THEMATIC PLAN OF PRACTICAL CLASSES IN THE DISCIPLINE "INTERNAL DISEASES" FOR STUDENTS 5TH YEAR OF THE FACULTY OF FOREIGN STUDENTS FOR THE AUTUMN SEMESTER OF THE 2026-2027 SCHOOL YEAR

1. **Myocarditis. Pericarditis. Cardiomyopathy – 6 hours**

Myocarditis: definition, etiology and pathogenesis, classification, pathomorphology, clinical picture. Diagnosis of myocarditis. Myocardial biopsy. Principles of treatment. Complications. Features of the course and treatment of viral myocarditis. Outcomes. Forecast. Prevention of myocarditis in risk groups.

Cardiomyopathy: definition, etiology. Pathogenesis of intracardiac hemodynamic disorders in dilated, hypertrophic, restrictive cardiomyopathy and arrhythmogenic dysplasia of the right ventricle. Classification. Secondary cardiomyopathies. The main clinical syndromes. Instrumental diagnostics: ECG, EchoCG, MRI, radionuclide methods, myocardial biopsy. Medical and surgical methods of treatment. Complications. Forecast. Curation of patients with cardiomyopathy: collection of complaints and medical history; objective examination; preparation of an examination plan; interpretation of the results of laboratory and instrumental examination methods; diagnosis; preparation of a treatment plan.

Pericarditis: definition, etiology and pathogenesis, classification, clinical manifestations. Diagnosis of dry, exudative, and adhesive (constrictive) pericarditis. Principles of treatment. Complications. Cardiac Tamponade. Indications for pericardial puncture and surgical treatment. Complications of pericarditis. Outcomes and prognosis in pericarditis. The plan of examination and treatment of patients with pericarditis.

2. Infectious endocarditis – 6 hours

Infectious endocarditis (IE): definition, epidemiology, etiology and pathogenesis. Classification. Groups and risk factors. Pathomorphology.

Clinical manifestations of IE, depending on the etiology, as well as in people with prosthetic heart valves, the elderly and senile, with diabetes mellitus, suffering from alcoholism and drug addiction, and HIV-infected.

Diagnosis of IE: laboratory: blood culture for hemoculture, markers of inflammation; instrumental: EchoCG, CT of the heart, MRI.

Diagnostic criteria and differential diagnosis of infectious endocarditis with other diseases accompanied by fever (acute rheumatic fever, systemic connective tissue diseases, hemobastoses, tumors). Complications.

Drug treatment (etiotropic, pathogenetic and symptomatic), criteria of cure. Forecast. Indications for surgical treatment. Prevention in risk groups.

3-4. Arrhythmias and heart blocks – 12 hours

Risk factors, electrophysiological mechanisms of arrhythmias and heart blocks. Classification of arrhythmias. The main diagnostic methods for arrhythmias and heart blocks, daily ECG monitoring.

Extrasystole: etiology, classification by Lawn, organic and functional extrasystoles, clinical manifestations, ECG diagnosis of extrasystoles, antiarrhythmic therapy, prevention.

Atrial fibrillation and flutter: etiology, pathogenesis, classification, hemodynamic disorders, clinical symptoms. Drug treatment: features of treatment of paroxysmal and permanent forms, risk scales of thromboembolic complications and bleeding, antiplatelet and anticoagulant therapy. Preparing the patient for cardioversion. Prognosis for atrial fibrillation and flutter.

Paroxysmal rhythm disturbances, clinical picture. ECG diagnosis of paroxysmal tachycardia. Differences between ventricular and supraventricular forms of paroxysmal tachycardia. Ventricular preexcitation syndromes. Algorithms for relieving an attack of paroxysmal tachycardia. Indications for electropulse therapy, percutaneous radiofrequency ablation of the arrhythmia source. Prevention of paroxysmal tachycardia attacks. Prognosis for paroxysmal cardiac arrhythmias.

Ventricular fibrillation: etiology, clinical manifestations, ECG diagnostics, resuscitation algorithms, sudden cardiac death (main causes and prevention).

Heart blocks (sinoauricular, atrioventricular, and intraventricular): etiology, pathogenesis, ECG diagnostics. Complications of heart blocks: Morgagni-Adams-Stokes syndrome, heart failure. Medical treatment of heart blocks, temporary pacing, implantation of the pacemaker. Forecast for blocks

Sinus node weakness syndrome: classification, diagnosis, and medical tactics. Indications for implantation of intracardiac devices (pacemakers, resynchronizing devices, cardioverter defibrillators).

***5.* Acute rheumatic fever. Chronic rheumatic heart disease – 6 hours**

Acute rheumatic fever: definition, epidemiology, etiology, pathogenesis, clinical manifestations. Diagnostics. Diagnostic criteria. Classification. Differential diagnosis. Treatment. Outcomes. Prevention is primary and secondary. Chronic rheumatic heart disease. Definition. Diagnostics. Patient management tactics.

***6.* Acquired heart defects. Mitral valve prolapse – 6 hours**

Acquired heart defects. Mitral valve insufficiency. Mitral stenosis. Insufficiency of the aortic valve. Aortic stenosis. Etiology of valvular defects. The pathogenesis of hemodynamic disorders in acquired heart defects. Clinical manifestations, direct and indirect signs of heart defects. The importance of instrumental methods in the diagnosis of heart defects (ECG, EchoCG, cardiac X-ray, MRI).

Combined heart defects: features of clinical manifestations, determination of the prevalence of the defect, diagnosis, course, complications, prognosis. Relative and absolute valve insufficiency. Complications of acquired heart defects. Causes of decompensation of heart defects. Prognosis of acquired heart defects. Principles of treatment of heart defects, indications for surgical treatment. Features of medical tactics for managing patients with prosthetic valves. Mitral valve prolapse. Definition. Causes of primary and secondary mitral valve prolapse. Classification. Diagnostics. The importance of electrocardiography and echocardiography for diagnosis. Course, complications, prognosis. Principles of therapeutic treatment, indications for surgical treatment. Minor cardiac anomalies (MCAs).