

**Thematic plan of practical classes
in the discipline "Clinical Immunology and Allergology"
for 5th year students of the faculty of foreign students
specialty 1-79 01 01 "General Medicine"**

*The thematic plan was approved at a meeting of the Department of Clinical Laboratory
Diagnostics, Allergology and Immunology (Minutes No. 8 dated 31.08.2024)*

Name of topics, content of the practical classes
<p>Topic 1. Main methods of immunodiagnostics. Examination of the immune system. Immunodeficiency. Principles of immunotherapy and immunocorrection.</p> <ol style="list-style-type: none"> 1. Types of immunopathology. Principles of examination of patients with immunopathology. 2. Immunological anamnesis. Objective signs and data at patients with immunopathology. 3. Examination of the immune system. Interpretation of the laboratory data. 4. Primary and secondary immunodeficiency. Clinical symptoms. Physical and laboratory examination. 5. Immunocorrection. Immunomodulation therapy. The control of therapy efficiency.
<p>Topic 2. Immunological markers of autoimmune diseases (AID).</p> <ol style="list-style-type: none"> 1. Autoimmune diseases. Criteria and symptoms. Classification. 2. Etiology and pathogenesis of AID. 3. Mechanism of tissue damage at AID. Clinical symptoms of AID. 4. General principles of immunodiagnostics of organ-specific and organ-specific autoimmune diseases. Antinuclear antibodies. Assessment of the immune status in autoimmune diseases. 5. The main directions of therapy for autoimmune diseases. 6. Immunolaboratory profiles in the diagnosis of autoimmune diseases (rheumatoid arthritis, SLE, systemic scleroderma, antiphospholipid syndrome).
<p>Topic 3. Immunopathology of reproduction. Tumors immunology.</p> <ol style="list-style-type: none"> 1. Immunological mechanisms of male infertility. 2. Immunological mechanisms of female infertility. 3. Immunological relationships between mother and fetus organisms; habitual miscarriage of the fetus; hemolytic disease of newborns, antiphospholipid syndrome. 4. Immunological methods of diagnosis and treatment of conflicts "mother-fetus". 5. Mechanisms of antitumor immunity. Principles of tumor immunodiagnostics. 6. Specific and non-specific immunotherapy of tumors. 7. Immunological bases of organ and tissue transplantation.
<p>Topic 4. Allergy. Atopic diseases. Approaches to diagnosis and management of allergic diseases.</p> <ol style="list-style-type: none"> 1. Environmental agents and allergy, risk factors for allergic disease, influence on the allergic diseases prevalence. Allergens. 2. Allergic reactions. Types. Etiopathogenetic factors. Clinical manifestations. The role of heredity in the development of allergic reactions. 3. Pseudo-allergic reactions, causes and mechanism, clinical significance, peculiarities of diagnosis and treatment. 4. Algorithms for the diagnosis of allergic diseases. Allergic history. Physical examination. In vivo allergy diagnostics tests. 5. Laboratory methods of allergy diagnostics. Molecular allergy diagnostics. 6. General principles of treatment of allergic diseases. Allergen-specific immunotherapy. Non-specific treatment and prevention.
<p>Topic 5. Drug allergy. Anaphylaxis and anaphylactoid reactions shock. Food allergy. Pollen allergy.</p> <ol style="list-style-type: none"> 1. Drug hypersensitivity. Types of drug intolerance. Pathogenesis, clinical picture, diagnostics. The principles of therapy.

2. Systemic allergic reactions to drugs: drug vasculitis, exudative erythema multiforme (Steven-Johnson syndrome, Lyell's syndrome). Diagnostics, treatment.
3. Anaphylaxis. Etiology, pathogenesis, clinic. Emergency therapy for anaphylactic shock. Prevention of anaphylaxis. Patient management tactics after an acute period.
4. Food allergies. Etiology and pathogenesis, clinical manifestations. Specific diagnostics, treatment.
5. Epidemiology, etiology, pathogenesis and clinic of pollen allergy. Modern methods of specific diagnostics and therapy of hay fever.