Thematic Plan of Lectures

for the discipline "Clinical Immunology and Allergology" for 5th-year students of the Faculty of International Students specialty 1-79 01 01 "General Medicine"

Names of Topics, Lecture Content
Topic 1 Organization of immunological and allergological care. Types of immunopathology. Principles of immunodiagnostics, immunotherapy, and immunoprophylaxis. Immunological deficiency. 1. Immunological deficiency – definition, classification. 2. Primary immunodeficiencies. Mechanism of development. Clinical manifestations, general approaches to diagnosis and treatment. 3. Management of patients with primary immunodeficiencies. 4. Transient hypogammaglobulinemia of childhood (MIS syndrome). 5. Common variable immunodeficiency. 6. Selective IgA deficiency. 7. Immunological deficiency due to acquired immunodeficiency (causes, laboratory diagnosis).
Topic 2 Allergy and pseudoallergy: risk factors, etiopathogenesis, clinical picture. Principles of diagnosis, treatment, and prevention of allergic diseases. 1. Epidemiology of allergic diseases. Organization of the allergological service in the republic. 2. Structure, origin, classification of allergens: Etiopathogenesis of allergic diseases. 3. Specifics of examining patients with allergopathology. Skin tests. Provocative tests. Elimination tests. 4. In vitro allergodiagnostics methods. Comparative effectiveness and clinical significance. 5. General principles of specific and non-specific therapy for allergic diseases.
Topic 3 Anaphylaxis. Drug hypersensitivity. Food, pollen, and insect allergy. 1. Anaphylaxis, types. Anaphylactic and anaphylactoid shock. Causes of anaphylactic shock, the role of allergens and non-specific agents, pathogenesis, and clinical manifestations. 2. Emergency therapy for Anaphylaxis, tactics for managing patients after the acute phase is resolved. 3. Food allergy. Types of food intolerance. Clinical manifestations of food allergy. Diagnosis of food allergy. Treatment of food allergy, 4. Types of drug intolerance. 5. Drug hypersensitivity, signs, pathogenesis, and diagnosis. 6. Skin and mucous membrane lesions in drug hypersensitivity. 7. Prevention and treatment of drug hypersensitivity.
Topic 4 Mechanisms of autoimmunization. Immunological markers of autoimmune diseases. Immunological aspects of transplantation. 1. Mechanisms of central and peripheral tolerance to self-tissues. Mechanisms of "breakdown" of autotolerance. 2. Classification of autoimmune diseases. Etiopathogenetic factors of autoimmune disorders. 3. Mechanisms of tissue damage. 4. Organ-specific and organ-nonspecific AID (Autoimmune Diseases). 5. Transplantation immunity. Principles of donor selection. Tissue typing. Immunological complications. Post-transplant reactions. Immunopathological signs of allograft rejection reaction. "Graft-versus-host" reaction, chimerism.
Topic 5 Immune mechanisms in the regulation of reproduction and reproductive pathology. Immunological basis of tumor growth. 1. Immune relationships in the mother-fetus system. Changes in systemic immunity during normal pregnancy and pathology of pregnancy. 2. Immunological causes of infertility. Laboratory immunological monitoring of reproductive pathology. 3. The role of autoimmune disorders and infections in intrauterine development disorders.

4. Antiphospholipid syndrome in the pathogenesis of spontaneous abortions. Diagnostic and treatment.
5. Immunological mechanisms of hemolytic disease of the newborn. Diagnosis and treatment.
6. Mechanisms of antitumor immunity. Anti-blastoma immune factors. Pro-blastoma factors in tumor formation (suppressing immunity and enhancing tumor growth). Tumor immune resistance.
7. Tumor-associated antigens. Immunodiagnostics of neoplasms. Diagnosis of immunological disorders in patients with oncopathology. Specific and non-specific immunotherapy of tumors.