

Study program: Doctoral Academic Studies in Biomedical Sciences
Name of the subject: ALLERGIC AND AUTOIMMUNE DISEASES
Teacher(s): Dejan M. Ćelić, Ljiljana N. Andrijević, Maja M. Buljčik Čupić, Biljana S. Zvezdin, Gordana V. Vijatov Đurić
Status of the subject: elective
Number of points: 20
Condition: -
<p>Goal of the subject: The main goal of education in the subject of Allergic and Autoimmune Diseases is to acquaint doctoral students with the following principles: 1) the occurrence of allergic and autoimmune diseases; 2) methods of diagnosis of allergic and autoimmune diseases; 3) principles and practical aspects of therapy of allergic and autoimmune diseases.</p>
<p>Outcome of the subject Outcome of the subject is in mastering and adopting the following: 1) elementary principles of diagnosis of allergic and autoimmune diseases; 2) skills for practical work in practice; 3) development of critical and fact-based thinking; 4) knowledge that can be applied in scientific research.</p>
<p>Content of the subject <i>Theoretical lectures:</i> 1) Introduction to immunology, history of clinical immunology; a brief overview of the cellular and humoral components of the immune system and the complement system; antigen presentation, intercellular communication, receptors, cytokines; innate and acquired immunity; 2) Immune system disorders; types of hypersensitivity reactions, theoretical aspect and clinical practice; 3. Immune deficits; congenital immunodeficiencies, acquired immunodeficiencies; methodology of diagnosis of immunodeficiency states, methods of treatment of immune deficits, complications of immunodeficiency states; overlap of autoimmune diseases and immunodeficiency states; 4) Basics of autoimmune processes and systemic autoimmune diseases; 5) Vasculitis, division, diagnosis and treatment; 6) Nephrological manifestations of autoimmune diseases; 7) Rheumatological autoimmune diseases; 8) Hematological diseases based on immune disorder; 9. Endocrinological and gastroenterological diseases based on immune disorder; 10. Neurological autoimmune diseases, diagnosis and treatment; 11) Skin manifestations of immune-mediated diseases; 12) Allergic and photoallergic dermatoses, diagnosis and treatment; 13) Atopic diseases of the skin and mucous membranes diagnosis and treatment; 14) ENT manifestations of immune-related diseases; 15) Asthma and other immune-related diseases of the lower respiratory tract, diagnosis and treatment; 16) Systemic anaphylactic reaction, importance in medicine, prevention, diagnosis and treatment 12) Allergic and photoallergic dermatoses, diagnosis and treatment; 13) Atopic diseases of the skin and mucous membranes diagnosis and treatment; 14) ENT manifestations of immune-related diseases; 15) Asthma and other immune-related diseases of the lower respiratory tract, diagnosis and treatment; 16) Systemic anaphylactic reaction, importance in medicine, prevention, diagnosis and treatment</p> <p><i>Practical lectures</i> Practical lectures are held in the form of 2 one-week block classes in the summer semester: the first week at the Clinic for Nephrology and Clinical Immunology KC Vojvodina, the second week divided at the Clinic for Dermatology KCV, Clinic for Ear, Throat and Nose KCV and the Institute for Lung Diseases of Vojvodina. 1. Immunological laboratory: protein electrophoresis, radial immune diffusion, agglutination techniques for proving rheumatoid factor and C reactive protein, 2. Indirect immunofluorescence, biological heterologous substrates, tissue cultures, cell smears, immunofluorescent method of ELISA depopulation diagnostics. Immunohermic detection of immune complexes in tissues, basics of flow cytometry, indications and interpretation of flow cytometry findings. 4. Clinical examinations of rheumatological and immunological patients (nephrology, immunology, gastroenterology). 5. Clinical examinations and treatment of patients with allergic and autoimmune diseases (hematology, endocrinology and neurology). 6. Skin testing of hypersensitivity, clinical examination of patients with skin manifestations of allergic and autoimmune conditioned diseases. 7. Functional lung tests, clinical examinations and treatment of immunologically conditioned lung diseases 8. Systemic anaphylactic reaction, diagnosis and treatment.</p>
<p>Recommended literature <i>Compulsory:</i> 1. Franklin Adkinson N, Bochner BS. Middleton's Allergy 2 - Volume Set: Principles and Practice, Edition 8th, Philadelphia: Elsevier; 2014.</p>

2. Adelman DC, Casale TB, Corren J. Manual of Allergy and Immunology, Edition: Fifth. Philadelphia: LippincottWilliams & Wilkins; 2012.
3. Rich RR. Clinical immunology: principles and practice. Amsterdam: Elsevier; 2019.

Additional

1. Spickett G. Oxford Handbook of Clinical Immunology and Allergy. Oxford: Oxford University Press; 2013.
2. Gimenez-Arnau AM, Maibach HI. Contact urticaria svndrome. Cham: Springer; 2018.

Number of active classes

Theory: 60

Practices: 45

Methods of delivering lectures:

Lectures, practical work with patients at different clinics, examination, diagnosis of immune disorders, therapy of immunologically conditioned diseases, basics of work in the laboratory for immunology, work in the laboratory for allergology, writing reports

Evaluation of knowledge (maximum number of points 100)

activity during the lecture: 25

seminars: 20

SRW: 25

oral exam: 30