

Approved

At the meeting of the Faculty Council Medicine nr. 2 Minutes No. 3 of 25.02.2014

Dean of the Faculty Medicine 2 PhD, associate professor Mircea Bețiu

Approved

At the meeting of the chair Surgery nr.1 "Nicolae Anestiadi" Minutes No. ______ of _____ . ____ 02 . _____

Head of the chair, PhD, university professor Gheorghe Ghidirim

SYLLABUS FOR STUDENTS OF THE FACULTY MEDICINE nr. 2

Name of the course: Surgical Diseases

Code of the course: S.07.O.052

Type of course: compulsory

Total number of hours – 140

lectures 40 hours, practical lessons 100 hours

Number of credits provided for the course: 7

Lecturers teaching the course: teaching assistant, Marin Vozian, MD

researcher, Gheorghe Zastavniţchi, MD, PhD teaching assistant, Elina Şor, MD teaching assistant, Elena Pleşco, MD teaching assistant, Liuba Strelţov, MD

teaching assistant, Eugen Beschieru, MD, PhD

Chișinău 2014



I. Aim of the discipline

- To study the etiology, pathogenesis, classification and clinical signs, diagnosis, differential diagnosis and treatment of surgical diseases;
- To study the theory and practical skills, which will allow the future doctor to deal with emergency situations and to build an adequate algorithm of emergency examination and treatment;
- To assimilate the diagnostic methods, management of different surgical pathologies;
- Giving emergency care to the patients with different surgical pathologies.

II. Objectives obtained in teaching the discipline

- <u>At the level of knowledge and understanding</u>
 - To recognize the surgical diseases in a patient;
 - To know the particularities of the onset and evolution of different surgical pathologies;
 - To understand the methods and particularities of patients' examination;
 - When and how to transfer a patient to specialized departments;
 - To know the incidence, etiology and pathogenesis of abdominal surgical diseases, as well as abdominal trauma;
 - To know the modern diagnostic methods (emergency and elective) in surgical diseases;
 - To know the modern treatment methods of abdominal surgical diseases and abdominal trauma;
 - To know the prophylaxis methods of acute and chronic pathologies of the abdominal organs.
- <u>At the level of application</u>
 - To collect and evaluate correctly of the history data;
 - To perform correct physical examination of the patients with different surgical pathologies;
 - To establish correct presumptive diagnosis;
 - To assess the patients' general state severity;
 - To provide emergency care in critical situations.
- <u>At the level of integration</u>
 - To appreciate the role of surgical diseases within medicine;
 - To address creatively fundamental medicine issues;
 - To create interrelations between Surgical Diseases and other medical disciplines;
 - To implement and integrate of the obtained knowledge with fundamental disciplines;
 - To evaluate adequately the gained knowledge;
 - To assimilate new trends in the surgical diseases field and to integrate it with other medical disciplines.



III. Provisional terms and conditions

In order to understand well the discipline a student should possess strong knowledge in the field of biology, chemistry, anatomy, histology, biochemistry, pharmacology, pathomorphology, pathophysiology, semiotics of general surgery etc., obtained during the first 3 years.

IV. Main theme of the course

A. Lectures:

Nr.	ΤΟΡΙΟ	Nr. of hours
1	Acute appendicitis: classification. Clinical features. Diagnosis and differential diagnosis, surgical treatment.	2
2	Evolutional complications of acute appendicitis: symptoms, diagnosis, and management. Postoperative complications. Chronic appendicitis.	2
3	Intestinal obstruction: etiology, pathogenesis. Homeostasis and hydro- saline imbalances in intestinal obstruction. Classification, clinical features, diagnosis, differential diagnosis.	2
4	Intestinal obstruction: clinical forms (volvulus, intussusceptions, obstructive tumors, gallstone ileus etc), clinical features, differential diagnosis, surgical management. Pre- and postoperative period: preoperative preparation, postoperative treatment, methods of intestinal function stimulation, postoperative complications.	2
5	Hernias of the abdominal wall. Anatomy, topography of the abdominal wall. Simple (reducible) hernias. Diagnosis. Treatment.	2
6	Complications of hernias. Strangulated hernias. Clinical features. Diagnosis. Surgical treatment.	2
7	Chronic venous insufficiency. Classification. Etiology. Clinical features. Diagnosis. Treatment. Superficial and deep acute thrombophlebitis. Clinical features. Diagnosis. Treatment.	2
8	Acute phlebothrombosis: clinical features, diagnosis and differential diagnosis. Postthrombophlebitic syndrome: etiopathogenesis, classification, clinical features, treatment. Pulmonary thromboembolism.	2
9	Cholelithiasis. Chronic lithiasic cholecystitis: clinical forms, symptoms, diagnosis and differential diagnosis. Biliary colic: variants of evolution, clinical features. Treatment. Postoperative complications.	2
10	Complications of cholelithiasis: classification, prophylaxis. Acute cholecystitis: etiology, classification, surgical tactics, postoperative treatment. Choledocolithiasis, acute Cholangitis: definition clinical	2



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	features, diagnosis. Treatment methods.	
11	Acute pancreatitis. Anatomy and physiology of the pancreas. Etiology, pathogenesis. Clinical features. Methods of diagnosis. Medical and surgical treatment.	2
12	Early complications of acute pancreatitis: classification, clinical features, diagnosis, treatment. Late complications of acute pancreatitis: classification, clinical features, diagnosis, treatment.	2
13	Peritonitis: etiopathogenesis, classifications, primary, secondary, tertiary peritonitis. Clinical features. Diagnosis and differential diagnosis.	2
14	Treatment of peritonitis: preoperative preparation; intraoperative tactics: volume of surgery, lavage and drainage of the peritoneal cavity; postoperative management.	2
15	Anatomy and physiology of the stomach and duodenum. Peptic ulcer disease: etiopathogenesis, classification, clinical and paraclinical diagnosis. Complications of the peptic ulcer. Treatment of the gastroduodenal ulcer: indications. Surgical procedures, postoperative management.	3
16	Acute complications of the gastroduodenal ulcer: perforation, bleeding. Clinical features. Diagnosis. Surgical management.	3
17	Chronic complications of the gastroduodenal ulcer: penetration, pyloric stenosis, malignancy. Clinical features. Diagnosis. Surgical management.	2
18	Thoracic trauma: classification, clinical features, diagnosis, treatment.	2
19	Abdominal trauma: classification, clinical features, paraclinical methods of examination. Traumatic injuries of solid and hollow abdominal organs: clinical features, diagnosis, treatment.	2
TOTAL		40

B. Practical lessons:

Nr.	Торіс	Nr. of hours
1	Acute appendicitis: classification. Clinical features. Diagnosis and differential diagnosis, surgical treatment.	5
2	Evolutional complications of acute appendicitis: symptoms, diagnosis, and management. Postoperative complications. Chronic appendicitis.	5
3	Intestinal obstruction: etiology, pathogenesis. Homeostasis and hydro- saline imbalances in intestinal obstruction. Classification, clinical features, diagnosis, differential diagnosis.	5
4	Intestinal obstruction: clinical forms (volvulus, intussusceptions,	5



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	obstructive tumors, gallstone ileus etc), clinical features, differential diagnosis, surgical management. Pre- and postoperative period: preoperative preparation, postoperative treatment, methods of intestinal function stimulation, postoperative complications.	
5	Hernias of the abdominal wall. Anatomy, topography of the abdominal wall. Simple (reducible) hernias. Diagnosis. Treatment.	5
6	Complications of hernias. Strangulated hernias. Clinical features. Diagnosis. Surgical treatment.	5
7	Chronic venous insufficiency. Classification. Etiology. Clinical features. Diagnosis. Treatment. Superficial and deep acute thrombophlebitis. Clinical features. Diagnosis. Treatment.	5
8	Acute phlebothrombosis: clinical features, diagnosis and differential diagnosis. Postthrombophlebitic syndrome: etiopathogenesis, classification, clinical features, treatment. Pulmonary thromboembolism.	5
9	Cholelithiasis. Chronic lithiasic cholecystitis: clinical forms, symptoms, diagnosis and differential diagnosis. Biliary colic: variants of evolution, clinical features. Treatment. Postoperative complications.	5
10	Complications of cholelithiasis: classification, prophylaxis. Acute cholecystitis: etiology, classification, surgical tactics, postoperative treatment. Choledocolithiasis, acute Cholangitis: definition clinical features, diagnosis. Treatment methods.	5
11	Acute pancreatitis. Anatomy and physiology of the pancreas. Etiology, pathogenesis. Clinical features. Methods of diagnosis. Medical and surgical treatment.	5
12	Early complications of acute pancreatitis: classification, clinical features, diagnosis, treatment. Late complications of acute pancreatitis: classification, clinical features, diagnosis, treatment.	5
13	Peritonitis: etiopathogenesis, classifications, primary, secondary, tertiary peritonitis. Clinical features. Diagnosis and differential diagnosis.	5
14	Treatment of peritonitis: preoperative preparation; intraoperative tactics: volume of surgery, lavage and drainage of the peritoneal cavity; postoperative management.	5
15	Anatomy and physiology of the stomach and duodenum. Peptic ulcer disease: etiopathogenesis, classification, clinical and paraclinical diagnosis. Complications of the peptic ulcer. Treatment of the gastroduodenal ulcer: indications. Surgical procedures, postoperative management.	5
16	Acute complications of the gastroduodenal ulcer: perforation, bleeding. Clinical features. Diagnosis. Surgical management.	5



17	Chronic complications of the gastroduodenal ulcer: penetration, pyloric stenosis, malignancy. Clinical features. Diagnosis. Surgical management.	5
18	Thoracic trauma: classification, clinical features, diagnosis, treatment.	5
19	Abdominal trauma: classification, clinical features, paraclinical methods of examination. Traumatic injuries of solid and hollow abdominal organs: clinical features, diagnosis, treatment.	5
20	Patients' examination. Clinical case. Examination: discussion of clinical case.	5
	TOTAL	100

V. Recommended literature:

- A. compulsory:
- 1. Lectures
- 2. Gh. Ghidirim, E. Gutu, Gh. Rojnoveanu. Surgical pathology, 2006

- B. additional:

- 1. F. Brunicardi, Dana Andersen, Timothy Billiar, David Dunn, John Hunter, Jeffrey Matthews, Raphael E. Pollock. Schwartz's Manual of Surgery, 8th Edition 2006.
- 2. Michael W. Mulholland. Greenfield's surgery: scientific principles and practice, 4th Ed, 2006
- 3. Courtney M. Townsend R. Daniel Beauchamp B. Mark Evers. Sabiston Textbook of Surgery, 18th ed., 2007
- 4. Robert M. Zollinger, Jr., MD, FACS; E. Christopher Ellison, MD, FACS. Zollinger's Atlas of Surgical Operations, 9 th ed., 2010
- 5. Adam Brooks (Editor), Bryan A. Cotton (Editor), Nigel Tai (Editor), Peter F. Mahoney (Editor). **Emergency Surgery**, 2010
- 6. Britt, L.D.; Trunkey, Donald D.; Feliciano, David V. (Eds.). Acute Care Surgery: Principles and Practice, 2007
- 7. Qassim Baker, Munther Aldoori. Guidelines in Clinical Surgery A Trainee Handbook, 2009
- 8. Klingensmith, Mary E.; Chen, Li Ern; Glasgow, Sean C.; Goers, Trudie A.; Melby, Spencer J. **Washington Manual of Surgery, The,** 5th Edition 2008
- 9. Haile T. Debas. Gastrointestinal Surgery Pathophysiology and Management. 2004
- Jeffrey A. Norton, R. Randal Bollinger, Alfred E. Chang, Stephen F. Lowry, Sean J. Mulvihill, Harvey I. Pass, Robert W. Thompson, Michelle Li. Essential Practice of Surgery Basic Science and Clinical Evidence. 2003

VI. Teaching and learning methods

Surgical diseases course is taught in a classical way: with lectures and practical seminars. During lectures theoretical data are provided by the lecturers. During practical seminars clinical cases are studied, physical and paraclinical examination of the patient, diagnosis, medical care, treatment, prophylaxis and treatment of complications, discussion of the data given at lectures.



Within the surgical departments the students will participate at the rounds, patients' presentation and discussion, conferences, will manage patients, visit the operating room.

Lectures and seminars are held within clinical departments of the chair: septic surgery, aseptic surgery, trauma surgery, and endoscopy.

Clinical facilities are within IMSP CNSPMU and IMSP SCM nr.2 "Sf. Arh. Mihail".

Discipline Surgical Diseases is studied during IV university year, within one semester (VII or VIII). The state exam has more than de 65% of questions from Surgical Diseases.

VII. Suggestions for individual activity

Contact with the patient is very important, physical examination, assessment of clinical data. Main part of the seminar is working with patients, practical skills learning.

All the particularities of every surgical pathology are discussed according to analytic program. In order to succeed a student should:

- Initially read the material. Make notes. Try to underline main moments. Study the schemes and figures from the books. Again: READ!
- Be present at lectures and seminars, but not only for the presence itself. Try to understand the information.

Ask questions to your teacher, to yourself and each other. Asking questions means you are trying to understand and analyze the information.

VIII. Methods of assessment

At the end of the course students are evaluated by: practical exam including a clinical case, test and oral exam. 100 minutes are given for the test (1 minute per question). Tests have several variants with 100 questions. Students who didn't recover the absences and didn't pass the practical exam are not admitted to the final exam.

Questions from Surgical Diseases are included in the State Exam (test and oral exam).

Knowledge evaluation is performed with marks from 1 to 10 as follows:

- 10 or "excellent" (ECTS-A) for 91-100% material knowledge;
- 9 or "very good" (ECTS-B) for 81-90% material knowledge;
- 8 or "good" (ECTS-C) for 71-80% material knowledge;
- 6 and 7 or "satisfactory" (ECTS-D) for 61-65% and 66-70% material knowledge;
- 5 or "poor" (ECTS-E) for 51-60% material knowledge;
- 3 and 4 (ECTS-FX) for 31-40% and 41-50% material knowledge;
- 1 and 2 or "bad" (ECTS-F) for 0-30% material knowledge.



Methods of mark rounding

The average of current and final marks	Final mark
5	5
5,1-5,5	5,5
5,6-6,0	6
6,1-6,5	6,5
6,6-7,0	7
7,1-7,5	7,5
7,6-8,0	8
8,1-8,5	8,5
8,6-9,0	9
9,1-9,5	9,5
9,6-10	10

Absence on examination without good reason shall be recorded as "absent" and is equivalent to 0 (zero). The student has the right to re-take the exam twice.

IX. Language of study

English