

**Thematic lesson plan of lectures
in the discipline "Faculty therapy"
for students of the educational program
specialist degree in the specialty/direction of training
31.05.01 Medical business,
direction (profile) Medical business,
form of study full-time
for the 2023-2024 academic year**

№	Topics of lectures	Hours (academic)
1.	Introductory lecture. Atherosclerosis. ¹ Etiology. Pathogenesis. Epidemiology and risk factors. Diagnosis of atherosclerosis, ECG monitoring. Clinical picture. Classification of the degree of cardiovascular risk, modern methods for assessing cardiovascular risk. Recommendations for the treatment and prevention of atherosclerosis. ²	2
2.	Coronary heart disease. Angina pectoris. ¹ The concept of CHD. Relevance of the problem. Risk factors for CHD. Classification. Angina pectoris. Pathogenesis. Clinical variants: stable, unstable. Current clinical guidelines for the diagnosis, treatment, and prevention of stable CHD. ²	2
3.	Acute myocardial infarction. Clinical variants of acute coronary syndrome. Diagnostics. Differential diagnosis. Complications. Treatment. Rehabilitation. ¹ Myocardial infarction. Pathogenesis. Clinical variants of myocardial infarction. ECG changes, blood picture, and biochemical parameters. Diagnostics. Differential diagnosis. Treatment. Pre-hospital care. Medical tactics in different periods of myocardial infarction. Forecast. Rehabilitation of patients. Diagnosis and treatment of pulmonary edema, cardiogenic shock, arrhythmias, and ventricular fibrillation. Subacute period complications. Modern algorithms for providing emergency care for AMI complications. Forecast. Rehabilitation of patients. ²	2
4.	Hypertension. Definition of WHO-COULD. Classification of arterial hypertension (AH). Etiology and pathogenesis of essential and symptomatic hypertension. Differential diagnosis of hypertension. Algorithm of examination of patients with hypertension. Complications. Principles of treatment. Emergency treatment of hypertensive crisis. Symptomatic hypertension. Classification of symptomatic hypertension. Renal arterial hypertension (reno-vascular, with nephritis and pyelonephritis). Endocrine arterial hypertension (Cushing's syndrome and disease, pheochromocytoma, aldosteroma). Hemodynamic hypertension. ¹ Etiology and pathogenesis. The role of central disorders of blood pressure regulation, sympathetic nervous system, humoral and hormonal pressor and depressive factors in the onset and progression of the disease. Significance of sodium metabolism disorders. The role of hereditary factors. Classification. Clinical picture of various stages of the disease. Hemodynamic variants. Diagnostics. Differential diagnosis of symptomatic and essential hypertension. Treatment. Relief of hypertensive crises. Outcomes. Forecast. Prevention. Etiology,	2

	pathogenesis, classification, clinical picture and diagnosis of symptomatic arterial hypertension. Differential diagnosis of symptomatic and essential hypertension. Course. Complications. Hypertensive crises. Malignant hypertension. Treatment. Outcomes. Forecast. Prevention. ²	
5.	Acute rheumatic fever. Classification, clinic, diagnosis, and treatment. Prevention. ¹ Etiology. Pathogenesis. Classification. Clinical picture of acute rheumatic fever. Significance of instrumental and laboratory methods of examination. Diagnostic criteria. Treatment. Prevention. ²	2
6.	Mitral heart defects: mitral valve insufficiency, mitral stenosis. Etiology and pathogenesis of acquired heart defects, classification. Hemodynamic disorders in mitral stenosis and mitral valve insufficiency. Clinic, diagnostic criteria. Indications for surgical treatment. ¹ Mitral insufficiency. Etiology and pathogenesis of hemodynamic disorders. Clinical picture. Stages and course of mitral insufficiency. Diagnostics. Forecast. Treatment. Employment opportunities. Mitral stenosis. Etiology. Pathogenesis. Hemodynamic disorders. Clinical picture. Stages and course of mitral insufficiency. Diagnostics. Treatment. Forecast. ²	2
7.	Aortic heart defects: aortic valve insufficiency, aortic stenosis. The concept of the degree of aortic stenosis and aortic insufficiency. Disorders of intracardiac hemodynamics. Clinical syndromes. Diagnostic criteria for aortic malformations. Indications for surgical treatment. ¹ Aortic valve insufficiency and aortic stenosis. Etiology. Pathogenesis of hemodynamic disorders. Clinical picture. Instrumental research methods. Course. Diagnostics. Differential diagnosis of heart murmurs. Complications. Forecast. Possibilities of surgical treatment. ²	2
8.	Infectious endocarditis. Etiology. Pathogenesis. Classification. Clinic. Diagnostics. Treatment. Features of infectious endocarditis in injecting drug addicts. ¹ Etiology. Pathogenesis. The significance of the pathogen in the occurrence of endocarditis. Clinic. Diagnostic criteria. Thromboembolic complications. Features of the course of endocarditis in the elderly. Course and outcomes. Forecast. Treatment. Choice of antibiotics. Indications for surgical treatment. Prevention of relapses. ²	2
9.	Chronic heart failure (CHF). The concept of CHF. Causes of CHF development. Classification. Clinical manifestations. Diagnostics. Modern approaches to treatment from the perspective of evidence-based medicine. ¹ Modern concepts of the pathogenesis of chronic heart failure. Classification. Clinical manifestations of left ventricular heart failure. Diagnostic methods. Current clinical guidelines for the diagnosis, treatment, and prevention of CHF. ²	2
10.	Cardiac rhythm and conduction disorders. Classification of arrhythmias. Extrasystole. Paroxysmal tachycardia. Changes in systemic hemodynamics during an attack. Indications for electro-pulse therapy. Syndrome of premature ventricular arousal. Atrial fibrillation and flutter. Complications. Therapy and prevention of paroxysms of atrial fibrillation. Ventricular fibrillation. Sinus node dysfunction. Indications for pacemaker implantation. Conduction disturbances. Classification. Complications (Morgagni-Edems-Stokes syndrome, heart failure). Treatment. Indications for pacemaker implantation. ¹ Relevance of the	2

	problem. Modern concepts of arrhythmias. Classification of arrhythmias. Diagnostic methods. Pathogenesis. Clinical manifestations. Current clinical guidelines for the diagnosis, treatment, and prevention of rhythm and conduction disorders. ²	
11.	Pneumonia. Etiology. Pathogenesis. Classification. Features of the course of pneumonia depending on the pathogen. Diagnostics. Complications. Indications for hospitalization. Treatment. ¹ Etiology. Pathogenesis. Classification. Features of the course of pneumonia depending on the type of pathogen. Diagnostics. Pneumococcal pneumonia. Viral pneumonia. Identification of the pathogen as an important stage in the choice of therapy. Principles of treatment of pneumonia. Recovery criteria. Disease outcomes. Forecast. ²	2
12.	Bronchial asthma. Etiology. Pathogenesis. Classification. Clinic. Instrumental methods of diagnostics. Urgent conditions. Treatment. ¹ Role of inflammation, endo- and exo-allergens, hereditary factors, focal upper respiratory tract infection. Diagnostic criteria for bronchial asthma. Classification, current. The role of peak fluometry and spirometry in the diagnosis of bronchial asthma. Asthmatic status, its criteria. Diagnostics. Relief of asthmatic status. Indications for treatment in PIT. Modern step-by-step drug therapy. Use of systemic glucocorticosteroids, methylxanthines, and leukotriene receptor inhibitors. Forecast. ²	2
13.	COPD. Etiology. Pathogenesis. Importance of smoking, infection, cooling, occupational and endogenous factors. Classification of COPD. The clinical picture depends on the form, stage and phase of the process. Course and complications. Diagnostic criteria for the disease. Treatment (antibacterial, bronchodilator, mucolytic therapy). Physical therapy and physical therapy, prognosis, prevention. ¹ Etiology. Pathogenesis of COPD. Importance of smoking, infection, occupational and endogenous factors. The clinical picture depends on the phase of the process. Course and complications. Diagnostics. Treatment (antibacterial, bronchodilator, mucolytic therapy). Physical therapy and physical therapy, prognosis, prevention. ²	2
14.	Peptic ulcer of the stomach and duodenum 12. Epidemiology. Etiology. Pathogenesis. Features of the clinic depending on the location of the ulcer. Laboratory and instrumental diagnostic methods. Treatment. Indications for surgical treatment. ¹ Etiology and pathogenesis of peptic ulcer disease. The role of Helicobacter pylori. Main clinical symptoms of the disease. The importance of instrumental and laboratory methods for diagnosing peptic ulcer disease. Diagnostics. Differential diagnosis of peptic ulcer disease with exacerbation of chronic gastritis, chronic pancreatitis, chronic cholecystitis, symptomatic ulcers, cancer of the stomach, pancreatic head, hiatal hernia. Main provisions of the Maastricht Treaty. Treatment. Spa treatment. ²	2
15.	Chronic hepatitis. The concept. Etiology and pathogenesis of CG. Modern classification. Clinical picture of HCG. Diagnostics. Algorithm of examination of a CG patient. Modern methods of treatment and prevention of HCG. ¹ Definition of CG, etiology and pathogenesis. Pathomorphology of the disease. Modern classification of CG from the	2

	standpoint of evidence-based medicine. Clinical and laboratory variants of CG: inflammatory syndrome, cytotoxicity, cholestasis, hepatic cell failure. Diagnostics. Differential diagnosis of HCG with cirrhosis and liver cancer, benign hyperbilirubinemia. Indications for liver puncture biopsy and its variants. Principles of drug therapy. Antiviral therapy of HCG: indications and contraindications. Dispensary monitoring of patients with CG. Prevention. Forecast. ²	
16.	Cirrhosis of the liver (CP). Etiology and pathogenesis of CP. Modern classification. Clinic for various forms of CP. Laboratory and instrumental diagnostics. CPU complications. Forecast. Methods of treatment. ¹ Definition of CP, etiology and pathogenesis. Modern CPU classification. Clinical syndromes of CP. Laboratory and instrumental diagnostics of CP. Differential diagnosis of CP with CG, liver tumors. Complications of CP: clinic, diagnosis, and treatment. Current clinical guidelines for the treatment and prevention of CP. Forecast. ²	2
17.	Chronic pancreatitis. Definition, etiology and pathogenesis. Primary and secondary pancreatitis. Clinical picture. Dependence of clinical manifestations on the localization of the process. The role of pancreatic function research, instrumental and laboratory research methods. Differential diagnosis. Treatment. Diet depending on the stage and form of the disease. Differentiated therapy taking into account the form of the disease and the phase of its course. ¹ Etiology and pathogenesis of CP. The main clinical syndromes of CP. International classification of CP. Features of the course of various forms of the disease. Algorithm for the diagnosis of CP. Differential diagnosis of CP with pancreatic cancer, FD, CG, exacerbation of gastric and duodenal ulcer, stomach tumors, CKD and GI. Treatment of CP. Indications for surgical treatment of CP. Prevention and spa treatment. Principles of dispensary observation of patients. ²	2
18.	Functional diseases of the gastrointestinal tract. Functional dyspepsia. Gastroesophageal reflux disease (GERD). Biliary dyskinesia. Irritable bowel syndrome. Etiology. Pathogenesis. Clinical picture. Diagnosis and its criteria. Features of instrumental diagnostics. Complications. Treatment. ¹ Functional diseases of the gastrointestinal tract. Functional dyspepsia. Gastroesophageal reflux disease (GERD). Biliary dyskinesia. Irritable bowel syndrome. Etiology. Pathogenesis. Clinical picture. Diagnosis and its criteria. Features of instrumental diagnostics. Differential diagnosis. Complications: clinic and diagnosis. Treatment. Prevention and spa treatment. Principles of dispensary observation of patients. ²	2
19.	Inflammatory bowel diseases: ulcerative colitis, Crohn's disease. Etiology. Pathogenesis. Clinic (intestinal and extra-intestinal systemic manifestations) Diagnostics. Basic laboratory and instrumental data. Treatment (basic drugs, additional methods of treatment). Management of patients in remission. ¹ Inflammatory bowel diseases: ulcerative colitis, Crohn's disease. Etiology. Pathogenesis. Clinic (intestinal and extra-intestinal systemic manifestations). Diagnostics and differential diagnostics. Basic laboratory and instrumental data. Treatment (basic drugs, additional methods of treatment). Management of patients in	2

	remission. Prevention and spa treatment. Principles of dispensary observation of patients. ²	
20.	Glomerulonephritis acute and chronic. Current understanding of etiology and pathogenesis. Classification. Clinical picture. Main clinical syndromes. Criteria for diagnosis. The main clinical variants of glomerulonephritis. Urgent conditions. Complications. Differential diagnosis. Principles of treatment. ¹ Modern understanding of etiology and pathogenesis. Classification. Clinical picture. Main clinical syndromes. Criteria for diagnosis. The main clinical variants of glomerulonephritis. Urgent conditions. Complications. Diagnostics. Differential diagnosis. Current clinical guidelines for the treatment and prevention of glomerulonephritis. Forecast. ²	2
21.	Iron deficiency anemia. Etiology. Pathogenesis. Clinic. Diagnostics. Hidden iron deficiency. Principles of treatment with iron preparations. Prevention. ¹ Modern classification of anemic conditions. Iron deficiency anemia (IDA). Ways of iron transport in the body, iron deposition, daily demand of the body for iron. Etiopathogenesis (stages of development of iron deficiency in the body, the concept of latent iron deficiency). Clinical picture, main IDA syndromes. Diagnostics. Criteria for diagnosis, algorithm for differential diagnosis with other types of anemia. Treatment, monitoring of the effectiveness of iron therapy. Providing emergency care. Course of the disease, outcomes, prevention, and follow-up. ²	2
22.	Chronic myeloid leukemia. Chronic lymphocytic leukemia. The role of mutagenic factors in the development of leukemia. Clinical and hematological diagnostic criteria. Differentiated therapy of chronic leukemias. ¹ Definition of "chronic myeloid leukemia" and "chronic lymphocytic leukemia". Clinical picture and main clinical syndromes. Stages of the current. Laboratory and morphological diagnostics. Diagnostic criteria. Differential diagnosis with myeloid and lymphocytic leukemoid reactions (immune agranulocytosis, infectious mononucleosis, tuberculosis, malignant neoplasms). Principles of treatment. Complications. Emergency care for blast and autoimmune crises. Outcomes. Prevention. Medical examination. ²	2
23.	Electrotherapy. Direct, pulsed and alternating currents used for therapeutic purposes. Mechanism of action. Indications and contraindications for use. Mobile devices. ¹ Justification of the choice of the method of treatment with direct and alternating electric currents, taking into account the existing indications and contraindications to their use. Application of physiotherapeutic methods of treatment with direct and alternating electric currents in the complex rehabilitation of patients. Basic techniques for safe operation when using devices for electrotherapy. Apparatuses and methods of applying continuous and pulsed direct and alternating currents in electroson, electroplating, therapeutic electrophoresis, Bernard currents (DDT), sinusoidal modulated current (SMT). Indications and contraindications for the appointment of treatment with continuous and pulsed direct and alternating currents. ²	2

24.	Phototherapy. Ultrasound. Physical characteristics of light radiation. The mechanism of action of various types of light energy. Indications and contraindications for the appointment. ¹ Physical characteristics of light radiation. The mechanism of action of various types of light energy. Sources of natural and artificial electromagnetic radiation. Physical parameters and mechanisms of therapeutic action of ultraviolet, visible, and infrared spectrum of electromagnetic radiation, laser therapy. Techniques and methods of applying various types of phototherapy. Devices, indications and contraindications. Application of phototherapy methods in complex rehabilitation of patients. Ultrasound therapy. Physical characteristics, mechanism of action, therapeutic effects. UZT techniques and techniques. Devices, indications and contraindications. ²	2
	Total:	48

¹ -Subject

² - essential content (if necessary)

Considered at the meeting of the Department of Faculty therapy " 24 " May 2023, Protocol No. 10.

Head of the Department

Faculty of Therapy, MD, Professor



A. R. Babaeva