# MINISTRY OF HEALTH OF UKRAINE ODESA NATIONAL MEDICAL UNIVERSITY

# Faculty of medicine

Department of propaedeutics of internal diseases and therapy Syllabus of the academic discipline

# "MODERN METHODS OF DIAGNOSTIC AND TREATMENT OF SYSTEMIC VASCULITIS"

Scope of the academic discipline	Total number of hours per discipline: 90 hours, 1.5 credits. Semesters: VII - VIII. 4d years of study.
Days, time, place of educational discipline	According to the class schedule.  Department of propaedeutics of internal diseases and therapy.  Odesa, Pastera 9 street, Multidisciplinary Medical Center No. 1 of Odesa National Medical University, 2nd floor.
Teacher(s)	Associate professors: MD, PhD Bondar Vadim, MD Sebov Denis. Assistants: MD, PhD Maznichenko Iegor, MD Zakritov Denis.
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#### COMMUNICATION

Communication with applicants will be conducted in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber, Telegram messengers (through groups created in Viber, Telegram for each group, separately through the head of the group).

# ABSTRACT OF THE ACADEMIC DISCIPLINE

Subject of study of discipline – studying the principles of diagnosis and treatment of systemic vasculitis.

The prerequisites are based on students' study of human anatomy (joint anatomy, muscle and connective tissue apparatus), histology (histoarchitecture of blood vessels, skin, histological features of internal organs), physiology (physiology of pain, physiology of movement), pathological anatomy (pathomorphological features of the course of the disease), pathological physiology (

mechanisms of formation and course of vasculitis), microbiology, virology and immunology (data collection for detailing complaints and structural elements of medical history), pharmacology (use of various drugs, local use of drugs, features of clinical pharmacology).

Course prerequisites: histology, human anatomy and pathological anatomy, human physiology and pathological physiology, pharmacology, microbiology, virology and immunology, internal medicine, general practice and family medicine, traumatology, topographic anatomy.

The purpose of the discipline: mastery by the student of higher education of knowledge and the formation of elements of professional competences in patient examination and assessment of the main manifestations of systemic vasculitis and improvement of skills and competences acquired during the study of previous disciplines, in order to achieve the main final goals defined in the Standard of Specialist Training in the specialty 222 "Medicine".

*Tasks* of the discipline:

- 1. Survey and physical examination of patients, analysis of their results in the internal medicine clinic.
- 2. Mastering the ability to analyze the results of the main laboratory and instrumental research methods, to determine the leading symptoms and syndromes in the internal medicine clinic.

Formation of skills and abilities: survey and physical examination of patients, analysis of their results in the internal medicine clinic.

Mastering the ability to analyse the results of the main laboratory and instrumental research methods, to determine the leading symptoms and syndromes in the internal medicine clinic. *Expected results*:

#### Know:

- The most important etiological and pathogenetic factors in the formation of pathological processes in the human body.
- Methodological basis of clinical examination of the patient, scheme of patient examination and writing of medical history.
- Methodological basis of survey and physical examination of the patient.
- The most important symptoms and syndromes in the clinic of internal diseases and their semiological interpretation.
- Clinical and diagnostic interpretations of indicators of the most important laboratory and instrumental studies.

## Be able:

- Conduct surveys and physical examinations of patients and analyze their results in the internal medicine clinic.
- To draw up a plan for examination of a patient with vasculitis.
- Analyze the results of basic laboratory and instrumental research methods
- To determine the leading symptoms and syndromes in the clinic of internal diseases.
- Demonstrate the ability to methodically correctly present the results of the patient's examination in the form of a medical history with the justification of the syndromic diagnosis.

## DESCRIPTION OF THE ACADEMIC DISCIPLINE

The discipline will be taught in the form of lectures (10 classroom hours), practical classes (30 classroom hours); organization of the applicant's independent work (50 hours).

*Teaching methods:* conversation, solving clinical situational problems, patient examination, manipulations according to list 5, instruction and practicing skills on simulation dummies.

Content of the academic discipline

# *Topics of lectures:*

Topic 1. Relevance of the problem of systemic vasculitis. Prevalence of systemic vasculitis. Modern approaches to diagnosis and treatment. Classification.

Topic 2. Vasculitis of small vessels. Etiology, pathogenesis, clinic. Diagnostic criteria. Pathogenetic treatment.

- Topic 3. Vasculitis of vessels of medium caliber. Etiology, pathogenesis, clinic. Diagnostic criteria. Pathogenetic treatment.
- Topic 4. Vasculitis of large vessels. Etiology, pathogenesis, clinic. Diagnostic criteria. Pathogenetic treatment
- Topic 5. Differential diagnosis of lesions of organs and systems in vasculitis.

## *Topics of practical classes:*

- Topic 1. Modern diagnosis of systemic vasculitis. Immunological methods of diagnosis.
- Topic 2. Modern approaches to the treatment of systemic vasculitis from the standpoint of evidence-based medicine. Biological therapy of systemic vasculitis.
- Topic 3. Lung lesions and broncho-obstructive syndrome in systemic vasculitis. Issues of differential diagnosis and treatment.
- Topic 4. Lesions of the skin, mucous membranes (oral cavity and genitals) in systemic vasculitis. Issues of differential diagnosis and treatment.
- Topic 5. Kidney damage in systemic vasculitis. Issues of differential diagnosis and treatment.
- Topic 6. Vasculitis of small vessels. Wegener's granulomatosis. Clinic, diagnostic criteria. Pathogenetic treatment.
- Topic 7. Charg-Strauss syndrome. Clinic, diagnostic criteria. Comprehensive treatment.
- Topic 8. Microscopic polyangiitis. Clinic, diagnostic criteria. Pathogenetic treatment.
- Topic 9. Schönlein-Henoch's purpura. Clinical and laboratory diagnostic criteria. Comprehensive treatment.
- Topic 10. Goodpascher's syndrome. Damage to the lungs and kidneys. Differential diagnosis. Pathogenetic treatment.
- Topic 11. Vasculitis of medium-sized vessels. Poly arteritis nodosa. The question of etiopathogenesis. Main clinical manifestations. Pathogenetic treatment.
- Topic 12. Kawasaki disease. Issues of etiology and pathogenesis. Morphology of lesions. Basic clinical and laboratory criteria. Pathogenetic treatment.
- Topic 13. Behcet's disease. Issues of etiology and pathogenesis. Morphology of lesions. Basic clinical and laboratory criteria. Pathogenetic treatment.
- Topic 14. Vasculitis of large vessels. Giant cell arteritis. Granulomatous arteritis of the aorta and its large branches (mainly extracranial vessels). Etiology, pathogenesis, diagnosis, treatment.
- Topic 15. Takayasu's arteritis. Etiology, pathogenesis, diagnosis, treatment.

## *List of recommended literature:*

#### Basic literature:

- 1. Text book of systemic Vasculitis 1st edition / Sharma A, Bacon P. Jaypee Brothers Medical Pub. 2015. 419p.
- 2. Diagnostic methods in the clinic of internal medicine: study guide / A.S. Svintsitskyi. K.: VSV "Medicine", 2019. 1008 p. + 80 s. color incl.

# Additional literature:

- 1. Firestein & Kelley's texbook of rheumatology 11th edition / GS Firestein, RC Budd, SE Gabriel, IB Mcinnes et al . Elsevier. 2020. 10023p.
- 2. Oxford textbook of rheumatoid arthritis (Oxford texbook of rheumatology) 1st edition / DL Scott, J Galloway, A Cope, A Pratt et al. OUP Oxford. 2020. 570p.
- 3. Bates' Guide to Physical Examination and History Taking /Ed. Lynn S. Bickley, Peter G. Szilagyi. Wolters Kluwer, 2017. 1066 p.

## **EVALUATION**

Forms and methods of current control: oral (survey), practical (working with a patient, working on a simulation model), assessment of practical skills and activity in class, assessment of the interpretation of the results of clinical, laboratory and instrumental studies.

Current evaluation criteria in practical training

Rating	The structure of evaluation of the current educational activity of one seminar session
Perfectly "5"	The student has a fluent command of the material, takes an active part in the role play, confidently demonstrates practical skills during the examination of a healthy and sick child and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
Fine «4»	The winner has a good command of the material, takes part in a role-playing game, demonstrates practical skills during the examination of a healthy and sick child and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
Satisfactorily "3"	The applicant does not have sufficient knowledge of the material, takes part in the role play without confidence, demonstrates practical skills during the examination of a healthy and sick child and the interpretation of clinical, laboratory and instrumental research data with significant errors.
Unsatisfactorily "2"	The applicant does not possess the material, does not take part in the role play, does not demonstrate practical skills during the examination of a healthy and sick child and the interpretation of clinical, laboratory and instrumental research data.

Forms and methods of final control: differential credit, issued to the applicant who has completed all sections of the educational program of the selected discipline, actively participated in practical classes, has an average current grade of at least 3.0 and has no academic debt.

Possibility and conditions of obtaining additional (bonus) points: not provided.

## INDEPENDENT WORK OF STUDENTS OF HIGHER EDUCATION

*Purpose:* to ensure the student's preparation for professional activity in conducting an anamnesis collection and physical examination of the patient by organs and systems, identifying symptoms and syndromes.

Tasks:

- 1. Conducting a survey and physical examination of patients and analysing their results in the internal medicine clinic.
- 2. Analysis of the results of the main laboratory and instrumental research methods.
- 3. Determination of leading symptoms and syndromes in the internal medicine clinic.

The criteria for evaluating the student's independent work correspond to the general evaluation criteria, the deadlines for submitting tasks according to the thematic plan "Student's independent work" are the last class on the eve of the assessment class.

## POLICY OF EDUCATIONAL DISCIPLINE

Deadlines and Rescheduling Policy:

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy:

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or work connections to obtain a positive or higher grade when exercising any form of control of learning outcomes or advantages in academic work;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation of academic integrity, students may be held to the following academic responsibility:

- a decrease in the results of assessment of the control work, assessment in class, credit, etc.;
- retaking the assessment (test, credit, etc.);
- assignment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

## Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

## *Use of mobile devices:*

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

## Behavior in the audience:

The behavior of applicants and teachers in the classrooms must be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics of academic relations at Odessa National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of Odessa National Medical University, Regulations on Prevention and detection of academic plagiarism in the research and educational work of students of higher education, scientists and teachers of Odessa National Medical University.