

Odesa National medical University
Department of the surgery №2

Syllabus
Liver disease. Echinococcus of the liver

Volume	4 credits / 120 hours
Semester, year of study	IV semester 2
Days, time, place	Monday - Friday 4 - 6 Acad. hours, according to the schedule Auditorium of the Department of Surgery No. 2 (ORCMC, Sudnobudivna St., 1), surgery department of the ORCMC.
Teachers	Head of the department: Boris Zaporozhchenko, Doctor of Medicine, Professor, Honored Doctor of Ukraine, Associate professor of the department: Ihor Borodaev, Doctor of Medicine, associate professor, member of the Association of Surgeons of Ukraine; Associate professor of the department: Muravyov Petro, Doctor of Medicine, associate professor, member of the Association of Surgeons of Ukraine.
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Workplace	ORCMC 1. 3rd floor: department of surgery: offices of the Department of Surgery No. 2, lecture hall; 2. 3rd floor - docent's office
Consultations	Consultations Face-to-face consultations: <input type="checkbox"/> Thursday - from 14.00 to 16.00; <input type="checkbox"/> Saturday - from 9:00 a.m. to 1:00 p.m Online consultations on the platform (Microsoft Teams): <input type="checkbox"/> Thursday - from 14.00 to 16.00; <input type="checkbox"/> Saturday - from 9:00 a.m. to 1:00 p.m

COMMUNICATION

Face-to-face in the classrooms of the department, online via the Microsoft Teams platform, in some cases with prior warning - in Viber groups.

COURSE ABSTRACT

The subject of study is the "Liver disease. Echinococcus of the liver" includes ethics, methodology, methods of scientific research, etiology of

diseases, risk factors, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, principles of surgical treatment of patients, and prevention.

Course prerequisites and post-requisites (The place of the discipline in the educational program)

Discipline of study (DS) is based on students' knowledge of human anatomy, medical biology, histology, cytology and embryology, pathomorphology, physiology, pathophysiology, medical and biological physics, bioorganic and biological chemistry, microbiology, virology and immunology, pharmacology, clinical pharmacology and clinical pharmacy, propaedeutics of internal medicine, infectious diseases, general practice (family medicine), gastroenterology, general surgery, which involves "vertical" integration with these disciplines and the formation of skills to apply knowledge in the process of further education and professional activity. Acquired knowledge, skills, abilities and competences from DS will become the basis for deepening knowledge in surgery, in particular surgical hepatology, and will form the basis for further continuous postgraduate education.

The purpose of the course

The goal is to acquire and deepen knowledge, skills, and other competencies necessary in professional activities, to develop skills in research work, to obtain new facts and to implement them in practical medicine and other spheres of social life.

The main tasks of the DS are:

- mastering the basic principles of diagnosis in liver diseases of various etiologies;
- mastering measures to provide assistance to patients with infectious, metabolic, autoimmune liver diseases;
- assimilation of knowledge on the interpretation of the dynamics of liver samples depending on the degree of severity of the course of chronic hepatitis and liver cirrhosis;
- assimilation of knowledge on the complex of medical and diagnostic measures for infectious and non-infectious liver diseases;
- mastering the methodology of examining a patient with hepatitis and liver cirrhosis of various etiologies;

- acquisition of practical skills in providing first aid for hepatic coma;
- assimilation of knowledge on the basics of diagnosis and assistance in liver failure;
- assimilation of knowledge on providing assistance at various stages of portal hypertension;
- formation of moral, ethical and deontological qualities during professional communication with the patient.

As a result of mastering the content of the DS, the candidate for the degree of Doctor of Philosophy should know:

- and systematically understand the problem of the specifics of diagnosis of surgical diseases of the liver and echinococcus, the development and progression of the disease for future professional and scientific activities;
- methods and criteria for evaluating research results regarding processes in surgical hepatology;
- basic principles of analysis and generalization of the results of scientific research in the field of liver surgery;
- clinical epidemiology, principles, methods and achievements of evidence-based medicine in the treatment of liver echinococcus;
- modern research methods, biomarkers of various processes and conditions in surgical hepatology, their informativeness.

Students have to be able to:

- demonstrate knowledge of research methodology and methods in the diagnosis of liver diseases and echinococcus;
- independently and critically analyze and synthesize scientific data in surgical hepatology
- choose modern methods of diagnosis, treatment and prevention of liver diseases, taking into account the patient's condition and age;
- use the results of scientific research in the field of surgical hepatology and pharmaceutical practice;
- to present the results of scientific research in oral and written form in the scientific community, in accordance with national and international standards;
- use ethical principles in working with patients of different age groups and gender, adhere to scientific and medical ethics;
- demonstrate academic integrity and act responsibly regarding the reliability of the obtained scientific results.
- to evaluate information about the diagnosis based on the results of laboratory and instrumental studies, namely, to determine the list of necessary clinical and laboratory and instrumental studies and to evaluate their results in patients of different age groups and gender.

- determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition in patients of different age groups and gender.

COURSE DESCRIPTION

Forms and methods of education

DS "Liver Diseases". Echinococcus of the liver" consists of 4 credits (120 hours): 60 practical classes and 60 hours for individual work.

Teaching methods

The study of DS is implemented on the basis of the following teaching methods:

- dominant means of learning: visual, verbal, practical, independent search and educational work;
- management of thematic patients;
- survey;
- group discussions on problematic clinical and scientific situations;
- individual control interview;
- situational tasks ("case method");
- performance of individual clinical studies.

All types of classes are provided with methodical developments, visual teaching aids (presentations), information resources of the department.

Demonstrations of thematic patients, analysis of disease histories of the thematic patients of the bank of the department, simulation trainings are used.

At the 1st practical session (PS), the trainee is provided with a detailed plan of work in the clinic and the conditions for its implementation are provided. The plan includes: a list of studies that the student should master; a list of thematic patients, whose supervision he must perform during the study of the DS; determining the time of consultations with the teacher, and the time for participation in clinical rounds, practical conferences.

The trainees are recommended to take simulation trainings using the simulator and the program of surgical intervention on the patient's liver, which provides an opportunity to practice 20 clinical scenarios on skills in liver surgery.

Content of the academic discipline

Topic 1. Liver: topography, structure, functions.

Peculiarities of metabolism in the liver. Blood circulation of the liver. The main functions of the liver. Age-related changes in liver mass.

Topic 2. Basic laboratory and instrumental research methods in hepatology. Clinical examination of patients with liver diseases. Syndromes and examination methods in hepatology.

Topic 3. Chronic obstructive pulmonary disease, Clinical symptoms and course of chronic obstructive pulmonary disease.

Treatment of cholelithiasis.

Topic 4. Parasitic liver cysts. Subjective and objective symptoms of parasitic cysts of the liver. Diagnostic criteria

Parasitic liver cysts. Histological examination of a liver biopsy.

Treatment of parasitic liver cysts

Topic 5. Autoimmune hepatitis. Definition and nature of the onset of the disease. Main laboratory markers of autoimmune hepatitis. Instrumental research methods. Differential diagnosis. Algorithm of the doctor's action in providing medical care to patients with autoimmune hepatitis

Topic 6. Toxic Chronic hepatitis. Definition, main clinical forms. Laboratory indicators in toxic hepatitis. Instrumental methods of examination. Differential diagnosis of toxic chronic hepatitis. The main actions of a doctor when providing medical assistance to patients with toxic chronic hepatitis.

Topic 7. Alcoholic liver disease. Clinical manifestations. Laboratory and imaging examinations. Algorithm of the doctor's actions when providing medical assistance to patients with alcoholic hepatitis (alcoholic liver disease).

Topic 8. Cirrhosis of the liver. Definition and classification of liver cirrhosis. Signs of liver failure. Portal hypertension and ascites: diagnosis and treatment.

Topic 9. Final lesson. Test control.

Literature

Main:

1. Surgery: a textbook/ Ya.S. Bereznytskyi, O.V. Belov, B.S. Zaporozhchenko and others. // Vinnytsia: Nova kniga, 2020.-528 p.
2. Surgical diseases: textbook/ Ya.S. Bereznytskyi, A.A. Viltanyuk, N.D. Zhelyba et al.: Ed. P.D. Fomina, Ya.S. Bereznytskyi. — k.: VSV "Medicine". — 2017. — 432 p.
3. Ya.S. Bereznytskyi, M.P. Zakharash, V.G. Myshalov. Surgery. Volume III (Book 1). Textbook Dnipropetrovsk: RVA "Dnipro-VAL", 2012. — 780 p.
4. Surgery (basic textbook) volume C (book 3 - related specialties for intern surgeons) Textbook / edited by G.V. Dzyak — Dnipropetrovsk: RVA "Dnipro-VAL", 2014. — 828 p.
5. Surgery. Volume II. Textbook edited by Ya.S. Bereznytskyi, M.P. Zakharasha, V.G. Myshalova. - Dnipropetrovsk, Dnipro-VAL, 2011, 643 p.
6. Surgery. Volume II. Textbook edited by Ya.S. Bereznytskyi, M.P. Zakharasha, V.G., Mishalova. - Dnipropetrovsk, Dnipro -VAL, 2007.
7. Lectures on hospital xipyrgy in 3 volumes. Under the editorship V. G. Mishalova. "Ascania", Kyiv, 2008.
8. Surgery. Textbook edited by M.P. Zakharasha, O.I. Go, M.D. Coach Kyiv, "Medicine", 2014, 656 p.
9. Xipyrgic diseases. Textbook edited by P.G. Kondratenko. H., "Fact". — 2006. — 816 p.
10. Surgery. Tutorial. Part 1 edited by O.B. Kutovoy. Dnipro, 2015, 287 p.

11. Surgery: a textbook/ edited by Kovalchuk A.Ya. — Ternopil: TDMU, 2010. — 1056 p.

Auxiliary:

1. Boyko V.V., Klymenko G.A., Maloshtan A.V. Choledocholithiasis (diagnosis and operative treatment). — Kh.: Novoe slovo, 2008. — 216 p.
2. Kondratenko P.G., Vasiliev A.A., Elyn A.F. etc. Emergency biliary tract surgery. — Lebed LLC, 2005 — 434 p.
3. Nychitaylo M.E., Grubnyk V.V., Kovalchuk A.L. and others. Minimally invasive surgery of bile duct pathology. K.: Medicine, 2013.-296 p.
4. Nychitaylo M.E., Grubnyk V.V., Lurin I.A. et al. Video endoscopic diagnosis and minimally invasive surgery of cholelithiasis. K.: Health, 2005.-424 p.
5. Gallstone disease: diagnosis and management. NICE Clinical guideline [CG 188] 2014. available <https://www.nice.org.uk/guidance/cg188/chapter/1-recommendations/>

Information resources:

1. Website of the Department of Surgery No. 2: <https://info.odmu.edu.ua/chair/surgery2>
2. Ministry of Health of Ukraine: <http://moz.gov.ua/>
3. National Scientific Medical Library of Ukraine: <http://www.library.gov.ua/>
4. Ukraine Ministry of Health testing center: <http://testcentr.org.ua/>
5. English-language web resource for doctors and other healthcare professionals: <http://www.medscape.com>
6. English text database of medical and biological publications: <http://www.pubmed.com>
9. English-language web resource for doctors and other healthcare professionals: <https://emedicine.medscape.com/pulmology>

EVALUATION

Current control methods:

Current control is carried out on the software in accordance with the formulated tasks for each topic. When evaluating educational activities, preference is given to standardized methods of control: oral survey, evaluation of a report on the clinical analysis of thematic patients, evaluation of the ability to participate in a discussion on problematic issues. When mastering each topic for the current educational activity, the student is given traditional grades on a 4-point scale. The current academic performance is calculated as the average current score, i.e. the arithmetic average of all grades received by the graduate student (student) on a traditional scale, rounded to 2 (two) decimal places, for example 4.75.

Assessment of current discipline control

Evaluation criteria:

□ **"excellent"**: acquires special creative abilities, knows how to independently acquire knowledge, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to solve problems, is able to produce innovative ways of solving problems, convincingly argues answers, reveals independently own gifts and inclinations.

□ **"good"**: the learner is fluent in the studied amount of material, applies it in practice, freely solves tasks and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant.

□ **"satisfactory"**: the student is able to master a significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, can analyze the educational material with the help of the teacher, correct errors, among which there are a significant number of essential ones.

□ **"unsatisfactory"**: the acquirer possesses the material at the level of individual fragments, which constitute a small part of the educational material.

Only those applicants who have no academic debt and have an average score for the current educational activity of at least 3.00 are admitted to the final certification.

Forms and methods of final control:

The final control in the form of a credit in the form of an individual interview is carried out at the final class after successful assimilation of all topics of the DS "Liver disease. Liver Echinococcus". Students who have attended all classroom classes prescribed by the DS, completed the entire volume of SR and have an average score for the current educational activity of at least 3.00 are admitted to the credit.

The grade for the discipline is the arithmetic average of two components: the average current score as the arithmetic average of all current grades; traditional credit assessment

The average score for the discipline is translated into a traditional evaluation of the discipline on a 4-point scale and is considered as the ratio of this arithmetic average to the percentage of assimilation of the required amount of knowledge in the given subject.

Conversion of the traditional grade in the discipline on a multi-point scale: performed by the information and computing center of the university. The obtained average grade for the discipline by multiplying it by 40 (the obtained grade is rounded to whole numbers) is converted into a grade on a 200-point scale, which, in turn, is converted into a traditional grade on a discipline on a 4-point scale.

The average score for the discipline. The grade for the discipline on a 200-point scale Discipline assessment on a 4-point scale (traditional assessment)

4.62–5.0	185–200	5
3.77-4.61	151-184	4
3.0-3.76	120-150	3

Self-control students` work (SSCW)

Makes 50% of the DS volume and includes: pre-auditory and extra-auditory preparation for lectures, software in accordance with thematic plans; work in departments of the clinical base of the department, including laboratories and the department of functional diagnostics, interpretation of data from laboratory and instrumental research methods related to the problems of gender and age-related cardiology in extra-auditory time; learning practical skills with the help of a phantom
□ KRSP Harvey, working with patients; individual work: speech at the clinic's scientific and practical conference, writing articles, etc.

The teachers of the department provide the opportunity to carry out SSCW and during the PW and the exam conduct control and evaluation of its implementation.

COURSE POLICY ("rules of the game")

Deadlines and Rescheduling Policy.

Tasks must be completed on time according to the deadline (class schedule). For untimely completion of the assignment, the graduate student receives an unsatisfactory grade. If the student of higher education was absent from classes for any reason, then the practice is carried out within the deadlines set by the teacher in accordance with the "Regulations on the organization of the educational process at ONMedU" (link to the regulations on the university's website <https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnijproces.pdf>). The rescheduling of credit is carried out in accordance with the schedule approved by the dean's office.

Academic Integrity Policy

The policy of the educational component is based on the principles of academic integrity (the provision is available on the university website <https://onmedu.edu.ua/wp-content/uploads/2020/07/polozhennja-prodobrochesnist.pdf>) and is determined by the system of requirements that the teacher presents to the applicant when studying the educational component: a) independent performance of educational tasks, tasks of current and final control of learning results (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities); b) references to sources of information in the case of using ideas, developments, statements, information.

Attendance and Tardiness Policy

In order to receive a satisfactory grade, it is mandatory to attend and work during classroom classes (lectures and software). Late arrivals are not welcome. The applicant is allowed to be late for a good reason for no more than 10 minutes.

Mobile devices

Use of telephones and computer facilities without the permission of the teacher is a violation of discipline. Mobile devices are allowed to be used only during online testing.

Behavior in the audience

The course involves working in a team (group, members of the department's team, employees of the department's clinical base). All communication environments are friendly, creative, open to constructive criticism. The following values are supported: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as one's own opinion; respecting the dignity of the opponent's personality during communication; compliance with the ethics of academic relationships

Developers:

Head

**Department of Surgery No. 2,
doctor of medicine, professor**

Honored Doctor of Ukraine Zaporozhchenko B.

Head teachers

Department of Surgery No. 2,

Doctor of Medicine, associate professor Borodaev I.

Department of Surgery No. 2

Doctor of Medicine Muravyov P.