TAJIK NATIONAL UNIVERSITY FACULTY OF MEDICINE DEPARTMENT OF SURGERY № 1



DISCIPLINE CURRICULUM "SURGICAL DISEASES"

TAJIK NATIONAL UNIVERSITY, FACULTY OF MEDICINE DEPARTMENT OF SURGERY NO.1

GENERAL CURRICULUM ON THE DISCIPLINE, MATERIAL ON THE CONDUCT OF (for 4th year students majoring in 79010100)

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EXPLANATORY NOTE

This working program establishes the minimum requirements for knowledge and skills of medical students in the field of surgical diseases. The program provides a list of surgical diseases of the cardiovascular system, diagnosis and treatment of which the student should know, and practical skills that he/she should master during pre-diploma training for further internship, master's or clinical residency in the chosen specialty.

Teaching should be based on a syndrome approach to the study of the main pathological conditions in surgery. Interdisciplinary continuity should be taken into account in the teaching of individual topics. Here are taught such sections as: surgical complications of infectious and parasitic diseases (malaria, typhoid, anthrax), basic knowledge of etiopathogenesis, epidemiology, diagnosis and therapy in the course of infectious diseases, chest trauma, surgical lung disease, surgical diseases of the liver and spleen, the concept of surgical operations and the main stages of surgical interventions, the basics of oncology and the basics of resuscitation. The inclusion and detailed familiarization with these topics is due to regional needs, in particular the increasing number of patients with such diseases. The treatment of a number of surgical diseases requires the knowledge of etiopathogenesis and principles of convalescent therapy acquired in the course of internal medicine. This principle is taken into account in the construction of the program for all sections of surgery.

Teaching is based on the principles of maximizing the proximity and involvement of students in practical activities, and the study of the course is based on the following basic disciplines: anatomy, histology, biology, physiology, pathological physiology, biochemistry, topographical anatomy, pharmacology, general surgery.

The need to emphasize the issues of preoperative preparation, postoperative administration and rehabilitation in a number of pathologies is due to the essence of the specialty of the family medicine physician and helps to expand the principles of continuity between him and hospital surgeons.

The main goal of teaching surgical diseases in the 4th year is further in-depth theoretical study of the main surgical pathologies, training students to diagnose the main surgical diseases, mainly emergency pathologies, to determine the methods of their treatment and prevention. It is aimed at preparing graduates for relatively independent practical work as a general practitioner - family physician.

Objectives:

- 1. Further consolidation of theoretical knowledge of surgery acquired in previous courses.
- 2. To contribute to a sufficient understanding of the clinical manifestations of major surgical syndromes.
- 3. To familiarize students with the basics of medical personnel activity at all stages of treatment of surgical patients; with diagnostic capabilities of laboratory and instrumental methods of examination.
- 4. To maximize the students' approach to practical activity and teach the ability of comprehensive clinical examination of surgical patients.
- 5. To develop the ability to summarize the obtained data of clinical, laboratory and instrumental examination to make a diagnosis, conduct differential diagnosis, choose atactic and method of treatment.
- 6. To teach the ability to correctly determine the tactics of providing necessary local care and ways of further examination and treatment of patients with acute surgical pathology.
- 7. Widely involve in clinical physician conferences, debriefings, pathology conferences, medical osmosis, outpatient clinics, patient demonstrations at lectures, surgical society meetings.
- 8. To teach the necessary practical skills to examine and provide essential primary care for patients with common surgical pathologies.
 - 9. Maintain continuity of acquired basic knowledge in the learning process.
- 10.To improve knowledge of medical ethics and deontology, to conduct educational work with active involvement of subordinates in the social life of the university and clinic, cultural and mass events.

Classes are conducted according to the cycle method and consist of lectures and practical classes. Students supervise patients during practical classes,

make out medical documentation, 2-3 compulsory duty with the teacher in the evening hours are organized.

During the period of study, days should be allocated to work in the operating room and dressing rooms - clean and purulent departments. Students should preferably participate in the most typical and common in practice operations (phlebectomy, removal of benign tumors, etc.). Taking into account the recommendations of the instructor and the student's desire to participate in one or another type of work during the day. For direct familiarization with the peculiarities of diagnosis and treatment of some pathologies, on the basis of interdepartmental agreement, a number of classes can be held in specialized clinics, with the direct participation of the staff of the relevant departments.

The level of knowledge is checked by: oral questioning; solving situational tasks and test questions during seminars and practical classes; final questioning at the end of the cycle. Students who have passed the practical skills and theoretical credit on the program are admitted to the State Examination. According to the approved educational standard for higher medical education in the Republic of Tajikistan, a state diploma on graduation from a higher medical school is issued and the qualification of a doctor is assigned. Subsequently, after completing internship or master's degree in surgery, the doctor is allowed to perform surgery independently.

LIST OF PRACTICAL SKILLS AND COMPETENCIES

Upon completion of the surgical cycle, the student should be familiarized:

- 1. With the main issues of organization of surgical care in outpatient and inpatient settings, in particular, with the issues of medical examination, rehabilitation after surgery, assessment of workability.
- 2. With major advances in early diagnosis and treatment outcomes of the most common surgical diseases.

Skill:

1. Collect anamnesis, draw up a medical history and outpatient card, determine the plan and analyze the data of general clinical, laboratory and instrumental methods of examination of patients with surgical diseases.

- 2. To make a detailed diagnosis, justify it and make a differential diagnosis, determine the patient's treatment plan.
- 3. If necessary, determine the profile of the medical institution to which the patient should be referred for further examination and treatment,
- 4. The student must be **able to** provide first aid and know the principles of pre-hospital tactics in: a) profuse gastro-intestinal bleeding; b) external bleeding with wounds of the main vessels and soft tissues; c) tension and open pneumothorax; d) shock; e) acute abdomen.

A LIST OF THE BASIC PRACTICAL SKILLS AND ABILITIES THAT THE SUBORDINATE MUST MASTER AFTER COMPLETING THE CYCLE SURGERY

<u>Be able to interpret</u>: general blood test; general urinalysis; biochemical analysis of blood; Zimnitsky and Nechiporenko tests; stool analysis; analysis of duodenal contents; analysis of gastric juice; blood, urine, sputum cultures.

<u>Be able to diagnose</u>: typical syndromes and diseases according to such additional methods as: chest, abdomen, skeletal bones radiographs; liver, thyroid, ultrasound, CT, MRI.

The student should be <u>able to perform the following manipulations:</u>

- 1) subcutaneous and intramuscular injections;
- 2) intravenous transfusion of blood substitutes and infusion media;
- 3) determination of blood group and Rh factor by express method, determination of Rh incompatibility;
- 4) temporary stopping of bleeding (tourniquet application, finger clamping of vessels, wound tamponade, pressure dressing);
 - 5) Bladder catheterization with soft and hard catheters;
 - 6) insertion of a probe into the stomach for lavage, feeding, and juice collection;
 - 7) Thyroid and mammary gland palpation;
 - 8) finger examination of the rectum and vagina;
 - 9) Determine the pulse on the peripheral arteries of the extremities, neck and face;
 - 10) perform cleansing, therapeutic and siphon enemas;
 - 11) definition of daily water balance;
 - 12) mouth-to-mouth, mouth-to-nose, airway--

- 13) to perform indirect cardiac massage;
- 14) to apply a Blakemore probe;
- 15) puncture and closed drainage of the pleural cavity;
- 16) puncture biopsy of soft tissue masses;
- 17) venesection;
- 18) master the basic methods of determining the patency of deep veins. insolvency of lower limb vein valves.
- 19) the technique of applying elastic bandages to the lower and upper extremities:
 - 20) with the abdominal bandage technique;
- 21) the technique of applying plaster bandages and simple plaster casts to the extremities;
 - 22) Novocain blockades (areas of fractured tubular bones, ribs),
- 23) methods of temporary immobilization of fractures of tubular bones, pelvic bones and spine;
 - 24) technique of occlusive dressing for pneumothorax;
 - 25) methodology of preparing severed limb segments for trans-portation.

In addition, the student must be able to assist the second assistant in such operations as: primary surgical wound care; laparotomy and revision of abdominal cavity organs; appendectomy; herniotomy; thoracotomy; tracheostomy; removal of benign soft tissue masses and at the same time independently perform the following surgical techniques: skin sutures; opening of panarisis; superficial abscesses and phlegmons of soft tissues.

SCHEDULE OF THEMATIC CLASSES IN THE DISCIPLINE "Surgical Diseases."

Number of total hours: 72 hours of which: 48 hours of lectures, 24 hours of classroom practical training.

	List of topics and sections	Number of hours	
Nº		Lecture	Practical training
1	Topic #1. Purulent surgical diseases of soft tissues: furuncle, carbuncle, hidradenitis, lymphad-	2	3

	nititis, lymphangoitis, abscess, phlegmon. Etiopathoge- nesis, clinic, diagnosis and treatment.				
2	Topic #2. Surgical complications of gastric and duodenal ulcer disease. P r i n c i p l e s of diagnosis, differential diagnosis, conservative and surgical treatment. Surgical tactics. Bleeding from the digestive organs. Operated gastric ulcer after gastric re-section. Deping syndrome Etiopathogenesis, classification, clinic, diagnosis and treatment. Methods of emergency care at the stages of medical care	2	3		
3	Topic #3 Surgical complications of parasitic d i s e a s e s (typical for the region) - e c h i n o c o c c o s i s o f t h e lungs, liver and abdominal cavity organs, amebiasis, etc. The principles of diagnosis and surgical treatment. Principles of diagnostics and surgical treatment. Surgical complications of infectious diseases (typical for the r e g i o n) - typhoid fever, anthrax, malaria, etc. The principles of diagnosis and surgical treatment. Principles of diagnosis and surgical treatment.	2	3		
4	Topic #4 External abdominal hernias. Postoperative and rare types of hernias. Diagnosis, differential diagnosis of hernias. Peculiarities of surgical tactics. Principles of preoperative preparation and postoperative management of patients. Internal hernias. Impingement and other complications of hernias. Diagnosis, differential diagnosis of hernias. Peculiarities of surgical tactics. Principles of preoperative management of patients.	2	3		
5	Topic #5 Gallstone disease. Acute cholecystitis. Methods of research, classification, clinic, diagnosis, difdiagnosis. First aid and principles of conservative therapy. Surgical treatment. Chronic cholecystitis. Classification, clinic, diagnosis, dif-diagnosis. Basic principles of conservative therapy. Complication iron-stone disease. Surgical treatment.	2	3		

6	Topic #6 Features of diagnosis and dif-diagnosis of acute appendicitis and its complications. Clinic, modern additional diagnostic methods and surgical tactics. Peritonitis. Etiopa-togenesis, classification, clinic, diagnosis and dif-diagnosis. Preoperative preparation, principles of surgical treatment.	2	3
7	Topic #7 Acute intestinal obstruction. Classification, etiopathogenesis, clinic, principles of conservative and operative treatment. Surgical tactics. Complications of acute intestinal o b s t r u c t i o n . Special types of acute intestinal permeability. Etiopathogenesis, classification, clinic and principles of conservative and surgical treatment. Acute mesenteric throm-bosis. Causes, classification, principles of diagnosis, prophylaxis and treatment.	2	3
8	Topic #8 Diseases of the colon. Non-specific ulcerative colitis, Crohn's disease. Tumors of the rectum and colon. Diseases of the rectum and perianal area. Hemorrhoids, para-proctitis fissures, epithelial fistula. prolapse of t h e rectum.	2	3
9	Total	16	24

PRACTICAL TRAINING SUMMARY

Practical training No. 1

Topic: Purulent surgical diseases of soft tissues: furuncle, carbuncle, hidradenitis, lymphadenitis, lymphangoitis, abscess, phlegmon.

Etiopathogenesis, clinic, diagnosis and treatment.

Objective: to familiarize students with the basic types of wounds, timely diagnosis, emergency care depending on the type of wound and type of infection. Familiarization with the types of conservative treatment of surgical purulent soft tissue disease vskritiye pustules. Teaching the basic principles of prophylactic and immunologic measures to prevent nosocomial infection. Providing-

The organization of sanitary and epidemiological measures in the case of specific types of infection.

Familiarization of students with the main types of purulent diseases of soft tissues, timely diagnosis, emergency care depending on the type of wound and type of infection. Familiarization with types of conservative treatment of purulent diseases of soft tissues and surgical treatment of soft tissues.

In order to realize the above goal, the following tasks need to be addressed:

- Basic concepts and classification of wounds. Study of the main symptoms of different types of wounds.
 - Study of the functional morphology of the wound process.
- Familiarization with specific types of wound infection, etiology of the disease, their classification, course of the infectious process, epidemiology of wounds and wound infection.
 - •Principles and types of surgical treatment of wounds depending on their type;
- Choice of tactics of conservative (general and local antibacterial, antiinflammatory, immunostimulating) therapy.
 - A study of the basic processes of wound healing.
 - Prevention of the development of specific and nonspecific wound infection;
- Basic concepts and classification of purulent soft tissue diseases. Study of the main symptoms of various types of purulent soft tissue diseases.
- Familiarization with the etiology of purulent soft tissue diseases, their classification, the course of the infectious inflammatory process, epidemiology of wounds and wound infection.
- Principles and types of surgical treatment of soft tissues depending on the type of purulent diseases;
- Selection of tactics of conservative (general and local antibacterial, antiinflammatory, immunostimulating) therapy.
 - Study of the basic processes of soft tissue healing.

Expected results - students should familiarize themselves with the main types of wounds. They should have a general understanding of the micro-biology, functional morphology, immunology of the wound process. Students learn the characterization of pathogens, know how to justify a diagnosis based on cardinal symptoms. Should know the peculiarities of wound healing depending on the nature of the injury and the conditions of the course of the wound pro-

The process. Familiarization with the principles and types of surgical treatment of wounds. They study the method of treatment and prevention of special types of wound infection, as well as purulent complications in various types of wounds.

Students should familiarize themselves with the main types of suppurative soft tissue diseases. They should have a general understanding of the my-biology, functional morphology, immunology of the inflammatory, infectious process. Students study the characteristics of pathogens, are able to justify the diagnosis on the basis of cardinal symptoms. Should know the peculiarities of wound healing depending on the nature of purulent soft tissue infections and the conditions of the wound process. Familiarization with the principles and types of surgical treatment of soft tissues.

Summary of the practical session:

Knowledge of the basic concepts and the main types of wounds pathogenesis, clinic and principles of their treatment forms the basis of almost all types of surgical interventions. The main types of purulent surgical infection. Knowledge of the etiopathogenesis of wounds and wound infection, their features and epidemiology determines the diagnosis and treatment tactics of various types of wounds. Fundamentals of microbiology, functional morphology and immunology of the wound process. Operative and non-operative wounds require special control. Immunology of the wound process.

Knowledge of etiology, pathogenesis, classification, clinic, principles of treatment and prevention of special types of wound infection - anaerobic, putrefactive, tetanus, anthrax. Timely diagnosis, emergency care depending on the type of wound infection. Sanitary and epidemiological measures and sanitary-hygienic regime in the department and ward for special types of wound infection - anaerobic, putrefactive, tetanus, anthrax, anthrax, bite wounds.

To know the principles of prevention of surgical infection or treatment of wound infection proper (specific and non-specific). First aid treatment for various types of wounds. Be able to conduct rational antibacterial therapy, both general and local. Detoxification. Correction of changes in the homoeostasis system in patients with purulent infection. Vaccine therapy and immunotherapy for anaerobic, putrefactive, tetanus, anthrax, siberian ulcer wounds, bite wounds.

Indications and contraindications for surgical treatment of purulent wounds. Surgical treatment of purulent wounds. Suturing a purulent wound, indications and contraindications. Drainage of purulent wound s, methods and

types. Modern advanced methods of treatment of wounds and wound infection (laser therapy, UHF-MHF therapy, vacuum wound treatment, ultrasound wound treatment, cryosurgery, UVO). Postoperative management of patients. Treatment of wounds in a controlled abacterial environment.

Purulent diseases of the skin, glandular organs, bones, fingers and hands. Know the principles of prevention of surgical infection or treatment of purulent diseases of soft tissues. First aid in various types of purulent diseases of soft tissues. Be able to conduct rational antibacterial therapy, both general and local. Detoxification. Correction of changes in the system of homoeostasis in patients with purulent infection. **Equipment of the practical t r a i n i n g : the** use of technical means of training, tables, drawings, slides, carrying out manipulations and operations in the operating room and dressing room, studying the dynamics of wound treatment with demonstration of different groups of patients, showing the process, photographs and

training films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, analysis at the bedside of patients, in the dressing room and operating room, interpretation of the results of laboratory and instrumental methods of research.

Students' independent work consists of repeating the relevant topics in anatomy, histology, pathomorphology, pharmacology, microbiology, infectious diseases, general surgery, work with additional literature, etc.

Recommended reading:

- 1. Gostischev V.K. General Surgery, Moscow, 2006, 832 p.
- 2. Gostischev V.K. Operative purulent surgery, M., 1996, 416 p.
- 3. Kolesov A.P. et al, Anaerobic infection in surgery. L. 1989, 160 pp.
- 4. Kuzin M.I. Wound and wound infection, M., 1990, 592 p.
- 5. Voyno-Yasenetsky V.F. Sketches of purulent surgery St. Petersburg, 2000, 704 p.
- 6. General Surgery, Vol. I-II, ed. by Zubarev P.K., St. Petersburg, 2000.

Practical session No. 2

Topic: Surgical complications of gastric and duodenal ulcer disease. Clinic, diagnosis, principles of conservative and surgical treatment. Surgical tactics. Bleeding from digestive organs. Etiopathogenesis, classification, clinic, diagnosis and treatment. Emergency care at the stages of medical care.

Objective: to familiarize with the main types of complications of gastric and duodenal ulcer disease, causes leading to their occurrence, principles of diagnosis. Conservative therapy and justification of surgical intervention.

To familiarize with the main types of bleeding from the gastrointestinal tract, the principles of diagnosis and emergency medical care. Conservative therapy and justification of surgical interventions.

In order to realize the above goal, the following tasks need to be addressed: • Determine the level of basic knowledge of anatomophysiological features

of the stomach and duodenum;

- •To familiarize with the main types of surgical interventions for gastric and duodenal ulcer disease;
 - Principles of justification of indications for surgical treatment and its types;
 - •Themaintasksofthepostoperativeperiod, prevention of complications;
 - · Classification of degrees of bleeding;
 - The main signs of internal bleeding and its diagnosis;
- Principles of justification of indications for surgical treatment and its main types;
 - Consequences and dangers of major blood loss;
 - Indications for transfusion therapy and complications of hemotransfusions;

Expected results - timely detection of the ineffectiveness of conservative therapy in complications of peptic ulcer disease, the need for emergency medical care danger of the consequences of ulcer bleeding, the correct definition of the scheme of anti-ulcer conservative therapy.

Timely determination of the severity, duration and volume of bleeding. Choosing the correct hemostatic therapy - drugs and hemotransfusion. The need for emergency treatment, dangers and consequences of bleeding.

Summary of the practical session:

Perforation of gastric and 12-peritoneal ulcer. Clinic, diagnosis, dif-diagnosis. Special techniques of diagnostics of gastric and duodenalulcer perforation. Choice of the method of surgical intervention. Penetration of ulcer. Clinic, diagnosis, treatment. Indications and contra-

indications for surgery.

Pyloroduodenal stenoses, pathogenesis. Classification. Diagnosis, indications for surgery. Principles of preoperative preparation.

Rehabilitation of patients after operations on the stomach and 12-perestine for peptic ulcer disease and its complications.

Ulcerative bleeding from the stomach and duodenum. Pathogenesis Classification. Clinic, diagnosis, dif-diagnosisIndi- vidual-active surgical tactics in gastroduodenal bleeding. Treatment - conservative and operative. Indications and pro- tivocations for emergency surgical treatment. Endoscopic methods of stopping bleeding. Postoperative management of patients. Prevention.

Gastrointestinal bleeding of ulcer and non-ulcer etiology, diseases related to them, the frequency of their occurrence. Clinical characteristics of gastrointestinal bleeding, degrees of blood loss. Diagnosis of gastrointestinal bleeding. Assistance at the stages of evacuation of the patient. Principles of conservative therapy, hemostatic agents. Separate types of bleeding - stress ulcers, bleeding in potral hypertension, Mellory-Weiss syndrome, bleeding from the small and large intestine, hemorrhoids, anal fissures, tumors of the large intestine and others. Diff-diagnosis of bleeding from the respiratory and digestive tracts and various levels of the gastrointestinal tract.

Equipment of the practical training: use of technical means of training, tables, drawings, slides, radiographs, carrying out methods of research in functional rooms and endoscopy room, manipulations and operations in the operating room and dressing room, showing photos and training films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, differential diagnostics, bedside examination of patients, demonstration of laboratory and instrumental examination results, interpretation of laboratory indicators, ultrasound, radiographs.

Independent work of students: repetition of knowledge on anatomy and physiology of the stomach and duodenum, critical conditions and their intensive care, correction of homeostasis, practical skills in the insertion of nasogastric and gastric tubes, enteral and parenteral nutrition, preparation of patients for radiological examination, participation in postoperative or conservative treatment of patients onduty, work with additional literature.

Recommended reading:

- 1. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 2. KuzinM.I. Surgical diseases (textbook), M. "Medicine". 2002.-784c.
- 3. Kurbonov K.M. Manual on emergency surgery of abdominal cavity organs, Dushanbe. 678c.
 - 4. Kurbonov K.M. Surgical diseases of the abdomen, Dushanbe, 867c.
- 5. Course of lectures on hospital surgery. Edited by N.U.Usmanov, Dushanbe, 2005, 2008.
- 6. Manual on emergency surgery of abdominal cavity organs, Edited by Saveliev V.S., M.1986.
 - 7. Savelyev V.S., Kirienko A.I. Surgical diseases, T.1-2, Moscow, 2006.
 - 8. Chernousov A.F. Surgery of gastric and duodenal ulcer disease. M 1996.
- 9. Shorokh G.P., Klimovich V.V.. Ulcerative gastroduodenal bleeding (tactics and treatment), Minsk, 1998. 156c.
- 10. Yudin S.S. Etudes of gastric surgery. Moscow: Medgiz, 1955, 264 p. Gorbashko A.N. Acute gastrointestinal bleeding. M., 1982
- 11. Mikhelson V.A., Manevich A. Fundamentals of resuscitation and anesthesiol- gy. M., 1992

Practical session No. 3

Topic: Surgical complications of parasitic diseases (typical for the region) - echinococcosis of the lungs, liver and abdominal organs, amebiasis, etc. The principles of diagnosis and surgical treatment. Principles of diagnosis and surgical treatment.

Surgical complications of infectious diseases (typical for the region) - typhoid fever, anthrax, malaria, etc. The principles of diagnosis and surgical treatment. Principles of diagnosis and surgical treatment.

Objective: general acquaintance with etiopathogenesis, clinic, principles of diagnostics, differential diagnostics and prophylaxis of human and ame-biasis echinococcosis, in particular in liver and lung lesions. Study of complications of echinococcosis, such as suppuration, cyst bursting into the biliary tract, abdominal cavity, bronchi and pleural cavity.

General acquaintance with etiopathogenesis, clinic and diagnostics of typhoid fever, malaria, anthrax, ascaridosis, viral hepatitis, abdominal tuberculosis. Clinical and laboratory diagnostics of complications of these diseases. Prevention of the spread of disease in

in the hospital and in the environment. Priority sanitary and epidemiologic measures.

In order to realize the above goal, the following tasks need to be addressed: • A study of the epidemiology of echinococcosis;

- Familiarization with the basic methods of diagnosing the disease;
- Study of the main clinical symptoms and laboratory values with and without complications;
- Providing first aid for complications of echinococcosis, ensuring the correct definition of the algorithm of diagnosis and treatment of parasitic patients in a surgical hospital;
 - Study of the general requirements of echinococcosis prevention;
- Study of epidemiology, clinic, diagnosis, methods of treatment and prevention of amoebiasis.
 - Study of the epidemiology of typhoid fever, malaria, anthrax, etc.;
 - Familiarize yourself with the basic methods of diagnosing these diseases;
- Study of the main clinical symptoms and laboratory values with and without complications;
- Provide basic requirements during the diagnosis and treatment of infectious patients in a surgical hospital;
 - The main types of surgical treatment of complications in infectious patients.

Expected results - reacquainted with echinococcosis and amoebiasis, possibilities of timely diagnosis and prevention of this disease. To know the principles of emergency medical aid at dangerous complications of echinococcosis of lungs and liver, amoebiasis. To know the principles of emergency medical care in early severe complications of lung and liver echinococcosis in order to correct them.

Awareness of the dangerous surgical complications of the above-mentioned diseases, with special attention to prescriptions during diagnosis and treatment of the above-mentioned infectious diseases. Sanitary and epidemiologic requirements for the follow-up of these patients to prevent spread. The need for surgical treatment when complications are detected early leads to good results.

Summary of the practical session:

Echinococcosis. Etiology, pathogenesis. Epidemiology. Methods of research. Clinic, diagnostics and differential diagnostics of echinococcosis.

for the lungs, liver, and abdominal organs. Complications of echinococcosis - suppuration, cyst rupture into the biliary tract, abdominal cavity, bronchi and pleural cavity, etc. Clinic, diagnosis and differential diagnosis. Determination of indications for surgical treatment. Principles of surgical treatment, chemotherapy. Radical and palliative operations. Chemotherapy, prognosis. Prevention of the disease and the role of the family doctor in this.

Amoebiasis. Forms of amoebiasis. Surgical complications - liver abscesses, intestinal bleeding, intestinal perforation, peritonitis. Clinic, diagnosis, surgical tactics. Types and methods of surgical treatment (opening of liver abscess, colostomy, resection of the colon, etc.). Prevention of amoebiasis and its complications.

Typhoid fever. Surgical complications - perforation of typhoid ulcers, intestinal bleeding, peritonitis. Features of diagnosis, medical tactics. Causes and prevention of complications.

Abdominal tuberculosis. Complications of abdominal tuberculosis (acute and chronic mesoadenitis, gastrointestinal bleeding, gastric ulcer perforation, intestinal obstruction, peritonitis) - surgical tactics. Conservative and surgical treatment. Palliative operations. Choice of surgical intervention.

Viral Hepatitis. Early and late complications of hepatitis B and C. Differential diagnosis of mechanical and infectious jaundice. Features of examination and management of patients until clarification of the diagnosis.

Ascaridosis. Sources of charge. Clinic and diagnosis of complicated forms of ascariasis (intestinal obstruction - intussusception and intestinal twists, gastrointestinal bleeding). Surgical tactics in complicated forms of ascariasis.

Malaria, clinical forms, peculiarities of epidemiology, diagnosis. Treatment and chemoprophylaxis. Surgical complications - sham acute abdomen, pseudoappendicitis, spleen rupture, thrombophlebitis of the spleen vein

"Surgical masks" of anthrax, Cutaneous and visceral forms. Peculiarities of differential diagnosis, medical tactics, sanitary-epidemiologic measures and actions of a physician when identifying patients with anthrax.

Equipment of the practical training: use of technical means of training, tables, drawings, slides, demonstration of different

The use of radiographs, tomograms and ultrasound examinations. Use of radiographs, tomograms and ultrasound findings.

Forms of testing knowledge, skills and practical skills by means of questioning, solving situational problems and test questions, questions of epidemiology, examination at the bedside of patients in the dressing room and in the operating room, interpretation of the results of laboratory and instrumental research methods, making a diagnosis.

Independent work of students consists of repeating the relevant topics on epidemiology, microbiology, infectious diseases, studying epidemiological requirements, studying the postoperative period on duty, working with additional literature, etc.

Recommended reading:

- 1. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 2.KuzinM.I.Surgicaldiseases(textbook), M. "Medicine". 2002.-784c.
- 3. Lisitsyn K.M., Revskoy A.K. Emergency abdominal surgery for infectious and parasitic diseases. M. 1988.
- 4. Milonov O.B., Toskin K.D., Zhebrovsky V.V., Postoperative complications and dangers in abdominal surgery. M. 1990, 560 p.
 - 5. Petrovsky B.V. et al. Surgery of echinococcosis, M.1985, 216c
 - 6. Pulatov A.T. Surgery of echinococcosis in children, L. 1983.
 - 7. Savelyev V.S., Kirienko A.I. Surgical diseases, T.1-2, Moscow, 2006.
- 8. Usmanov N.U. Diagnostics and surgical treatment of complicated forms of pulmonary echinococcosis. Dushanbe, "Matbuot", 2004. 184c.
- 9. Course of lectures on hospital surgery. Edited by N.U.Usmanov, Dushanbe, 2005, 2008.

Practical session No. 4

Topic: External abdominal hernias. Postoperative and rare types of hernias. Diagnosis, differential diagnosis of hernias. Features of surgical tactics. Principles of preoperative preparation and postoperative management of patients. Internal hernias. Impingement and other complications of hernias. Diagnosis, differential diagnosis of hernias. Peculiarities of surgical tactics. Principles of preoperative preparation and postoperative management of patients.

Objective: general idea of the main causes of external hernias and their main types. Prevention of complications in external hernias. Diagnosis and differential diagnosis in external hernias. To study certain types of external hernias. Study surgical tactics, types of hernioplasty. Prevention of hernia recurrences.

General idea of the main causes of internal hernias and their main types. Prevention of complications in internal hernias. Diagnosis and differential diagnosis in internal hernias. Operative treatment. Prevention of internal hernia recurrences.

In order to realize the above goal, the following tasks need to be addressed: • Repetition of the anatomy of the anterior abdominal wall:

- Familiarization with the main symptoms of external hernias, especially with their complications;
- Familiarization with the basic principles and requirements for preparing patients for surgery;
- Know the principle of suture material and prosthesis selection for hernia repair;
 - Preparing students to provide rehabilitation for postoperative patients.
 - Repetition of the anatomy of the anterior abdominal wall and abdominal cavity;
- Familiarization with the main symptoms of internal hernias, especially in their complications;
- Familiarization with the basic principles and requirements for preparing patients for surgery;
- Know the principle of suture material and prosthesis selection for hernia repair;
 - Preparing students to provide rehabilitation for postoperative patients.

Expected results - knowledge of the main causes of external hernias helps to prevent them. Knowledge of the complications of external hernias facilitates timely treatment of patients. Preoperative preparation reduces the duration of inpatient treatment. Rehabilitation of patients improves their quality of life in the postoperative period.

Knowing the main causes of internal hernias helps to prevent them. Knowing the complications of hernias will facilitate timely

treatment of patients. Preoperative preparation reduces the length of hospitalization. Rehabilitation of patients improves their quality of life in the postoperative period.

Summary of the practical session:

General doctrine of hernias. Definition of the concept, elements of hernia, hernia classification by origin, localization, course. Etiology and pathogenesis of hernias (predisposing and producing factors). General symptomatology of hernias, diagnosis and dif-diagnosis. Features of clinical picture in adults and children. Operative treatment, basic principles. Preoperative preparation and postoperative administration of patients. Causes of recurrence of hernias.

Separate forms of abdominal hernias - white line hernia, hernias of the urethra, tendon junctions and rectus abdominis, umbilical hernia, umbilical hernia in adults and in children.

inguinal and femoral hernias. Classification. Features of congenital and oblique inguinal hernia. Diagnosis and differential diagnosis, methods of inguinal herniasurgery. Peculiarities of herniorrhaphy in elderly and old people, as well as in women and children. Dangers and complications during herniorrhaphy surgery.

Selected types of internal hernias. Diaphragmatic hernias. Etiology, pathogenesis. Classification. Clinic, diagnosis, treatment. Hernias of the esophageal aperture of the diaphragm (sliding, paraesophagal). Classification, clinic, diagnosis, types of surgical intervention. Results of surgery.

Definition of internal hernias, classification of hernias by origin, localization, course. Etiology and pathogenesis of internal hernias (predisposing and producing factors). General symptomatology of internal hernias, diagnosis and dif-diagnosis. Features of clinical picture in adults and children. Operative treatment, basic principles. Features of preoperative preparation and postoperative management of patients with internal hernias. Causes of hernia recurrence.

Postoperative hernias. Clinic, diagnosis. Features of preoperative preparation of patients with large and giant hernias and concomitant respiratory and circulatory diseases. Displacement syndrome in giant postoperative hernias.

Complications of abdominal hernias - basic concepts Pinched hernia, types of impingement. Inflammation of the hernia. Irreparability of the hernia. Coprostasis. Clini-

The peculiarities of preoperative preparation of patients with complicated forms of hernias. Features of preoperative preparation of patients with complicated forms of hernias. Surgical tactics in various complications. Prognosis.

Equipment of the practical training: use of technical means of training, tables, drawings, slides, demonstration of different groups of patients, macropreparations, suture material, prostheses, meshes for hernioplasty, demonstration of the process, photos and educational films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, questions of epidemiology, examination at the bedside of patients in the dressing room and in the operating room, interpretation of the results of laboratory and instrumental methods of research, making a diagnosis.

Independent work of students consists of repeating the relevant topics on anatomy, studying the atlas of surgical operations, studying the postoperative period on duty, working with additional literature, etc.

Recommended reading:

- 1. Gostischev V.K. General Surgery, Moscow, 2006, 832 p.
- 2. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
- 3. Kovanov V.V. Operative surgery and topographical anatomy. Moscow, 1985.
- 4. Kuzin M.I. Surgical diseases (textbook), Moscow "Medicine". 2002.- 784 c.
 - 5. Littman N.I. Operative Surgery. M., 1986.
- 6. Milonov O.B., Toskin K.D., Zhebrovsky V.V., Postoperative complications and dangers in abdominal surgery. M. 1990, 560 p.
- 7. Rehachev V.P. Postoperative ventral hernias. Diastases of the rectus abdominis muscles. Arkhangelsk. 1999. 197 c.
 - 8. Savelyev V.S., Kirienko A.I. Surgical Diseases, Vol. 1-2, Moscow, 2006.
- 9.Timoshin A.D., Yurasov A.V., Shestakov A.L. Surgical treatment of pachonic and postoperative hernias of the abdominal wall., M. Triad X, 2003, 144.
- 10. Toskin K.D., Zhebrovsky V.V. Hernias of the abdominal wall. M. Medina, 1990, 272.
- 11. Private Surgery (textbook for medical universities), ed. by Shevchenko Y.L., St. Petersburg, 1998.

Practical session No. 5

Topic: Gallstone disease. Chronic cholecystitis. Classification, clinic, diagnosis, dif-diagnosis. Basic principles of conservative therapy. Surgical treatment. Acute cholecystitis. Methods of research, classification, clinic, diagnosis, dif-diagnosis. First aid and principles of conservative therapy. Surgical treatment.

Objective: to familiarize students with the basic concepts of cholelithiasis. Familiarization with the main causes of chronic cholecystitis, methods of its diagnostics, conservative and operative treatment tactics.

Familiarization with the main causes and development of acute cholecystitis, methods of its diagnosis, with the tactics of conservative and surgical treatment.

To familiarize students with the basics of etiopathogenesis of acute and chronic pancreatitis, mechanisms of pancreonecrosis and severe endotoxemia, complications of acute pancreatitis. Familiarization with the need for priority measures in the treatment and stabilization of the further course of the disease. Prevention of acute pancreatitis.

In order to realize the above goal, the following tasks need to be addressed: • Repetition of the anatomy of the biliary system.

- To develop students' skills in history-taking, correct palpation of the abdomen and correct identification of local signs of chronic cholecystitis;
- Familiarization with the use and effectiveness of additional diagnostic methods in chronic cholecystitis.
- Know the complications and their ways of conservative and surgical treatment of patients.
 - Have an understanding of postcholecystectomy syndrome.
 - Repetition of the anatomy of the biliary system;
- To develop students' skills in history taking, correctpalpation of the abdomen and correct identification of local signs of acute cholecystitis;
- Familiarization with the use and effectiveness of additional diagnostic methods in acute cholecystitis;
 - Introduction to the clinical semiotics of acute cholecystitis;
- Know the complications and their ways of conservative and surgical treatment of patients;

- Have an understanding of postcholecystectomy syndrome.
- The nature of autolysis in the pathogenesis of acute pancreatitis.
- To form the students' skills to collect anamnesis, to be able to palpate the abdomen correctly and to be able to correctly identify local signs of acute and chronic pancreatitis;
 - Be able to recognize and analyze the main clinical symptoms of a disease.
 - Pathogenesis of endotoxemia and panreonecrosis;
- Familiarization with the ways of application and effectiveness of additional research methods;
- Familiarization with pharmacokinetics of specifically used drugs in conservative therapy of acute and chronic pancreatitis.
 - To know the complications and ways of their conservative and surgical treatment. **Expected results** the use of existing diagnostic possibilities in chronic cholecystitis contributes to the early choice of surgical tactics.

Knowledge of the patient's medical history and complaints allows you to develop a clinical mindset in your students.

The use of existing diagnostic possibilities in acute cholecystitis contributes to the early choice of surgical tactics. Knowledge of the patient's history and complaints helps to develop clinical thinking in students.

Understand the complexity of diagnosis and treatment of acute and chronic pan-creatitis, based on familiarity with the physiology and pathophysiology of the pancreas, assess the clinical course, and understand the difficulties of treating complications of the disease.

Summary of the practical session:

The main etiopathogenetic moments of cholelithiasis and chronic cholecystitis development. Acute cholecystopancreatitis. Specific symptoms. Tasks and actions of a doctor at the pre-hospital stage. Diagnostics. Significance of instrumental and laboratory methods of investigation. Differential diagnosis. Principles of conservative therapy. Surgical tactics. Surgical treatment of chronic cholecystitis.

Complicated forms of chronic cholecystitis. Prophylaxis of postcholecystectomy syndrome development. Possibilities of endoscopic technology in the diagnosis and treatment of diseases of the glandular tract. Features of preoperative preparation and postoperative management of patients with acute cholecystitis.

The main etiopathogenetic points of development of acute cholecystitis. Acute cholecystopancreatitis. Specific symptoms. Tasks and actions of the doctor at the pre-hospital stage. Diagnosis. Significance of instrumental and laboratory methods of research. Differential diagnosis. Principles of conservative therapy. Surgical tactics. Surgical treatment of acute cholecystitis. Complicated forms of acute cholecystitis. Possibilities of endoscopic technology in the diagnosis and treatment of diseases of the gland-excretory tract. Features of preoperative preparation and postoperative management of patients with acute cholecystitis.

Anatomo-physiological information about the pancreas. Etiopathogenesis of acute and chronic pancreatitis. Main phases of acute pancreatitis development. Clinical and anatomical classification of acute pancreatitis. Clinical semiotics of acute pancreatitis depending on the form of the disease. Complications of acute pancreatitis, clinic, diagnosis, treatment options. Clinical, laboratory and instrumental diagnostics. Diff-diagnosis. Treatment tactics. Principles of conservative therapy according to the phases of the disease and complications. Surgical treatment Indications for laparo- pical and laparotomic interventions. Minor invasive surgical interventions - percutaneous drainage of purulent foci, laparoscopic cholecystostomy, drainage of the omental sac cavity, sanation and drainage of the abdominal cavity. Prognosis. Possibilities of endoscopic technology in the diagnosis and treatment of pancreatic diseases.

Equipment of practical training: use of technical means of training, tables, drawings, slides, demonstration of different groups of patients, ultrasound results, radiographs, macropreparations, showing the process, photos and training films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, diff-diagnostic questions, examination at the bedside of patients in the dressing room and in the operating room, interpretation of the results of laboratory and instrumental research methods, making a diagnosis.

Independent work of students consists of repeating the relevant topics on anatomy and pathophysiology of the biliary tract, studying the atlas of surgical operations, studying postoperative pediatrics on duty, working with additional literature, etc.

Recommended reading:

1. Gulmuradov T.G., Muradov F.H. Complicated cholecystitis. Tursun-Zadeh, 1996, 108 p.

- 2. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 3. Kuzin M.I. Surgical diseases (textbook), M. "Medicine". 2002.- 784 c.
- 4. Kurbonov K.M. Manual on emergency surgery of abdominal cavity organs, Dushanbe. 678c.
 - 5. Mondor G. Emergency diagnostics, S-P. 1997. VOL. I-II.
- 6. Rotkov I.L., Diagnostic and tactical errors in acute appendicitis. Moscow, 1988, 208 p.
- 7. Manual on emergency surgery of abdominal cavity organs, Edited by Saveliev V.S., M.1986.
 - 8. Savelyev V.S., Kirienko A.I. Surgical diseases, T.1-2, Moscow, 2006.
- 9. Course of lectures on hospital surgery. Edited by N.U.Usmanov, Dushanbe, 2005, 2008.
- 10. Vaschetko R.V. et al. Acute pancreatitis and trauma of the pancreas. S-P., $2000,\,320$ p.
- 11. Private Surgery (textbook for medical universities), ed. by Shevchenko Y.L., St. Petersburg, 1998.

Practical session No. 6

Topic: Peculiarities of diagnosis and differential diagnosis of acute appendicitis and its complications. Clinic, modern additional diagnostic methods and surgical tactics. Peritonitis. Etiopatho- genesis, classification, clinic, diagnosis and dif- diagnosis. Preoperative preparation, basics of modern complex therapy and principles of surgical intervention.

Objective: familiarization with the basic and atypical process of acute appendicitis and its complications. Knowledge of the peculiarities in the diagnosis of acute appendicitis as well as other acute abdominal diseases.

To familiarize with the main causes and pathogenesis of peritonitis, principles of diagnosis, surgical treatment and intensive care in peritonitis. In **order to realize**

this goal it is necessary to solve the following tasks:

- Repetition of the anatomy of the abdominal organs;
- Have an understanding of the etiology and pathogenesis of acute appendicitis;
- To develop students' skills in history taking, correctpalpation of the abdomen and correct identification of local signs of acute appendicitis;

- Familiarization with the ways of application and effectiveness of additional research methods:
 - Know the indications and contraindications for surgical intervention;
 - Know the complications and the ways of their conservative and operative treatment
 - General classification of peritonitis;
 - Identify the main causes of severe clinical course of peri- tonitis;
- Principles of justification of indications for surgical treatment and its main types;
 - Principles of intensive therapy in peritonitis
 - Dangers and complications of peritonitis;

Expected results - in case of difficulty in diagnosing abdominal diseases, students should know when to hospitalize the patient for examination and observation by specialists to avoid unwanted complications. Knowledge of the patient's history and complaints allows students to develop a clinical mindset.

Timely determination of the severity and prevalence of peritonitis. Choosing the right tactics of intensive care. Familiarization with the basic principles of surgical treatment in peritonitis depending on the underlying cause.

Summary of the practical session:

Diagnostic features of acute appendicitis. Clinical manifestations of atypical forms - empyema of the worm, retrocecal, pelvic, subhepatic, left-sided appendicitis. Features of the clinical course of acute appendicitis in the elderly and children. Appendicitis and pregnancy. Differential diagnosis between acute appendicitis and other acute surgical diseases of abdominal organs and obstetric-gynecologic pathologies, renal colic and non-surgical diseases - toxico-infections, enterocolitis, etc.

Complications of acute appendicitis at pre-hospital and hospital stages. Appendicular infiltrate, periappendicular abscess, retroperitoneal phlegmon, interintestinal abscess, pylephlebitis, liver abscess, subdiaphragmatic abscess, sepsis, local and widespread peritonitis. Surgical tactics. Rehabilitation of patients.

Peritonitis. Classification. Etiology, pathogenesis. The clinical picture and variability of the clinical picture depending on the causes that lead to-.

The diagnosis, diffdiagnosis of various forms of peritonitis. Diagnosis, differential diagnosis of various forms of peritonitis. Principles of preoperative preparation and postoperative management. The main tasks of surgical intervention. Dangers and complications of peritonitis, measures of their prevention.

Equipping the practical training: the use of technical means of training, tables, drawings, slides, demonstration of different groups of patients, ultrasound results, radiographs, macropreparaty, showing the process, photos and training films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, examination at the bedside of patients in the dressing room and in the operating room, interpretation of the results of laboratory and instrumental research methods, diagnosis.

Independent work of students consists of repeating the relevant topics on anatomy, studying the atlas of surgical operations, studying the postoperative period on duty, working with additional literature, etc.

Recommended reading:

- 1. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 2. Kuzin M.I. Surgical diseases (textbook), M. "Medicine". 2002.-784c.
 - 3. Mondor G. Emergency diagnostics, S-P. 1997. VOL. I-II.
- 4. Rotkov I.L., Diagnostic and tactical errors in acute ap- pendicitis. Moscow, 1988, 208 p.
- 5. Manual on emergency surgery of abdominal cavity organs, Edited by Saveliev V.S., M.1986.
 - 6. Savelyev V.S., Kirienko A.I. Surgical diseases, T.1-2, Moscow, 2006.

Practical session No. 7

Topic: Acute intestinal obstruction. Classification, etiopa-togenesis, clinic, principles of conservative and surgical treatment. Surgical tactics. Complications of acute intestinal obstruction. Special types of acute intestinal obstruction. Etiopathogenesis, classification, clinic and principles of conservative and operative treatment. Acute disorders of mesenterial circulation. Etiopathogenesis, classification, clinic and principles of conservative and operative treatment.

Purpose: to familiarize students with different types of acute intestinal permeability (AIP), causes of their occurrence, diagnostic tactics, algorithm of examination of patients, principles of conservative and surgical treatment, prevention of their occurrence.

To familiarize students with the causes of development, pathogenesis, clinic, diagnostic methods, tactics of conservative and surgical treatment and prevention of complications of acute intestinal obstruction.

To familiarize students with the causes of development, pathogenesis, clinic, diagnostic methods, tactics of conservative and surgical treatment and prevention of acute mesenteric circulation disorder.

In order to realize the above goal, the following tasks need to be addressed: • Know the classification of the OCN:

- •Basic principles of diagnosis and difdiagnosis of this disease; Indications and contraindications for surgical treatment;
- The main types of surgical interventions in OCN;
- Prevention of postoperative complications.
- Knowledge of the anatomy and physiology of the small and large intestine and the peculiarities of its blood supply;
- Familiarize yourself with the main types of complications of acute intestinal non-passage;
- Familiarize with the etiology and pathogenesis of complications of special types of acute intestinal obstruction;
- Familiarize with the etiology and pathogenesis of acute mesenteric circulatory failure;
 - Familiarize yourself with the classification of these diseases;
 - Know the basic principles of diagnostics and the significance of their findings;
 - Conservative treatment and surgical tactics.

Expected results - students should have an idea of the pathological process, its diagnostic difficulties, complications, the need for timely hospitalization and, if necessary, dynamic observation, diagnostic algorithm, treatment methods and ways to prevent the disease and its complications.

Students should have an idea of the complications of acute intestinal obstruction, their etiopathogenesis, diagnosis and difdiagnosis with other diseases, clinical picture and methods of conservative and surgical treatment.

Students should have an understanding of the etiopathogenesis of acute mesenteric circulatory disturbance, its diagnosis and diphdi-

The diagnosis with other diseases, clinical picture and methods of conservative and surgical treatment.

Summary of the practical session:

Acute intestinal obstruction (AIO). Classification. Predisposing and producing factors. Clinical picture. Differential diagnosis between individual forms of ACI and acute surgical diseases of the abdominal cavity.

General principles of treatment. Surgical tactics. Objectives and content of surgical aid - revision of abdominal cavity organs, determination of the form of obstruction, assessment of intestinal viability, selection of the volume of intestinal resection at its necrosis according to the level of obstruction and indications for primary intestinal resection. Selection of unloading operations on the intestine. Nasointestinal drainage. Peculiarities of postoperative management. Infusion and transfusion therapy, control of postoperative intestinal paresis.

The main distinguishing features of pathogenesis, clinical manifestations and therapeutic tactics in dynamic and mechanical forms of acute intestinal obstruction. Complications of acute intestinal obstruction. The main types are perforation of necrotically changed intestine, complete rupture of the intestine, peritonitis, pulmonary, cardiovascular complications, shock. Frequency, causes, pathogenesis, clinical picture, diagnosis, differential diagnosis, conservative and operative treatment, prognosis.

Acute disorders of mesenteric circulation. Etiology, patho- genesis, clinical picture. Clinical and instrumental diagnosis. Diff-diagnosis. Surgical tactics. Principles of conservative therapy. Postoperative management and rehabilitation of patients after extensive intestinal resections.

Equipment of practical training: use of technical means of training, tables, drawings, slides, demonstration of different groups of patients, results of laboratory tests, ultrasound, radiographs, macropreparaments, process demonstration, photos and training films of operations.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, questions of diff-diagnostics, examination at the bedside of patients in the dressing room and in the operating room, interpretation of the results of laboratory and instrumental research methods, making a diagnosis.

1. What did Abuali ibni Sino call the OCN?

- 2 Abuali ibni Sino and the classification of OCN
- 3. What do you know are the predisposing factors for OCD?
- 4. What do you know are the producing factors of the OCN?
- 5. Tell the classification of the OCN.
- 6. What forms of strangulation OCD do you know?
- 7. What is a dynamic bowel obstruction?
- 8. What radiologic symptoms of OCN do you know?
- 9. Tell me about the ultrasound picture in OCD.
- 10. Instrumental methods of research
- 11. How are Sklyarov, Tsoge-Manteufel, Kivul, and Obukhov Hospital symptoms defined?
 - 12. Conservative treatment of OCD.
 - 13. Operative treatment of OCNs.
 - 14. Methods of intestinal intubation in UCN.
 - 15. How do you determine the viability of intestinal tissue?
 - 16. Postoperative management of patients with OCN?

Independent work of students consists of repetition of relevant topics on anatomy and pathophysiology of abdominal cavity organs, critical conditions in surgery, intensive care, correction of homeostasis, enteral and parenteral nutrition, study of the atlas of surgical operations, study of postoperative period on duty, work with additional literature, etc.

Recommended reading:

- 1. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 2. Kuzin M.I. Surgical diseases (textbook), M. "Medicine". 2002.- 784 c.
- 3. Kurbonov K.M. Manual on emergency surgery of abdominal cavity organs, Dushanbe. 678c.
- 4. Emergency surgery of the breast and abdomen. Manual for doctors . Edited by L.N.Bisenkov, P.N.Zubarev, St. Petersburg: Hippocrates, 2002. 512.
- 5. Nechaev E.A., Bisenkov A.A. Thoracoabdominal wounds, S-P., 1995, 160 pp.
 - 6. Mondor G. Emergency diagnostics, S-P. 1997. VOL. I-II.
 - 7. Petrov V.P., Eryukhin I.A. Intestinal obstruction, M. 1986, 288 p.
- 8. Manual on emergency surgery of abdominal cavity organs, Edited by Saveliev V.S., M.1986.

- 9. Savelyev V.S., Kirienko A.I. Surgical diseases, T.1-2, Moscow, 2006.
- 10. Shaposhnikov Y.G. et al. Abdominal injuries M., 1986. 256 c.
- 11. Private Surgery (textbook for medical universities), ed. by Shevchenko Y.L., St. Petersburg, 1998.

Practical session No. 8

Topic: Diseases of the colon. Prolapse of the rectum. Tumors of the rectum and colon. Diseases of the rectum and peria- nal area. Hemorrhoids, fissures, paraproctitis, epithelial fistula.

Objective: to familiarize with the main types of the above mentioned colorectal diseases. To study the methods of diagnostics and determination of the ways of con- servative and operative treatment. To familiarize with the main causes and types of benign and malignant tumors of the colon. Ways of early diagnosis and prevention of diseases, dispensation of patients. Organization of surveillance and oncological monitoring among patients at risk.

To familiarize with the main types of the above mentioned diseases of the rectum. Familiarize with the main causes of their occurrence and pathogenesis. Clinical picture of diseases. To study the methods of diagnostics and determination of the ways of conservative and operative treatment. Ways of favorable diagnosis and prevention of diseases.

In order to realize the above goal, the following tasks need to be addressed: • The main types of colorectal diseases, their etiopathogenesis, clinical

picture;

- Types of benign and malignant colorectal tumors
- Basic methods of examination of patients and their results in determining the method of diagnosis and treatment;
 - General principles of patient preparation for rectal and colon surgery; Types of benign and malignant tumors of the rectum and colon;
 - Basic methods of radical and palliative treatment for malignant tumors;
- Dispenserization of patients with precancerous diseases of the rectum and colon;
- Causes and pathogenesis of hemorrhoids, fissures, paraproctitis, and epithelial fistula.

- · Clinic, diagnosis, difdiagnosis
- General principles of preparing patients for rectal surgery;
- The main methods of treating diseases;
- Complications of rectal diseases, their treatment and ways of disease prevention.

Expected results - students will learn methods of examining patients with diseases of the rectum and colon. The study of the patient's medical history and complaints helps in determining how to diagnose and differentiate between different diseases, as well as in determining further treatment tactics.

Students learn about the methods of clinical examination of diseases of the rectum and perianal area. Examination of the patient's medical history and complaints is helpful in determining how to diagnose and differentiate between different diseases, as well as in determining further treatment tactics.

Summary of the practical session:

Nonspecific ulcerative colitis. Etiology, pathogenesis. Clinic, diagnosis, conservative treatment. Indications for surgery.

Hirschsprung's disease. Etiopathogenesis. Clinic. Diagnosis, diff-diagnosis. Treatment.

Polyps and polyposis of the colon. Diagnosis, treatment. Indications and contraindications for surgery. Cancer of the colon. Predisposing factors and precancerous diseases. Clinic. Diagnosis. Treatment. Types of surgical interventions.

Prolapse of the rectum. Etiology, pathogenesis. The degree of rectal prolapse and the degree of sphincter insufficiency. Clinic, diagnosis. Indications for surgical treatment.

Precancer and cancer of the rectum and colon. Clinical classification. Clinic, diagnosis and differential diagnosis. Indications for surgical treatment.

Hemorrhoids. Etiopathogenesis. Classification. Clinic, diagnosis, difdiagnostics. Conservative and surgical treatment. Acute thrombophlebitis and thrombosis of hemorrhoidal nodes: clinic, diagnosis, dif- diag- stics. Conservative and operative treatment.

Anterior fissures. Etiopathogenesis. Clinic, diagnosis, dif- diagnostics. Conservative and surgical treatment.

Epithelial fistulous passage. Etiopathogenesis. Clinic, diagnosis, difdiagnosis. Conservative and surgical treatment.

Acute paraproctitis. Classification. Clinic, diagnosis, treatment. Chronic paraproctitis (rectal fistula). Clinic, diagnosis and treatment. Choice of the method of surgery depending on the type of fistula.

Polyps and polyposis of the colon. Diagnosis, treatment. Indications and contraindications for surgery. Cancer of the colon. Predisposing factors and precancerous diseases. Clinic. Diagnosis. Treatment. Types of surgical interventions.

Equipment of practical training: use of technical means of training, tables, drawings, slides, radiographs, demonstration of patients and operations in the operating room and dressing room, demonstration of photos and educational films of operations, indicators of laboratory tests, carrying out methods of research in functional rooms and in the office of coloscopy and rectoscopy.

Forms of testing knowledge, skills and practical skills by questioning, solving situational problems and test questions, studying the results of laboratory and instrumental studies, differential diagnostics, bedside examination of patients.

Independent work of students: repetition of knowledge on the anatomy of the colon and rectum, study of methods of enema placement, clinical examination, choice of diet and work, participation in postoperative or conservative treatment of patients on duty, work with additional literature,

Recommended reading:

- 1. Atlas of oncologic operations, ed. by B.E. Peterson, 1987. 536 c.
- 2. Gostischev V.K. General Surgery, Moscow, 2006, 832 p.
- 3. Clinical Surgery. Edited by V.S.Savelyev, A.I.Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
 - 4.KuzinM.I.Surgicaldiseases(textbook), M. "Medicine". 2002.-784c.
 - 5. Savelyev V. S., Kirienko A. I. Surgical diseases, T. 1-2, Moscow, 2006.
 - 6. Saveliev V.S. 80 lectures on surgery. Moscow: Litera, 2008. 912 c.
- 7. Fedorov V.D., Vorobyov G.I., Rivkin V.L. Clinical operative coloproctology., M., 1994.
- 8. Private Surgery (textbook for medical universities), ed. by Shevchenko Y.L., St. Petersburg, 1998.

List of key references

- 1. Gostischev V.K. General Surgery, Moscow, 2006, 832 p.
- 2.KuzinM.I.Surgicaldiseases(textbook), M. "Medicine". 2002.-784c.

- 3. Course of lectures on hospital surgery. Edited by N.U.Usmanov, Dushanbe, 2005, 2008.
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- 5. General Surgery, Vol. I-II, ed. by Zubarev P.K., Lytkin M.I., St. Petersburg, 2000.
 - 6. Petrovsky B.V. Surgical diseases (textbook). M, 1980.
- 7. Manual on emergency surgery of abdominal cavity organs, Edited by Saveliev V.S., M.1986.
- 8. Private Surgery (textbook for medical universities), ed. by Shevchenko Y.L., St. Petersburg, 1998.

List of additional literature

- 1. Atlas of oncologic operations. Edited by B.E. Peterson, 1987. 536 c.
- 2. Bisenkov L.N., Popov V.I., Shalaev S.A. Surgery of acute infectious lung destruction. St. Petersburg, 2003, 400 pp.
 - 3. Brusov P.G., Nechaev E.A.. Military field surgery. M. 1996.
 - 4. Wagner E.A. Surgery of chest injuries. M.1981.
- 5. Wagner E.A.. Surgery of combined injuries of the chest and abdomen. M. 1989.
- 6. Vaschetko R.V. et al. Acute pancreatitis and trauma of the pancreas. S-P., 2000, 320 p.
 - 7. Voyno-Yasenetsky V.F. Sketches of purulent surgery St. Petersburg, 2000, 704 p, ill.
- 8. Gostischev V.K. Operative purulent surgery, Manual for doctors, Moscow, 1996, 416 p.
- 9. Gostischev V.K.Operative treatment of destructive forms of lactation mastitis. M., Medicine, 1986.
 - 10. Gorbashko A.N. Acute gastrointestinal bleeding. M., 1982.
- 11. Gulmuradov T.G., Muradov F.H. Complicated cholecystitis. Tur-sunzadeh, 1996, 108 p.
 - 12. Eryukhin I.A. Intestinal obstruction, S-P., 1999. 420 c.
 - 13. Zhenchevsky R.A. Spastic disease, M., 1989, 192 p.
 - 14. Kolesov A.P. et al, Anaerobic infection in surgery. Л. 1989. 160с.
 - 15. Kuzin M.I. Wound and wound infection, M., 1990. 592 c.
- 16. Milonov O.B., Toskin K.D., Zhebrovsky V.V., Postoperative complications and dangers in abdominal surgery. M. 1990, 560 p.
 - 17. Clinical Surgery. Edited by R. Conden and L. Nayhus, M. 1998,716 pp.

- 18. Clinical Surgery. Edited by V.S. Savelyev, A.I. Kirienko, M.; GEOTAR-Media, 2008, Vol.1.- 864 p.
- 19. Kovanov V.V. Operative surgery and topographical anatomy. 2nd ed. M., 1985.
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 - 22. Littman N.I. Operative Surgery. M., 1986.
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- 25. Makarenko T.P., Kharimonov L.G., Bogdanov A.V. Management of general surgical patients in the postoperative period. M., 1989.
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 - 31. Strukova A.I., Acute spilled peritonitis. Moscow, 1987, 288 p.
 - 32. Petrov V.P., Eryukhin I.A. Intestinal obstruction, M. 1986, 288 p.
 - 33. Petrovsky B.V. et al. Surgery of echinococcosis, M.1985, 216c
 - 34. Pokrovsky A.V. Diseases of the aorta and its branches. M. 1979. 328 c.
 - 35. Popov V.A. Peritonitis, 1985, L. 232 pp.
 - 36. Popov V.A. Panaricius, M., 1986.
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