancreas.

25. Chest pain – causes, examination methods.

26. Dyspnoea, cough - causes, examination methods.

27. Icterus – classification, causes, examination methods.

28. Oedemas and the accumulation of fluid in body cavities – causes, pathophysiologic mechanisms.

I. CARDIOVASCULAR MEDICINE

1. Arterial hypertension – etiology, classification and diagnostics, risk factors of essential hypertension.

2. Secondary arterial hypertension – overview, basic pathophysiologic mechanisms.

3. Treatment of essential arterial hypertension, treatment options in various forms of secondary hypertension

4. Syncope – classification, causes. Chronic arterial hypotension.

5. Atherosclerosis – etiopathogenesis, clinical manifestations.

6. Atherosclerosis – risk factors and their management.

7. Coronary heart disease – epidemiology and different forms.

8. Angina pectoris stable and unstable

9. Acute myocardial infarction – classification, diagnostics, clinical picture.

10. Acute myocardial infarction – treatment, acute complications, rehabilitation during hospitalisation, late complications.

11. Secondary prevention of acute coronary syndromes.

12. Heart failure – classification, pathophysiology.

13. Acute left and right heart failure - causes, clinical picture, treatment

14. Chronic heart failure – causes, classification, pharmacotherapy and other therapeutic options.

15. Arrhythmias – classification

16. The most common arrhythmias and their treatment.

17. Prognostically significant arrhythmias, cardiac stimulation.

18. The most common congenital heart diseases in adults.

19. Aortic valve stenosis and insufficiency.

20. Mitral valve stenosis and insufficiency.

21. Infective endocarditis.

22. Cardiomyopathy.

23. Myocarditis and pericardial diseases.

24. Peripheral artery disease.

25. Chronic venous disease, varices, superficial thrombophlebitis. Lymphoedema.

26. Deep vein thrombosis in the legs.

27. Pulmonary embolism, acute cor pulmonale.

28. Chronic thromboembolic pulmonary hypertension - classification, chronic cor pulmonale

29. Stroke – risk factors, classification, basic pathophysiology. Clinical picture, the principles of treatment, secondary prevention.

III. PNEUMOLOGY + VARIA

1. Principles of laboratory investigation in clinical medicine. Preanalytical, analytical and postanalytical part of the examination - description and possible errors. Diagnostic sensitivity and specificity, predictive values of tests. Collection of biological material.

2. Haematological laboratory methods, examination in clinical haematology.

3. Skiagraphy and skiascopy – indications in internal medicine, examination process.

4. Ultrasonography and dopplerometry - indications in internal medicine, examination process.

5. Computer tomography (CT) and magnetic resonance imaging (MRI) – indications in internal medicine, examination process.

6. Angiography and interventional radiology techniques – indications in internal medicine, examination process.

7. Hybrid imaging and nuclear medicine methods - indications in internal medicine, examination process.

8. Examination of a patient with suspected infectious disease – medical history, laboratory and imaging tests. The organization of the work at the department of infectious diseases, barrier precautions.

9. Examination in intensive care - diagnostics of urgent conditions, monitoring in intensive care, imaging methods and their indications.

10. Chronic wounds and pressure ulcers – diagnostics of the wounds, therapeutic options.

- 11. General principles of pharmacotherapy in internal medicine.
- 12. The principles of nutrition in internal medicine.
- 13. Neurological problems in internal medicine.
- 14. Psychiatric problems in internal medicine.
- 15. Respiratory insufficiency.
- 16. Bronchial asthma.
- 17. COPD, bronchiectasis.
- 18. Tuberculosis of the lungs.
- 19. Pleural diseases (non-malignant)
- 20. Community-acquired pneumonia