MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»
Head of education program
«General medicine»
_____ Khotimchenko Yu.S._____
(signature) (Full name)
«09» of July 2019

«APPROVED»
Director of the Department of Clinical Medicine
_____ Geltser B.I._____
(signature) (Full name)
«09» of July 2019

WORKING PROGRAM OF ACADEMIC DISCIPLINE (WPAD)
«Hospital Surgery, Pediatric Surgery»
Education program
Specialty 31.05.01 «General medicine»
Form of study: full time

year 5,6, semester 9, A,B
lectures 54 hours
practical classes 162 hours
laboratory works not provided
total amount of in-classroom works 216 hours
independent self-work 144 hours
including preparation to exam 36 hours
control works ()
credit year 5, semester 9,A
exam year 6, semester B

The working program is drawn up in accordance with the requirements of the Federal state educational standard of higher education (level of training), approved by the order of the Ministry of education and science of the Russian Federation from 09.02.2016 № 95.

The working program of the discipline was discussed at the meeting of the Department of fundamental and clinical medicine. Protocol No. 8, 09 of July 2019

Authors: Professor V. Usov, Associate Professor Kiselev A.Yu.

ANNOTATION

Academic discipline " Hospital surgery, pediatric surgery" is designed for students enrolled in the educational program of higher education 31.05.01" General medicine", included in the basic part of the curriculum, implemented in the 5,6th year in the 9th, A, B semesters. The total complexity of the discipline is 360 hours, 10 credits. Federal state educational standard of higher education in the specialty 31.05.01 "General medicine" (level of training specialty) was used in the development of the working program of this discipline.

The course program is based on the medical knowledge obtained by students:

Ability to abstract thinking, analysis, synthesis (GPC-1);

Readiness to solve standard tasks of professional activity using information, bibliographic resources, biomedical terminology, information and communication technologies and taking into account the basic requirements of information security (GPC-1).

The purpose of the academic discipline:

Formation of students' knowledge on the prevention, diagnosis, differential diagnosis of major surgical diseases and their most frequent complications, skills to make a plan of conservative and surgical treatment, to develop a set of measures for the rehabilitation of the patient, assessing his ability to work, dispensary features.

Tasks:

1. study of the basic principles of diagnostic and therapeutic activity in surgery.
2. mastering the basics of clinical examination of surgical patients and the skills of self-supervision of patients
3. familiarity with semiotics of the main types of surgical diseases
4. mastering the methods of providing first aid for surgical diseases, injuries.
5. to study the principles of diagnosis and differential diagnosis of surgical diseases in their typical and atypical manifestations, as well as in complicated forms of pathology

6. master the skills of interpreting the results of special research methods
7. be able to choose the method of treatment and prophylaxis, as well as the preparation of a rehabilitation plan for the main surgical diseases
8. master the skills of medical records

As a result of studying this discipline, students form the following universal, general professional and professional competencies:

Code of competence	**Stages of competence formation**	
willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows	Blood components and products, blood substitutes and other means of infusion-transfusion therapy, indications, contraindications to their use, methods of administration, criteria of effectiveness, possible complications, methods of prevention and treatment of complications of ITT
	Is able to	To apply means of infusion-transfusion therapy to correct circulatory disorders, acid-base balance and water-salt metabolism.
	Possesses	Methods of infusion-transfusion therapy for the correction of circulatory disorders, acid-base balance and water-salt metabolism.
the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations. (PC-2)	Knows	Normative documentation on the organization of preventive medical examinations, medical examination and implementation of medical supervision
	Is able to	Use the guidance documents for the organization of preventive medical examinations, medical examination and dispensary observation
	Possesses	Skills of planning and organization of preventive medical examinations, medical examination and implementation of medical supervision, accounting for their results.
ability to determining the patient's basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review (PC-6)	Knows	physiological signs of major pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review
	Is able to	to verify and determine the normal basic pathological conditions of the human body, as well as to diagnose the symptoms and syndromes of diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review
	Possesses	basic skills of diagnosing pathological conditions, symptoms, syndromes, diseases, clinical entities
ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows	Fundamentals of management of patients who need infusion-transfusion therapy
	Is able to	Draw up a program of infusion-transfusion therapy in various pathological conditions. Determine the indications for infusion-transfusion therapy.
	Possesses	Skills of establishing the diagnosis, prescribing and carrying out the necessary infusion-transfusion therapy in various pathological conditions;
Readiness for the management and treatment of patients with various nosological forms in outpatient and day hospital conditions (PC-9);	Knows	the principles of the organization of surgical care in the country, the organization of work in the outpatient setting and the conditions of the day hospital
	Is able to	provide the necessary assistance to outpatient and day hospital conditions
	Possesses	possession of possession, allowing to diagnose and provide outpatient care for various surgical diseases.

The following methods of active / interactive training are used to form the above competences within the discipline "Hospital Surgery, Pediatric Surgery":

1. Provides for practical training using computer-based training programs.

2. For the organization of independent work, the preparation of abstracts and reports is proposed for performance in the group and at the student conference; and also, preparation for practical exercises, work with additional literature, preparation of essays, occupation conference.

The share of practical classes conducted in interactive forms is 10% of the classroom time; self-extracurricular work - 33% of the time.

I. STRUCTURE AND CONTENT OF THEORETICAL PART OF THE COURSE (54 hrs.)

Module I. Hospital surgery and its subject (4 hours).

Theme 1. The subject of hospital surgery. Surgical symptoms and syndromes. Clinical thinking and diagnostic search in surgery. Organization of outpatient surgical care (2 hours).

Purposes and objectives of the subject of hospital surgery. The main surgical symptoms and syndromes for the diagnosis and differential diagnosis of surgical pathology of the chest and abdomen. Sharp belly, sharp false belly. The scheme of clinical research of the surgical patient. Plan for compiling the history of the surgical patient. Features outpatient surgical care.

Theme 2. Modern methods of laboratory and instrumental diagnostics of surgical diseases. Minimally invasive endoscopic surgery (2 hours).

General clinical methods for the diagnosis of surgical diseases. Radiation diagnostic methods (radiography, MRI, CT, PET-CT, angiography). Instrumental methods (ultrasound, bronchoscopy, thoracoscopy, laparoscopy, biopsy). Radioisotope methods (scintigraphy). Bacteriological and cytomorphological

methods (PCR, ELISA, Clinical evaluation of the results of the study of biopsy material).

Module II. Basics of vascular pathology (10 hours.)

Theme 1. Prevention of thromboembolic complications in surgery (2 hours)

Main thrombotic and inflammatory lesions of the inferior vena cava. Classification. Pathological disorders of regional and general hemodynamics. Diagnostics (clinical, radiological, functional). Treatment (conservative, surgical). Acute thrombosis of the superior vena cava system. Pathogenesis and pathophysiology of hemodynamic disorders. Classification. Diagnostics (clinical, radiation, MRI). Principles of conservative and surgical therapy.

Theme 2. Disruption of the mesenteric blood circulation (2 hours.)

Clinical anatomy and features of the blood supply to the small, large and rectal intestines. Acute disorders of mesenteric circulation. Etiology, pathogenesis, clinic, diagnosis, Methods of laboratory and instrumental diagnosis of acute disorders of the mesenteric circulation. Differential diagnosis. Complications. Surgical tactics for acute disorders of the mesenteric circulation. Types of operations, especially preoperative preparation and postoperative management of patients.

Theme 3. IHD, heart defects, aneurysms, pericarditis (2 hours).

Atherosclerosis of the coronary arteries as a cause of coronary artery disease. Clinic. Diagnostic methods. Surgical treatment methods: balloon angioplasty, stenting, shunting. The use of X-ray technology in the treatment of coronary artery disease. Maintaining the pre-and postoperative period. Defect of interventricular septum (VSD). Clinical and hemodynamic classification of different stages of the defect. ECG diagnostics. X-ray diagnostics. Cardiac catheterization and directional angiocardiography in VSD. Differential diagnosis. Indications for surgical treatment of cerebrovascular disease. Contraindications to surgery. Preoperative preparation. Maintaining a normal postoperative period. Complications after surgery, their prevention and treatment. The immediate results of the operation. Rehabilitation of operated patients

Theme 4. Obliterating arterial diseases (2 hours).

Obliterating atherosclerosis of the lower extremities. Leriche syndrome. Obliterating thrombangitis. Raynaud's disease and syndrome. Stratifying aortic aneurysm. Pathogenesis. Classification. Clinic. Diagnostics. Differential diagnosis. Surgical tactics.

Theme 5. Vein diseases. Thrombophlebitis and pulmonary embolism (2 hours).

Varicose veins and chronic venous insufficiency. Etiology. Pathogenesis. Clinic. Diagnosis and differential diagnosis. Features of ultrasound diagnostics. Types of treatment: conservative, sclerotherapy, types of surgical treatment. Modern methods of surgical treatment: RFA, laser coagulation of varicose veins. Phlebitis, thrombophlebitis. Clinic options for the flow. Features of ultrasound diagnostics. Treatment (conservative, surgical tactics). Postthrombophlebitic syndrome.

Module III. Basics of endocrine surgery (4 hours)

Theme 1. Surgical diseases of the endocrine system (thyroid, adrenal glands) (2 hours)

Surgical treatment of thyroid diseases. Endemic goiter. Classification. Clinic goiter. Diagnostics and differential diagnostics. Indications for surgery. Types and volume of operations. Complications. Thyroid cancer. Pre-cancerous conditions. Cancer classification. Features of metastasis. Clinic. Modern research methods. The choice of method and scope of operation. Combined treatment, surgical, radioisotope, radiotherapy, hormonal. Surgical treatment of adrenal gland diseases. Tumors of the adrenal medulla. Diagnostics. Clinic. Preoperative preparation. Types of operations. Maintaining pre-and postoperative period. Tumors of the adrenal cortex. Diagnostics. Clinic. Preoperative preparation. Types of operations. Maintaining pre-and postoperative period.

Theme 2. Diabetes. Surgical complications of diabetes. Modern approaches to treatment (2 hours)

Type I diabetes. Type II diabetes. Pathogenesis of diabetes. Pathogenesis, clinical and morphological characteristics. Features of the management of surgical patients

with diabetes. Forecast. Causes of death. Complications of diabetes: diabetic angiopathy, nephropathy, retinopathy, neuropathy. Diabetic foot syndrome and diabetic gangrene. Types of modern treatment of complications of diabetes mellitus: balloon angioplasty, artery stenting, bypass surgery, prosthetics. Indications for amputation, types of amputations.

Module IV. General syndromology in surgery (18 hours.)

Theme 1. Acute abdomen. Acute false belly. Pain in the abdomen (2 hours).

The concept of acute abdominal syndrome. Causes of acute abdomen: damage to the organs of the abdominal cavity and retroperitoneal space, inflammatory diseases of the abdominal organs, perforation of hollow organs caused by acute and chronic diseases, vascular disorders (with the development of severe ischemia of the internal organs), obstructive lesions of various intestinal sections with the development of obstruction, internal bleeding, infectious diseases. Clinical characteristics of pain in acute abdomen. Diagnosis (clinical, laboratory and instrumental) and differential diagnosis of acute abdominal syndrome. Treatment algorithm for acute abdomen syndrome.

Theme 2. Dyspeptic syndrome (including constipation). (2 hours).

The concept of dyspeptic syndrome. Symptoms characterizing dyspeptic syndrome. Options for the course (ulcer-like, dyskinetic, non-specific) and forms (functional, organic) of the dyspeptic syndrome. Causes and clinical characteristics. Diseases accompanied by dyspeptic syndrome. Diagnosis and differential diagnosis of dyspeptic syndrome. Principles of medical and surgical treatment of dyspepsia. Prevention and consequences.

Theme 3. Syndrome of pathological impurities in the stool (2 hours.)

The concept of pathological impurities in the stool. Diseases characterized by the presence of pathological impurities in the feces. Causes of the presence of pathological impurities in the feces. Diagnostics (macroscopic examination of feces - consistency, shape, color, smell, medium reaction, visible impurities; microscopic examination of feces - food debris, elements of the intestinal mucosa, crystalline formations, flora and detritus; chemical research - amidopyrine test,

benzidine test or Gergesene reaction , determination of bile pigments, protein and mucin) and differential diagnostics (coloproctological syndromes - feces with gastric and intestinal bleeding, feces with dysentery, as with insufficient minute digestion in the colon, small intestine, gastric digestion failure when, as in pancreatic insufficiency as in low bile, feces with cancer processes in the gut, children stool - meconium). Clinical manifestations of dyspeptic syndrome. Treatment and prevention.

Theme 4. Dysuria syndrome (including hematuria) (2 hours)

The concept of dysuria syndrome. Dysuric syndrome in children (enuresis, urinary incontinence, stranguria). Urinary syndrome (change in urine color, odor, clarity, reaction) and the diseases with which it is accompanied. Changes in the relative density of urine (crystalluria, hematuria, proteinuria, cylindruria). Violations of urination (polyuria, oliguria, anuria, ischuria, nocturia). Nephrotic syndrome, edema. Diagnosis and differential diagnosis of dysuria syndrome. Principles of emergency care and treatment.

Theme 5. Toxic-anemic syndrome (2 hours)

The concept of toxic-anemic syndrome. Symptoms characterizing the toxic-anemic syndrome (weakness, malaise, loss of strength and performance, rapid fatigue, fever, pale skin). Diseases that cause toxic-anemic syndrome. Diagnostics (clinical, laboratory and instrumental) and differential diagnostics. Specific examination of feces. Algorithm of action in toxic-anemic syndrome.

Theme 6. Portal hypertension syndrome and ascitic syndrome (2 hours).

Etiology and pathogenesis of portal hypertension. Classification of portal hypertension syndrome. Subhepatic, intra-and suprahepatic form of portal hypertension. Methods of examination (collection history, indicators of a general blood test, evaluation of biochemical blood tests - cytolytic syndrome, mesenchymal inflammatory syndrome, hepatodepression, cholestasis). Instrumental diagnostic methods. The degree of varicose veins of the esophagus. The clinical picture in various forms of portal hypertension syndrome. Child – Pugh criteria. Ascitic syndrome. Causes leading to ascites. Transient ascites.

Stationary permanent ascites. Diuretic-resistant ascites. Surgical methods for the correction of ascites. Splenomegaly and hypersplenism.

Theme 7. Bleeding from the digestive tract (2 hours).

Causes of bleeding from the gastrointestinal tract. Classification of bleeding from the gastrointestinal tract (by source, by changes in the mucous membrane, by the nature of flow). Bleeding of their upper and lower GI tract. Bleeding of their terminal GI tract. Clinical and laboratory manifestations of gastrointestinal bleeding. Diagnosis of gastrointestinal bleeding (features of history taking, clinical and laboratory methods, the definition of "hidden" blood in the stool, instrumental diagnosis). Indications for emergency FGDs. Indications for emergency colonoscopy. Diagnosis of small bowel bleeding. Principles of emergency assistance. Treatment of surgical diseases complicated by bleeding their gastrointestinal tract.

Theme 8. Hemoptysis syndrome (2 hours).

Causes of hemoptysis. Differential diagnosis of cancer and pulmonary tuberculosis, trauma, cardiovascular pathology, systemic vasculitis (hemorrhagic vasculitis, Goodpasture syndrome), hemorrhagic diathesis (coagulopathy, thrombocytopenia), lung abscess, and other causes. Differential diagnosis of bleeding in diseases of the upper respiratory tract and upper gastrointestinal tract (esophageal varices, oral trauma, esophageal trauma, cancer of the upper gastrointestinal tract, complicated by bleeding). Clinical presentation and assessment of the severity of pulmonary hemorrhage. Medical tactics for the examination and treatment of patients. Emergency care for pulmonary hemorrhage.

Theme 9. Syndromes of chest pain, respiratory and heart failure (2 hours).

Causes of pain in the chest. Characteristics of pain syndrome (duration, depth, provoking factors, pain intensity, pain localization, arresting, specific characteristics). Diagnosis and differential diagnosis of diseases of the chest cavity organs. The clinical picture in acute heart and respiratory failure. Principles of first aid for pain in the chest. Treatment of diseases of the chest, accompanied by pain.

Theme 10. Syndrome abdominal cavity tumor (2 hours).

The concept of abdominal tumor. Causes of formation of the abdominal cavity. Clinical symptoms in the formation of the abdominal cavity and its characteristics (size, localization, consistency, mobility, sources). Diagnostics and differential diagnostics of abdominal tumor. Tumor coming from the retroperitoneal space. Complications of formations of the abdominal cavity, retroperitoneal space, and small pelvis (rupture, bleeding, dyspeptic syndrome). Algorithm of examination and treatment of diseases of the abdominal cavity, accompanied by the tumor syndrome.

Module V. Surgical diseases of the chest and abdomen (18 hours.)

Theme 1. Trauma of the chest (2 hours).

Causes of chest injury. Classification of injuries of the chest. Early and late complications. Dull chest injury. Rib fractures. Terminal fracture, clinic, diagnosis, treatment. Rules of first aid. Damage to the chest cavity. Closed pneumothorax, clinic, diagnosis, treatment. Principles of first aid. Chest drainage. Diagnostic program for damage to the heart. Triad of heart injury symptoms. Clinical diagnostic and therapeutic surgical program for wounds of the heart.

Theme 2. Blunt abdominal trauma (2 hours).

Causes of abdominal trauma. Classification of damage to the abdominal cavity. Clinic and symptoms of damage to the abdominal organs. Differential diagnosis of damage to the abdominal organs, retroperitoneal space and small pelvis. Criteria for assessing the severity of patients with blunt abdominal trauma. Hemoperitoneum, classification, clinical picture. Clinical laboratory and instrumental diagnosis of blunt abdominal trauma. Principles of first aid. Treatment.

Theme 3. Breast diseases (2 hours).

Benign breast tumors. Classification. Clinical and instrumental diagnostics. Biopsy, its types. Surgery for benign tumors. Mastopathy: classification, clinic, diagnosis, treatment. Malignant tumors of the breast. Etiology, risk factors. Diagnosis, differential diagnosis. Ways of metastasis. Modern complex treatment of breast cancer. Results. Rehabilitation.

Theme 4. Disease of the mediastinum and esophagus (2 hours).

The most common diseases of the esophagus and mediastinum. Anatomical and physiological features of the mediastinum. Acute mediastinitis. Tumors and cysts of the mediastinum. Classification. Diagnostics. Differential diagnosis. Methods of surgical treatment. Achalasia of the esophagus, Diverticula, peptic esophagitis, burns of the esophagus. Esophageal carcinoma. Classification. Diagnostics. Differential diagnosis. Methods of surgical treatment.

Theme 5. Peptic ulcer of the stomach and duodenum (2 hours).

Causes of peptic ulcer disease, pre-ulcer conditions. Classification. The clinical picture of uncomplicated gastric ulcer and duodenal ulcer. Complications of peptic ulcer. Diagnosis (clinical, laboratory and instrumental) and differential diagnosis of peptic ulcer. Methods of conservative treatment and options for surgical interventions. Stomach cancer. Classification, clinical picture. Early and late complications. Outcomes The postoperative period. Recommendations for treatment at the outpatient stage. Rehabilitation issues. Examination of disability.

Theme 6. Diseases of the operated stomach (2 hours).

Definition of the concept. Etiology and pathogenesis. Classification of diseases of the operated stomach. Diagnosis of diseases of the operated stomach. Methods of treatment and indications for them. Reconstructive stomach surgery. Features of the postoperative period. Prevention of diseases of the operated stomach. Clinical examination of patients. Peptic ulcer anastomosis. Etiology. Clinic, diagnosis. Complications. Treatment: conservative and surgical. Technique of gastric resection. Dumping syndrome. Hypoglycemic syndrome. Theories of pathogenesis. Clinic. Diagnostics. Conservative treatment. Indications for surgery. Types of operations in dumping syndrome. Equipment. The results of reconstructive operations. Afferent loop syndrome. Definition Classification. Etiology, pathogenesis. Clinical manifestations. Diagnostics. Conservative treatment. Surgical treatment, technique of operations. The results of surgical treatment.

Theme 7. Malignant tumors of the liver, gallbladder and biliary tract (2 hours).

Epidemiology. Etiology. Pathogenesis. Classification. Pathological picture. International Cancer Classification by TNM system. Stages of cancer. Clinical picture. Diagnostics. Differential diagnosis. Treatment: surgical, chemotherapeutic, and others. Indications and contraindications for surgical treatment. Determination of functional and anatomical operability in malignant tumors of the liver. The scope of surgery. The postoperative period. Metastatic tumors of the liver: features of diagnosis and treatment.

Theme 8. Chronic pancreatitis (2 hours).

Definition of the concept. Etiology. Pathogenesis. Pathological picture. Classification. The clinical picture and diagnosis of chronic pancreatitis. Differential diagnosis. Complications of chronic pancreatitis. Conservative treatment. Indications for surgical treatment. Types of operations. Operations on the bile ducts. Operations on the pancreas. Operations on the ducts of the pancreas. Operations on the autonomic nervous system. Technique operations. The postoperative period. The results of treatment. Rehabilitation of patients.

Theme 9. Diseases of the rectum (2 hours).

Surgical anatomy of the rectum. Hemorrhoids: definition, etiology, pathogenesis, classification, clinic, diagnosis. The choice of treatment. Minimally invasive treatment: methods, technique, indications, contraindications, complications. Surgical treatment: indications, technique of operations, complications. Rehabilitation of patients. Diseases of the rectum. Anal fissure. Anal itching. Etiology, pathogenesis, classification, clinic, diagnosis and treatment of diseases. Acute paraproctitis. Etiology, pathogenesis, classification, clinic, diagnosis and treatment, treatment outcomes. Chronic paraproctitis. Etiology, pathogenesis, classification, clinic, diagnosis and treatment, treatment outcomes. Features ligature method. Technique operations. Prevention of paraproctitis.

II. STRUCTURE AND CONTENT OF PRACTICAL COURSE (162 HOURS)

Module I. Hospital surgery and its subject (12 hours)

Theme 1. The subject of hospital surgery. Surgical symptoms and syndromes. Clinical thinking and diagnostic search in surgery. Organization of outpatient surgical care (6 hours).

Purposes and objectives of the subject of hospital surgery. The main surgical symptoms and syndromes for the diagnosis and differential diagnosis of surgical pathology of the chest and abdomen. Sharp belly, sharp false belly. The scheme of clinical research of the surgical patient. Plan for compiling the history of the surgical patient. Features outpatient surgical care.

Theme 2. Modern methods of laboratory and instrumental diagnostics of surgical diseases. Minimally invasive endoscopic surgery (6 hours).

General clinical methods for the diagnosis of surgical diseases. Radiation diagnostic methods (radiography, MRI, CT, PET-CT, angiography). Instrumental methods (ultrasound, bronchoscopy, thoracoscopy, laparoscopy, biopsy). Radioisotope methods (scintigraphy). Bacteriological and cytomorphological methods (PCR, ELISA, Clinical evaluation of the results of the study of biopsy material).

Module II. Basics of vascular pathology (30 hours.)

Theme 1. Prevention of thromboembolic complications in surgery (6 hours)

Main thrombotic and inflammatory lesions of the inferior vena cava. Classification. Pathological disorders of regional and general hemodynamics. Diagnostics (clinical, radiological, functional). Treatment (conservative, surgical). Acute thrombosis of the superior vena cava system. Pathogenesis and pathophysiology of hemodynamic disorders. Classification. Diagnostics (clinical, radiation, MRI). Principles of conservative and surgical therapy.

Theme 2. Disruption of the mesenteric blood circulation (6 hours.)

Clinical anatomy and features of the blood supply to the small, large and rectal intestines. Acute disorders of mesenteric circulation. Etiology, pathogenesis, clinic, diagnosis, Methods of laboratory and instrumental diagnosis of acute disorders of the mesenteric circulation. Differential diagnosis. Complications. Surgical tactics

for acute disorders of the mesenteric circulation. Types of operations, especially preoperative preparation and postoperative management of patients.

Theme 3. IHD, heart defects, aneurysms, pericarditis (6 hours).

Atherosclerosis of the coronary arteries as a cause of coronary artery disease. Clinic. Diagnostic methods. Surgical treatment methods: balloon angioplasty, stenting, shunting. The use of X-ray technology in the treatment of coronary artery disease. Maintaining the pre-and postoperative period. Defect of interventricular septum (VSD). Clinical and hemodynamic classification of different stages of the defect. ECG diagnostics. X-ray diagnostics. Cardiac catheterization and directional angiocardiography in VSD. Differential diagnosis. Indications for surgical treatment of cerebrovascular disease. Contraindications to surgery. Preoperative preparation. Maintaining a normal postoperative period. Complications after surgery, their prevention and treatment. The immediate results of the operation. Rehabilitation of operated patients

Theme 4. Obliterating arterial diseases (6 hours).

Obliterating atherosclerosis of the lower extremities. Leriche syndrome. Obliterating thrombangitis. Raynaud's disease and syndrome. Stratifying aortic aneurysm. Pathogenesis. Classification. Clinic. Diagnostics. Differential diagnosis. Surgical tactics.

Theme 5. Vein diseases. Thrombophlebitis and pulmonary embolism (6 hours).

Varicose veins and chronic venous insufficiency. Etiology. Pathogenesis. Clinic. Diagnosis and differential diagnosis. Features of ultrasound diagnostics. Types of treatment: conservative, sclerotherapy, types of surgical treatment. Modern methods of surgical treatment: RFA, laser coagulation of varicose veins. Phlebitis, thrombophlebitis. Clinic options for the flow. Features of ultrasound diagnostics. Treatment (conservative, surgical tactics). Postthrombophlebitic syndrome.

Module III. Basics of endocrine surgery (12 hours)

Theme 1. Surgical diseases of the endocrine system (thyroid, adrenal glands) (6 hours)

Surgical treatment of thyroid diseases. Endemic goiter. Classification. Clinic goiter. Diagnostics and differential diagnostics. Indications for surgery. Types and volume of operations. Complications. Thyroid cancer. Pre-cancerous conditions. Cancer classification. Features of metastasis. Clinic. Modern research methods. The choice of method and scope of operation. Combined treatment, surgical, radioisotope, radiotherapy, hormonal. Surgical treatment of adrenal gland diseases. Tumors of the adrenal medulla. Diagnostics. Clinic. Preoperative preparation. Types of operations. Maintaining pre-and postoperative period. Tumors of the adrenal cortex. Diagnostics. Clinic. Preoperative preparation. Types of operations. Maintaining pre-and postoperative period.

Theme 2. Diabetes. Surgical complications of diabetes. Modern approaches to treatment (6 hours)

Type I diabetes. Type II diabetes. Pathogenesis of diabetes. Pathogenesis, clinical and morphological characteristics. Features of the management of surgical patients with diabetes. Forecast. Causes of death. Complications of diabetes: diabetic angiopathy, nephropathy, retinopathy, neuropathy. Diabetic foot syndrome and diabetic gangrene. Types of modern treatment of complications of diabetes mellitus: balloon angioplasty, artery stenting, bypass surgery, prosthetics. Indications for amputation, types of amputations.

Module IV. General syndromology in surgery (54 hours.)

Theme 1. Acute abdomen. Acute false belly. Pain in the abdomen (6 hours).

The concept of acute abdominal syndrome. Causes of acute abdomen: damage to the organs of the abdominal cavity and retroperitoneal space, inflammatory diseases of the abdominal organs, perforation of hollow organs caused by acute and chronic diseases, vascular disorders (with the development of severe ischemia of the internal organs), obstructive lesions of various intestinal sections with the development of obstruction, internal bleeding, infectious diseases. Clinical characteristics of pain in acute abdomen. Diagnosis (clinical, laboratory and

instrumental) and differential diagnosis of acute abdominal syndrome. Treatment algorithm for acute abdomen syndrome.

Theme 2. Dyspeptic syndrome (including constipation). (3 hours).

The concept of dyspeptic syndrome. Symptoms characterizing dyspeptic syndrome. Options for the course (ulcer-like, dyskinetic, non-specific) and forms (functional, organic) of the dyspeptic syndrome. Causes and clinical characteristics. Diseases accompanied by dyspeptic syndrome. Diagnosis and differential diagnosis of dyspeptic syndrome. Principles of medical and surgical treatment of dyspepsia. Prevention and consequences.

Theme 3. Syndrome of pathological impurities in the stool (6 hours.)

The concept of pathological impurities in the stool. Diseases characterized by the presence of pathological impurities in the feces. Causes of the presence of pathological impurities in the feces. Diagnostics (macroscopic examination of feces - consistency, shape, color, smell, medium reaction, visible impurities; microscopic examination of feces - food debris, elements of the intestinal mucosa, crystalline formations, flora and detritus; chemical research - amidopyrine test, benzidine test or Gergesene reaction , determination of bile pigments, protein and mucin) and differential diagnostics (coloproctological syndromes - feces with gastric and intestinal bleeding, feces with dysentery, as with insufficient minute digestion in the colon, small intestine, gastric digestion failure when, as in pancreatic insufficiency as in low bile, feces with cancer processes in the gut, children stool - meconium). Clinical manifestations of dyspeptic syndrome. Treatment and prevention.

Theme 4. Dysuria syndrome (including hematuria) (6 hours)

The concept of dysuria syndrome. Dysuric syndrome in children (enuresis, urinary incontinence, stranguria). Urinary syndrome (change in urine color, odor, clarity, reaction) and the diseases with which it is accompanied. Changes in the relative density of urine (crystalluria, hematuria, proteinuria, cylindruria). Violations of urination (polyuria, oliguria, anuria, ischuria, nocturia). Nephrotic syndrome,

edema. Diagnosis and differential diagnosis of dysuria syndrome. Principles of emergency care and treatment.

Theme 5. Toxic-anemic syndrome (3 hours)

The concept of toxic-anemic syndrome. Symptoms characterizing the toxic-anemic syndrome (weakness, malaise, loss of strength and performance, rapid fatigue, fever, pale skin). Diseases that cause toxic-anemic syndrome. Diagnostics (clinical, laboratory and instrumental) and differential diagnostics. Specific examination of feces. Algorithm of action in toxic-anemic syndrome.

Theme 6. Portal hypertension syndrome and ascitic syndrome (6 hours).

Etiology and pathogenesis of portal hypertension. Classification of portal hypertension syndrome. Subhepatic, intra-and suprahepatic form of portal hypertension. Methods of examination (collection history, indicators of a general blood test, evaluation of biochemical blood tests - cytolytic syndrome, mesenchymal inflammatory syndrome, hepatodepression, cholestasis). Instrumental diagnostic methods. The degree of varicose veins of the esophagus. The clinical picture in various forms of portal hypertension syndrome. Child – Pugh criteria. Ascitic syndrome. Causes leading to ascites. Transient ascites. Stationary permanent ascites. Diuretic-resistant ascites. Surgical methods for the correction of ascites. Splenomegaly and hypersplenism.

Theme 7. Bleeding from the digestive tract (6 hours).

Causes of bleeding from the gastrointestinal tract. Classification of bleeding from the gastrointestinal tract (by source, by changes in the mucous membrane, by the nature of flow). Bleeding of their upper and lower GI tract. Bleeding of their terminal GI tract. Clinical and laboratory manifestations of gastrointestinal bleeding. Diagnosis of gastrointestinal bleeding (features of history taking, clinical and laboratory methods, the definition of "hidden" blood in the stool, instrumental diagnosis). Indications for emergency FGDs. Indications for emergency colonoscopy. Diagnosis of small bowel bleeding. Principles of emergency assistance. Treatment of surgical diseases complicated by bleeding their gastrointestinal tract.

Theme 8. Hemoptysis syndrome (6 hours).

Causes of hemoptysis. Differential diagnosis of cancer and pulmonary tuberculosis, trauma, cardiovascular pathology, systemic vasculitis (hemorrhagic vasculitis, Goodpasture syndrome), hemorrhagic diathesis (coagulopathy, thrombocytopenia), lung abscess, and other causes. Differential diagnosis of bleeding in diseases of the upper respiratory tract and upper gastrointestinal tract (esophageal varices, oral trauma, esophageal trauma, cancer of the upper gastrointestinal tract, complicated by bleeding). Clinical presentation and assessment of the severity of pulmonary hemorrhage. Medical tactics for the examination and treatment of patients. Emergency care for pulmonary hemorrhage.

Theme 9. Syndromes of chest pain, respiratory and heart failure (6 hours).

Causes of pain in the chest. Characteristics of pain syndrome (duration, depth, provoking factors, pain intensity, pain localization, arresting, specific characteristics). Diagnosis and differential diagnosis of diseases of the chest cavity organs. The clinical picture in acute heart and respiratory failure. Principles of first aid for pain in the chest. Treatment of diseases of the chest, accompanied by pain.

Theme 10. Syndrome abdominal cavity tumor (6 hours).

The concept of abdominal tumor. Causes of formation of the abdominal cavity. Clinical symptoms in the formation of the abdominal cavity and its characteristics (size, localization, consistency, mobility, sources). Diagnostics and differential diagnostics of abdominal tumor. Tumor coming from the retroperitoneal space. Complications of formations of the abdominal cavity, retroperitoneal space, and small pelvis (rupture, bleeding, dyspeptic syndrome). Algorithm of examination and treatment of diseases of the abdominal cavity, accompanied by the tumor syndrome.

Module V. Surgical diseases of the chest and abdomen (54 hours.)

Theme 1. Trauma of the chest (3 hours).

Causes of chest injury. Classification of injuries of the chest. Early and late complications. Dull chest injury. Rib fractures. Terminal fracture, clinic, diagnosis, treatment. Rules of first aid. Damage to the chest cavity. Closed pneumothorax,

clinic, diagnosis, treatment. Principles of first aid. Chest drainage. Diagnostic program for damage to the heart. Triad of heart injury symptoms. Clinical diagnostic and therapeutic surgical program for wounds of the heart.

Theme 2. Blunt abdominal trauma (3 hours).

Causes of abdominal trauma. Classification of damage to the abdominal cavity. Clinic and symptoms of damage to the abdominal organs. Differential diagnosis of damage to the abdominal organs, retroperitoneal space and small pelvis. Criteria for assessing the severity of patients with blunt abdominal trauma. Hemoperitoneum, classification, clinical picture. Clinical laboratory and instrumental diagnosis of blunt abdominal trauma. Principles of first aid. Treatment.

Theme 3. Breast diseases (6 hours).

Benign breast tumors. Classification. Clinical and instrumental diagnostics. Biopsy, its types. Surgery for benign tumors. Mastopathy: classification, clinic, diagnosis, treatment. Malignant tumors of the breast. Etiology, risk factors. Diagnosis, differential diagnosis. Ways of metastasis. Modern complex treatment of breast cancer. Results. Rehabilitation.

Theme 4. Disease of the mediastinum and esophagus (6 hours).

The most common diseases of the esophagus and mediastinum. Anatomical and physiological features of the mediastinum. Acute mediastinitis. Tumors and cysts of the mediastinum. Classification. Diagnostics. Differential diagnosis. Methods of surgical treatment. Achalasia of the esophagus, Diverticula, peptic esophagitis, burns of the esophagus. Esophageal carcinoma. Classification. Diagnostics. Differential diagnosis. Methods of surgical treatment.

Theme 5. Peptic ulcer of the stomach and duodenum (6 hours).

Causes of peptic ulcer disease, pre-ulcer conditions. Classification. The clinical picture of uncomplicated gastric ulcer and duodenal ulcer. Complications of peptic ulcer. Diagnosis (clinical, laboratory and instrumental) and differential diagnosis of peptic ulcer. Methods of conservative treatment and options for surgical interventions. Stomach cancer. Classification, clinical picture. Early and late

complications. Outcomes The postoperative period. Recommendations for treatment at the outpatient stage. Rehabilitation issues. Examination of disability.

Theme 6. Diseases of the operated stomach (6 hours).

Definition of the concept. Etiology and pathogenesis. Classification of diseases of the operated stomach. Diagnosis of diseases of the operated stomach. Methods of treatment and indications for them. Reconstructive stomach surgery. Features of the postoperative period. Prevention of diseases of the operated stomach. Clinical examination of patients. Peptic ulcer anastomosis. Etiology. Clinic, diagnosis. Complications. Treatment: conservative and surgical. Technique of gastric resection. Dumping syndrome. Hypoglycemic syndrome. Theories of pathogenesis. Clinic. Diagnostics. Conservative treatment. Indications for surgery. Types of operations in dumping syndrome. Equipment. The results of reconstructive operations. Afferent loop syndrome. Definition Classification. Etiology, pathogenesis. Clinical manifestations. Diagnostics. Conservative treatment. Surgical treatment, technique of operations. The results of surgical treatment.

Theme 7. Malignant tumors of the liver, gallbladder and biliary tract (6 hours).

Epidemiology. Etiology. Pathogenesis. Classification. Pathological picture. International Cancer Classification by TNM system. Stages of cancer. Clinical picture. Diagnostics. Differential diagnosis. Treatment: surgical, chemotherapeutic, and others. Indications and contraindications for surgical treatment. Determination of functional and anatomical operability in malignant tumors of the liver. The scope of surgery. The postoperative period. Metastatic tumors of the liver: features of diagnosis and treatment.

Theme 8. Chronic pancreatitis (6 hours).

Definition of the concept. Etiology. Pathogenesis. Pathological picture. Classification. The clinical picture and diagnosis of chronic pancreatitis. Differential diagnosis. Complications of chronic pancreatitis. Conservative treatment. Indications for surgical treatment. Types of operations. Operations on the bile ducts. Operations on the pancreas. Operations on the ducts of the pancreas.

Operations on the autonomic nervous system. Technique operations. The postoperative period. The results of treatment. Rehabilitation of patients.

Theme 9. Diseases of the rectum (6 hours).

Surgical anatomy of the rectum. Hemorrhoids: definition, etiology, pathogenesis, classification, clinic, diagnosis. The choice of treatment. Minimally invasive treatment: methods, technique, indications, contraindications, complications. Surgical treatment: indications, technique of operations, complications. Rehabilitation of patients. Diseases of the rectum. Anal fissure. Anal itching. Etiology, pathogenesis, classification, clinic, diagnosis and treatment of diseases. Acute paraproctitis. Etiology, pathogenesis, classification, clinic, diagnosis and treatment, treatment outcomes. Chronic paraproctitis. Etiology, pathogenesis, classification, clinic, diagnosis and treatment, treatment outcomes. Features ligature method. Technique operations. Prevention of paraproctitis.

Theme 10. Systemic inflammatory response syndrome in surgical patients (6 hours)

Definition of concepts associated with sepsis. Immune response in bacterial infections. Evasion of bacteria from immune protection. The main disorders of the organs and systems observed in sepsis. Criteria for polyorgan dysfunction. Etiology and pathogenesis of sepsis. Diagnosis and differential diagnosis of sepsis. Principles of antibacterial therapy of sepsis. Principles of restoration of homeostasis and organ disorders. Treatment of life-threatening syndromes. Treatment of septic shock syndrome.

III. TRAINING AND METHODOLOGICAL SUPPORT OF INDEPENDENT WORK OF STUDENTS

The main content of the topics, evaluation tools are presented in the work program: terms and concepts necessary to master the discipline.

In the course of mastering the course “Hospital surgery, pediatric surgery”, the student will have to do a large amount of independent work, which includes preparation for seminars and writing an essay.

Practical exercises help students to deeper learn the material, to acquire the skills of creative work on documents and primary sources.

Plans for practical classes, their topics, recommended literature, the purpose and objectives of its study are communicated by the teacher at the introductory classes or in the curriculum for the discipline.

Before proceeding to the study of the topic, it is necessary to familiarize yourself with the main questions of the practical training plan and list of recommended literature.

Starting the preparation for the practical lesson, it is necessary first of all to refer to the lecture notes, sections of textbooks and teaching aids in order to get a general idea of the place and importance of the topic in the course being studied. Then work with additional literature, make notes on the recommended sources.

In the process of studying the recommended material, it is necessary to understand the construction of the topic being studied, to highlight the main points, to follow their logic and thereby to get into the essence of the problem being studied.

It is necessary to keep records of the material being studied in the form of an outline, which, along with the visual, includes the motor memory and allows you to accumulate an individual fund of auxiliary materials for a quick repetition of what you read, to mobilize accumulated knowledge. The main forms of record: a plan (simple and detailed), extracts, theses.

In the process of preparation, it is important to compare the sources, think over the material being studied and build an algorithm of actions, carefully consider your oral presentation.

At a practical lesson, each participant should be ready to speak on all the questions posed in the plan, to be as active as possible in their consideration. The speech should be convincing and reasoned, and simple reading of the abstract is not allowed. It is important to show your own attitude to what is being said, express your personal opinion, understanding, substantiate it and draw the right conclusions from what has been said. You can refer to notes of notes and lectures, directly to primary sources, use the knowledge of monographs and publications, facts and observations of modern life, etc.

A student who did not have time to speak at a practical lesson can present a prepared summary to the teacher for verification and, if necessary, answer the teacher's questions on the topic of the practical lesson in order to get a credit score on this topic.

The educational and methodological support of the independent work of students in the discipline "Hospital surgery, pediatric surgery" is presented in Appendix 1 and includes:

- characteristics of tasks for independent work of students and methodological recommendations for their implementation;

- requirements for the presentation and presentation of the results of independent work;

- criteria for assessing the performance of independent work.

IV. CONTROL OF ACHIEVEMENT OF COURSE GOALS

Code of competence		Stages of competence formation			
N p/p	Controlled modules / sections / themes of academic discipline	Codes and stages of the formation of competencies		Evaluation tools - name	
				current control	intermediate evaluation
1	Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery	willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
2	Module IV. General Syndromology in Surgery Module I. Hospital surgery and its subject.	the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations. (PC-2)	Knows	EO-1 Interview	Questions of final control B semester - 39-110
			Is able to	EO-1 Interview	PW-1 Test
			Possesses	PW-1 Test PW-11 Case task	EO2 Colloquium
3	Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery Module IV. General Syndromology in Surgery	ability to determining the patient's basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review (PC-6);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
4	Module V. Surgical diseases of the chest and abdomen Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology	ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
5	Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery	Readiness for the management and treatment of patients with various nosological forms in outpatient and day	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium

	Module IV. General Syndromology in Surgery Module V. Surgical diseases of the chest and abdomen	hospital conditions (PC-9);			

Control and methodological materials, as well as criteria and indicators which are necessary for the evaluation of knowledge and skills, and characterizing the stages of the formation of competencies in the process of mastering the educational program are presented in Appendix 2

V. LIST OF EDUCATIONAL LITERATURE AND INFORMATIONAL-METHODICAL REQUIREMENTS FOR THE DISCIPLINE

Primary

1. Oncoplastic surgery / Springer Nature Singapore Pte Ltd. and Zhejiang Science and Technology Publishing House 2018 https://link.springer.com/book/10.1007/978-981-10-3400-8#editorsandaffiliations
2. CT Scan in Abdominal Emergency Surgery / Springer International Publishing AG, part of Springer Nature 2018 https://link.springer.com/book/10.1007/978-3-319-48347-4#editorsandaffiliations
3. Open Abdomen / Springer International Publishing AG, part of Springer Nature 2018 https://link.springer.com/book/10.1007/978-3-319-48072-5#editorsandaffiliations

Additional

1. Abdominal Sepsis / Springer International Publishing AG, part of Springer Nature 2018 https://link.springer.com/book/10.1007/978-3-319-59704-1#editorsandaffiliations
2. Surgical Quality Improvement / Springer International Publishing Switzerland 2017 https://link.springer.com/book/10.1007/978-3-319-23356-7#editorsandaffiliations

The list of resources of the information-telecommunication network "Internet"

1. Russian Society of Surgeons / http://xn----9sbdbejx7bdduahou3a5d.xn--p1ai/
2. School of Modern Surgery / http://www.websurg.ru/
3. The main surgical portal / http://www.operabelno.ru/
4. Doctor - Surgeon Medical Surgical Portal / http://xupypr.org/
5. WebSurg / http://www.websurg.com/?lng=ru
6. MED-EDU.ru - Medical portal / http://www.medvideo.org/surgery/

II. VI METHODOLOGICAL RECOMMENDATIONS ON THE COMPLETING THE DISCIPLINE

The purpose of the practical classes is to consolidate the knowledge gained by students in lectures, the modeling of practical situations, and also to test the effectiveness of students' independent work.

Practical lesson usually includes interviewing students for seminars. This allows the teacher to recognize the level of students' knowledge of lecture course materials, basic textbooks, knowledge of current problems and the current situation in the modern educational space. Further, the ability of students to apply their theoretical knowledge to solving practical problems is revealed.

It is advisable to begin the preparation for the practical lesson by repeating the material of the lectures. It should be borne in mind that the lecture course is limited in time and does not allow the lecturer to consider in detail all aspects of the issue being studied. Therefore, it is required to independently expand knowledge of both theoretical and practical nature. At the same time, the lectures provide a good guide for the student to search for additional materials, since they set a certain structure and logic for studying a particular question

When working independently, the student should first of all study the material presented in the recommended literature and / or teacher’s educational literature and monographs. It is necessary to draw students' attention to the fact that not only basic textbooks are included in the library list, but also more in-depth sources on each theme of the course. A consistent study of the subject allows the student to form a stable theoretical base.

An important part of the preparation for the practical class is the work of students with scientific and analytical articles that are published in specialized periodicals. They allow you to broaden your horizons and get an idea of current problems, possible ways to solve them and / or trends in the area under study.

The final step of preparing a student for practical training should be the acquaintance with the results of scientific research relevant to each topic.

Lecture - visualization

The lecture is accompanied by the display of tables, slides, which contributes to a better perception of the presented material. Lecture - visualization requires certain skills - verbal presentation of the material must be accompanied and combined with the visual form. The information presented in the form of charts on the board, tables, slides, allows you to formulate problematic issues, and contribute to the development of professional thinking of future professionals.

Lecture - conversation.

Lecture-conversation, or how else in pedagogy this form of education is called "dialogue with the audience," is the most common form of active learning and allows you to involve students in the learning process, as there is direct contact with the teacher audience. Such contact is achieved in the course of the lecture, when students are asked questions of a problem or informational nature, or when I ask students to ask me questions themselves. Questions are offered to the entire audience, and any student can offer his own answer, another can complement it. At the same time, from lecture to lecture I identify more active students and try to activate students who are not participating in the work. This form of lecture allows you to engage students in work, increase their attention, thinking, gain collective experience, learn how to formulate questions. The advantage of the lecture-conversation is that it allows you to draw students' attention to the most important issues of the topic, to determine the content and pace of presentation of educational material.

Lecture - press conference

At the beginning of the lesson, the teacher calls the topic of the lecture and asks students to ask him in writing questions on this topic. Each student must within 2-3 minutes formulate the most interesting questions on the topic of the lecture, write them on a piece of paper and pass the note to the teacher. The teacher within 3-5 minutes sorts the questions according to their semantic content and begins to give a lecture. The presentation of the material is presented in the form of a coherent disclosure of the topic, and not as an answer to each question asked, but during the

lecture the corresponding answers are formulated. At the end of the lecture, the teacher conducts a final assessment of the questions, revealing the knowledge and interests of the students.

Practical training in the discipline "Hospital surgery, pediatric surgery"

Practical exercises - a collective form of consideration of educational material. Seminars, which are also one of the main types of practical exercises, intended for in-depth study of the discipline, held interactively. At the workshop on the topic of the seminar, questions are sorted out and then, together with the teacher, they hold a discussion, which is aimed at consolidating the material under discussion, developing skills to debate, develop independence and critical thinking, the students' ability to navigate through large information flows, to develop and defend their own position on problematic issues academic disciplines. As active learning methods are used in practical classes: a press conference, a detailed conversation, dispute. A detailed conversation involves preparing students for each issue of the lesson plan with a list of recommended compulsory and additional literature recommended for all. Reports are prepared by students on pre-proposed topics.

Dispute in the group has several advantages. The dispute may be called by the teacher during the course of the lesson or planned by him in advance. In the course of the controversy, students form resourcefulness, quick thinking reaction.

Press conference. The teacher instructs 3-4 students to prepare short reports. Then one of the participants in this group makes a report. After the report, students ask questions that are answered by the speaker and other members of the expert group. Based on the questions and answers, a creative discussion takes place with the teacher.

VII. LIST OF INFORMATION TECHNOLOGIES AND SOFTWARE

The location of the computer equipment on which the software is installed, the number of jobs	**List of licensed software**
Multimedia auditorium Vladivostok Russian island, Ayaks 10, building 25.1, RM.	Windows Seven enterprice SP3x64 Operating System Microsoft Office Professional Plus 2010 office suite that includes software for working with various

M723 Area of 80.3 m2 (Room for independent work)	types of documents (texts, spreadsheets, databases, etc.); 7Zip 9.20 - free file archiver with a high degree of data compression; ABBYY FineReader 11 - a program for optical character recognition; Adobe Acrobat XI Pro 11.0.00 - software package for creating and viewing electronic publications in PDF; WinDjView 2.0.2 - a program for recognizing and viewing files with the same format DJV and DjVu.

In order to provide special conditions for the education of persons with disabilities all buildings are equipped with ramps, elevators, lifts, specialized places equipped with toilet rooms, information and navigation support signs

III. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

For practical work, as well as for the organization of independent work, students have access to the following laboratory equipment and specialized classrooms that meet applicable sanitary and fire regulations, as well as safety requirements for educational and research and production work:

Name of equipped premises and rooms for independent work	**List of basic equipment**
Computer class of the School of Biomedicine aud. M723, 15 place of work	Screen with an electric drive 236 * 147 cm Trim Screen Line; DLP Projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; The subsystem of specialized fixing equipment CORSA-2007 Tuarex; Video switching subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; DVI extension cable for twisted pair DVI 201 Tx / Rx Extron; Audio switching and sound reinforcement subsystem; ceiling speaker system SI 3CT LP Extron; DMP 44 Extron digital audio processor; extension for the control controller IPL T CR48; Wireless LANs for students are provided with a system based on 802.11a / b / g / n access points 2x2 MIMO (2SS). Monoblock HP RgoOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD +/- RW, GigEth, Wi-Fi, BT, usb kbd / mse, Win7Pro (64-bit) + Win8.1Pro (64-bit), 1-1-1 Wty
Reading rooms of the FEFU Scientific Library with open access to the Foundation (Building A - Level 10)	Monoblock HP RgoOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD +/- RW, GigEth, Wi-Fi, BT, usb kbd / mse, Win7Pro (64-bit) + Win8.1Pro (64-bit), 1-1-1 Wty Internet access speed 500 Mbit / s. Jobs for people with disabilities are equipped with braille displays and printers; equipped with: portable devices for reading flat-

	printed texts, scanning and reading machines with a video optimizer with the ability to adjust color spectra; magnifying electronic loops and ultrasonic markers
Accreditation and Simulation Center of the School of Biomedicine	Scales medical with a bar Centimeter tape (150x13 mm) Light meter-UV radiometer thermohydrometer Dynamometer Wrist dynamometer Height meter medical with a stool (adult)

Practical training is conducted on a clinical basis.

Clinical bases:

1. Medical Center of the Federal State Autonomous Educational Institution of Higher Education "Far Eastern Federal University";
2. Regional State Institution "Regional Clinical Hospital №2";
3. Regional State Institution "Vladivostok Clinical Hospital № 4";

Appendix 1

THE MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal State autonomous education institution of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

FUND ASSESSMENT TOOLS

INDEPENDENT WORK OF TRAINEES

in discipline **«Hospital surgery, pediatric surgery»**
Educational program
Preparation for 31.05.01. General Medicine
Form of training full-time

Vladivostok
2017

Passport of the Fund Assessment Tools is filled in accordance with the Regulations on the Funds of Evaluation Tools of Educational Programs of Higher Education - Bachelor's Programs, Specialties, FEFU Magistrates, approved by order of the Rector on 12/05/2015 No. 12-13-850.

Independent work includes:

1. Library and homework with educational literature and lecture notes,
2. Preparation for practical exercises,
3. Performance of an individual task
4. Preparation of the essay
5. Preparation for testing and control interview.

The procedure for the performance of independent work by students is determined by the schedule of independent work on the academic discipline.

Schedule of independent work on the academic discipline

N p/p	Date / Deadline	Type of independent work	Estimated time to complete (hour)	Form of control
9 semester				
1	2-3 week	Essay Individual task	3	EO-3-Report, speaking on the practical class
2	4-15 week	Presentation on the essay Presentation of the results of an individual task	6	EO-3-Report, speaking on the practical class
3	17-18 week	Preparing to exam	3	EO-1-Interview PW-1 - Test
A semester				
2-3 week	Essay	3	EO-3-Report, speaking on the practical class	
4-15 нweek	Presentation on the essay	6	EO-3-Report, speaking on the practical class	
17-18 week	Preparing to exam	3	EO-1-Interview PW-1 - Test	
B semester				
1	2-3 week	Essay	3	EO-3-Report, speaking on the

				practical class
2	4-15 week	Presentation on the essay	6	EO-3-Report, speaking on the practical class
3	17-18 week	Preparing to exam	3	EO-1-Interview PW-1 - Test

Topics of reports and essays

There are 108 hours of independent work on the discipline, within the framework of these hours 2 essay is carried out on the proposed topics.

1. Modern methods of vascular stenting

2. Diabetic foot

3. Peptic ulcer of the stomach and duodenum, diseases of the operated stomach.

4. Bleeding from the gastrointestinal tract. Portal hypertension of childhood.

5. Differential diagnosis of gastrointestinal bleeding.

6. Functional, instrumental methods of research in diseases of the stomach and intestines

7. Functional, instrumental methods of research in diseases of the liver, extrahepatic bile ducts, pancreas

8. Transplantology. General provisions. Transplantation of the kidney, heart, pancreas, liver.

9. Clinic, diagnosis and treatment of postcholecystectomy syndrome and parasitic liver diseases.

10. Differential diagnosis and treatment of diseases of the rectum and para-rectal space

11. Differential diagnosis and treatment of mediastinal diseases

12. Differential diagnosis and treatment of chronic ulcerative colitis and Crohn's disease

Guidelines for writing and design of the essay

Essay - the creative activity of the student, which reproduces in its structure the research activities to solve theoretical and applied problems in a particular branch of scientific knowledge.

The essay is a model of scientific research. It is an independent work in which a student solves a problem of a theoretical or practical nature, applying the scientific principles and methods of this branch of scientific knowledge. The result of this scientific search can have not only subjective, but also objective scientific novelty, and therefore can be presented for discussion by the scientific community in the form of a scientific report or a message at a scientific-practical conference, as well as a scientific article.

The abstract is carried out under the direction of the supervisor and involves the acquisition of skills for building business cooperation based on ethical standards of scientific activity. Purposefulness, initiative, disinterested cognitive interest, responsibility for the results of their actions, conscientiousness, competence - personality traits that characterize the subject of research activities corresponding to the ideals and norms of modern science.

The essay is an independent educational and research activity of the student. The supervisor provides advisory assistance and evaluates the process and results of activities. He provides approximate themes of essay, clarifies with the student the problem and theme of research, helps to plan and organize research activities, assigns time and a minimum number of consultations.

Traditionally there was a certain structure of the abstract, the main elements of which in order of their location are the following:

1. Title page.
2. The task.
3. Table of Contents
4. List of symbols, symbols and terms (if necessary).
5. Introduction.
6. The main part.
7. Conclusion.

8. Bibliographic list.

9. Appendixes

The title page lists: educational institution, graduating department, author, scientific advisor, research theme, place and year of the essay.

The name of the essay should be as short as possible and fully comply with its content.

The table of contents reflects the names of the structural parts of the essay and the pages on which they are located. The table of contents should be placed at the beginning of work on one page.

The presence of a detailed introduction - an obligatory requirement for the abstract. Despite the small volume of this structural part, its writing causes considerable difficulties. However, a qualitatively executed introduction is the key to understanding the entire work, which testifies to the professionalism of the author.

Thus, the introduction is a very important part of the essay. The introduction should start with a justification of the relevance of the chosen theme. From how the author of the essay can choose a theme and how correctly he understands and evaluates this theme from the point of view of modernity and social significance, it characterizes his scientific maturity and professional preparedness.

In addition, in the introduction it is necessary to isolate the methodological basis of the essay, to name the authors, whose works constituted the theoretical basis of the study. A review of the literature on the theme should show the authors thorough acquaintance with special literature, his ability to systematize sources, critically examine them, highlight the essential, determine the most important in the current state of knowledge.

The introduction reflects the importance and relevance of the chosen topic, defines the object and subject, purpose and objectives, and the chronological framework of the study.

Introduction should be completed by setting out general conclusions about the scientific and practical significance of the theme, its degree of scrutiny and providing with sources, then hypothesis is proposed.

The main part describes the essence of the problem, reveals the theme, determines the author's position, factual material is given as an argument and for illustrations of put forward provisions. The author needs to demonstrate the ability of sequential presentation of material while its analysis. Preference is given to the main facts, rather than small details.

The essay ends with the final part, which is called "conclusion". This part of the essay synthesizes scientific information, which is accumulated in the main part. This synthesis is a consistent, coherent presentation of the results obtained and their relation to a common goal and specific tasks that were set and formulated in the introduction. It is here that contains the so-called "output" knowledge, which is new in relation to the original knowledge. The conclusion may include suggestions of a practical nature, thereby increasing the value of theoretical materials.

So, in conclusion, the student should a) present the findings of the study; b) reflect the theoretical and practical significance, the novelty of the abstract; c) indicate the possibility of applying the results of the study.

After the conclusion it is accepted to place the bibliographic list of the used literature. This list is one of the essential parts of the essay and reflects the independent creative work of the author.

The list of sources used is placed at the end of the work. It is made or in alphabetical order (by the name of the author or the name of the book), or in the order in which the references appear in the text of the written work. In all cases, the full title of the work, the names of the authors or the editor of the publication are indicated if the writing team involved a group of authors, data on the number of volumes, the name of the city and publisher in which the work was published, year of publication, number of pages.

Guidelines for writing and design of the presentations

For the preparation of the presentation is recommended to use: Power Point, MS Word, Acrobat Reader, LaTeX beamer. The simplest program for creating presentations is Microsoft PowerPoint. For the preparation of the presentation it is necessary to process the information collected when writing the essay.

The sequence of preparation of the presentation:

1. Clearly state the purpose of the presentation.

2. Determine what the presentation format will be: live presentation (then how long it will be) or e-mail (what the presentation context will be).

3. Select the entire content of the presentation and build a logical chain of presentation.

4. Identify key points in the content of the text and highlight them.

5. Determine the types of visualization (pictures) for displaying them on slides in accordance with the logic, purpose and specificity of the material.

6. Choose the design and format the slides (the number of pictures and text, their location, color and size).

7. Check the visual perception of the presentation.

The types of visualization include illustrations, images, charts, tables. The illustration is a representation of a real-life visual. The images - as opposed to illustrations - are a metaphor. Their purpose is to cause an emotion and create an attitude towards it, to influence the audience. With the help of well-designed and presented images, information can remain permanently in a person's memory. The diagram is a visualization of quantitative and qualitative relationships. They are used for convincing data demonstration, for spatial thinking in addition to the logical one. Table - specific, visual and accurate data display. Its main purpose is to structure information, which sometimes facilitates the perception of data by the audience.

Guidelines for writing and design of the practical class

Monitoring the results of independent work is carried out in the course of conducting practical exercises, oral surveys, interviews, solving situational problems, examinations, including through testing.

1. The student should prepare for the practical lesson: repeat the lecture material, read the necessary section on the topic in the textbook.

2. Lesson begins with a quick frontal oral survey on a given topic.

3. In the classroom students work with lecture notes, slides.

4. For classes, you must have a notebook for recording theoretical material, a textbook.

6. At the end of the lesson, homework is given on the new topic and it is proposed to compile tests on the material that has been studied, which were studied in the lesson (summary).

7. The presentations and the activity of the students in the classroom are evaluated by the current assessment.

Guidelines for the preparation of the report

1. Independent student selection of the report topic.

2. Selection of literary sources on the chosen topic from the recommended basic and additional literature offered in the work program of the discipline, as well as work with the resources of the Internet information and telecommunications network specified in the work program. 3. Work with the text of scientific books, textbooks is reduced not only to the reading of the material, it is also necessary to analyze the selected literature, compare the presentation of the material on the topic in different literary sources, pick up the material so that it reveals the topic of the report.

4. The analyzed material is outlined, the most important thing is that it should not be simply a conscientious rewriting of source texts from selected literary sources without any comments and analysis.

5. Based on the analysis and synthesis of literature, the student draws up a plan for the report, on the basis of which the text of the report is prepared.

6. The report should be structured logically, the material is presented in one piece, coherently and consistently, conclusions are drawn. It is desirable that the student could express his opinion on the formulated problem.

7. The report takes 7-10 minutes. The report is told, but not read on paper.

Guidelines for working with literature

1. It is necessary to make an initial list of sources. The basis may be a list of references recommended in the course work program. For convenience, you can create your own file of selected sources (authors' last name, title, publication characteristics) as a working file in a computer. This card index has the advantage, because it allows you to add sources, replace, if necessary, one with another, remove those that were not relevant topics. The initial list of references can be supplemented using the electronic catalog of the FEFU library, and do not hesitate to contact the library staff for help.

2. Working with literature on one topic or another, one must not only read, but also learn the method of studying it: make a brief summary, algorithm, scheme of the read material, which allows it to be quickly understood and remembered. It is not recommended to literally rewrite the text.

Criteria for evaluation of the oral report

Oral report on the discipline "Hospital surgery, pediatric surgery" is evaluated by the point system: 5, 4, 3.

"5 points" is exposed to a student, if he expressed his opinion on the formulated problem, argued it, having precisely defined its content and components, is able to analyze, summarize the material and draw correct conclusions using basic and additional literature, freely answers questions, which indicates what he knows and owns the material.

“4 points” is given to a student if he presents material on the chosen topic coherently and consistently, gives arguments to prove one or another position in the report, demonstrates the ability to analyze the main and additional literature, but admits some inaccuracies in the wording of concepts.

“3 points” are given to a student if he has conducted an independent analysis of the main and additional literature, however, certain provisions of the report are not always sufficiently argued, mistakes are made in presenting the material and not always fully answering additional questions on the topic of the report.

Criteria for evaluation of the abstract

Evaluation criteria for the abstract: the novelty of the text; the validity of the choice of source; the degree of reveal of the essence of the issue; compliance to the design requirements.

The novelty of the text:

a) the relevance of the research theme;

b) novelty and independence in the formulation of the problem, the formulation of a new aspect of the well-known problem;

c) the ability to work with research, critical literature, to systematize and structure the material;

d) the appearance of the author's position, independence of assessments and judgments;

e) stylistic unity of the text.

The degree of disclosure of the essence of the question:

a) the plan compliance with the theme of the abstract;

b) compliance of the content to the theme and plan of the essay;

c) completeness and depth of knowledge on the theme;

d) the validity of the methods and methods of working with the material;

e) the ability to generalize, draw conclusions, compare different points of view on one issue (problem).

The validity of the choice of sources: a) evaluation of the used literature: the use of the most famous works on the research topic (including journal publications of recent years, recent statistics, summaries, references, etc.).

Compliance with the design requirements:

a) the correctness of references to the used literature, references;

b) assessment of literacy and presentation culture (including spelling, punctuation, stylistic culture), knowledge of terminology;

c) compliance with the requirements for the volume of the abstract.

The reviewer should clearly state the remark and questions, preferably with references to the work (possible on specific pages of the work), to research and evidence that the author did not take into account**.**

The reviewer can also indicate whether the student has addressed the theme earlier (essays, written works, creative works, olympiad works, etc.).

The reviewer can also indicate whether the student has addressed the theme earlier (essays, written works, creative works, olympiad works, etc.).

The rating "Excellent" is set if all the requirements for writing and presenting the abstract are fulfilled: the problem is indicated and its relevance is justified, a brief analysis of various points of view on the problem under consideration is made and own position is logically presented, conclusions are formulated, the theme is fully revealed, the volume is met, the requirements are met to the external design, given the correct answers to additional questions.

Evaluation of "Good" - the basic requirements for the essay are met, but there are some shortcomings. In particular, there are inaccuracies in the presentation of the material; there is no logical sequence in the judgments; not sustained volume of the abstract; there are omissions in the design; Additional questions are incomplete answers.

Assessment "Satisfactory" - there are significant deviations from the requirements for essay. In particular, the theme is only partially revealed; factual errors in the content of the abstract or when answering additional questions; there is no output.

The rating of "Unsatisfactory" - the theme of the essay is not revealed, there is a significant lack of understanding of the problem or the student's abstract is not presented.

Appendix 2

THE MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal State autonomous education institution of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

FUND ASSESSMENT TOOLS

TRAINING COMPLEX OF DISCIPLINE

«Hospital surgery, pediatric surgery»
Educational program
Preparation for 31.05.01. General Medicine
Form of training full-time

Vladivostok
2017

Passport of the Fund Assessment Tools is filled in accordance with the Regulations on the Funds of Evaluation Tools of Educational Programs of Higher Education - Bachelor's Programs, Specialties, FEFU Magistrates, approved by order of the Rector on 12/05/2015 No. 12-13-850.

Code of competence	**Stages of competence formation**	
willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows	Blood components and products, blood substitutes and other means of infusion-transfusion therapy, indications, contraindications to their use, methods of administration, criteria of effectiveness, possible complications, methods of prevention and treatment of complications of ITT
	Is able to	To apply means of infusion-transfusion therapy to correct circulatory disorders, acid-base balance and water-salt metabolism.
	Possesses	Methods of infusion-transfusion therapy for the correction of circulatory disorders, acid-base balance and water-salt metabolism.
the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations. (PC-2)	Knows	Normative documentation on the organization of preventive medical examinations, medical examination and implementation of medical supervision
	Is able to	Use the guidance documents for the organization of preventive medical examinations, medical examination and dispensary observation
	Possesses	Skills of planning and organization of preventive medical examinations, medical examination and implementation of medical supervision, accounting for their results.
ability to determining the patient's basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review (PC-6)	Knows	physiological signs of major pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review
	Is able to	to verify and determine the normal basic pathological conditions of the human body, as well as to diagnose the symptoms and syndromes of diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review
	Possesses	basic skills of diagnosing pathological conditions, symptoms, syndromes, diseases, clinical entities
ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows	Fundamentals of management of patients who need infusion-transfusion therapy
	Is able to	Draw up a program of infusion-transfusion therapy in various pathological conditions. Determine the indications for infusion-transfusion therapy.
	Possesses	Skills of establishing the diagnosis, prescribing and carrying out the necessary infusion-transfusion therapy in various pathological conditions;
Readiness for the management and treatment of patients with various nosological forms in outpatient and day hospital conditions (PC-9);	Knows	the principles of the organization of surgical care in the country, the organization of work in the outpatient setting and the conditions of the day hospital
	Is able to	provide the necessary assistance to outpatient and day hospital conditions
	Possesses	possession of possession, allowing to diagnose and provide outpatient care for various surgical diseases.

CONTROL OF ACHIEVEMENT OF COURSE GOALS

Code of competence		Stages of competence formation			
N p/p	Controlled modules / sections / themes of academic discipline	Codes and stages of the formation of competencies		Evaluation tools - name	
				current control	intermediate evaluation
1	Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery	willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
2	Module IV. General Syndromology in Surgery Module I. Hospital surgery and its subject.	the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations. (PC-2)	Knows	EO-1 Interview	Questions of final control B semester - 39-110
			Is able to	EO-1 Interview	PW-1 Test
			Possesses	PW-1 Test PW-11 Case task	EO2 Colloquium
3	Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery Module IV. General Syndromology in Surgery	ability to determining the patient's basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review (PC-6);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
4	Module V. Surgical diseases of the chest and abdomen Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology	ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
5	Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery	Readiness for the management and treatment of patients with various nosological forms in outpatient and day	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium

	Module IV. General Syndromology in Surgery Module V. Surgical diseases of the chest and abdomen	hospital conditions (PC-9);			

The scale of assessment the level of formation of competences

Code and formulation of competence	Stages of the formation of competencies		Criteria	Indicators	Points
willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows (threshold level)	drugs prescribed in the treatment of surgical pathology	Knowledge of drugs prescribed in the treatment of surgical pathology, indications for their purpose and ways of administration	Formed structured systematic knowledge of drugs prescribed in the treatment of surgical pathology, indications for their purpose and ways of administration	65-71
	Is able to (advanced)	Determine the indications for the appointment of drugs for surgical diseases, make appointments, based on the dose and route of administration	The ability to determine the indications for the appointment of drugs for surgical diseases, make appointments, based on the dose and route of administration	Ready and able to determine the indications for the appointment of drugs for surgical diseases, make appointments, based on the dose and route of administration	71-84
	Possesses (high)	Skills in the use of drugs in various surgical diseases	The skill of using drugs in various surgical diseases	Able to prescribe drugs for various surgical diseases, based on the pathogenesis and stage of the pathological process	85-100
the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations.(PC-2)	Knows (threshold level)	Normative documentation on the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	Knowledge of normative documentation on the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	Formed structured systematic knowledge of normative documentation on the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	65-71

	Is able to (advanced)	Use the guidance documents for the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	Ability to use the guidance documents for the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	Ready and able to use the guidance documents for the organization of preventive medical examinations, medical examination and implementation of dispensary supervision	71-84
	Possesses (high)				85-100
ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows (threshold level)	Fundamentals of management of patients who need infusion-transfusion therapy	Knowledge of fundamentals of management of patients who need infusion-transfusion therapy	Formed and structured systematic knowledge of the fundamentals of management of patients who need infusion-transfusion therapy	65-71
	Is able to (advanced)	Draw up a program of infusion-transfusion therapy in various pathological conditions. Determine the indications for infusion-transfusion therapy.	Ability to draw up a program of infusion-transfusion therapy in various pathological conditions. Determine the indications for infusion-transfusion therapy	Ready and can to draw up a program of infusion-transfusion therapy in various pathological conditions. Determine the indications for infusion-transfusion therapy	71-84
	Possesses (high)	Skills of establishing the diagnosis, prescribing and carrying out the necessary infusion-transfusion therapy in various pathological conditions;	Formed skills of establishing the diagnosis, prescribing and carrying out the necessary infusion-transfusion therapy in various pathological conditions	Skills surely to establish the diagnose, prescribe and conduct the necessary infusion-transfusion therapy in various pathological conditions;	85-100
ability to determining the patients basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of	Knows (the threshold level)	The physiological signs of major pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review	The knowledge of physiological signs of major pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review	The capacity and willingness to learn a foreign language at the level of everyday communication, to the written and oral communication in the official language	45-64

Diseases and Related Health X review (PC-6);	Is able to (advanced)	to verify and determine the normal basic pathological conditions of the human body, as well as to diagnose the symptoms and syndromes of diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review	The ability to verify and determine the normal basic pathological conditions of the human body, as well as to diagnose the symptoms and syndromes of diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review	The capacity to verify and determine the normal basic pathological conditions of the human body, as well as to diagnose the symptoms and syndromes of diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review	64-85
	Possesses (high)	The basic skills of diagnosing pathological conditions, symptoms, syndromes, diseases, clinical entities	Possession the s basic skills of diagnosing pathological conditions, symptoms, syndromes, diseases, clinical entities	The capacity to basic skills of diagnosing pathological conditions, symptoms, syndromes, diseases, clinical entities	86-100
the willingness to treat patients with different nosological entities in the outpatient settings and a day hospitals **(PC-9)**	Knows (the threshold level)	Principles of the organization of surgical care in the country, the organization of work in outpatient and day hospital conditions	Knowledge of the principles of the organization of surgical care in the country, the organization of work in outpatient and day hospital conditions	Formed a structured systematic knowledge of the principles of the organization of surgical care in the country, the organization of work	65-71
	Is able to (advanced)	provide the necessary surgical care outpatient and day hospital conditions	Ready and able to provide the necessary surgical care outpatient and day hospital conditions	able to provide the necessary surgical care outpatient and day hospital conditions	71-84
	Possesses (high)	Skills of diagnosis and outpatient care in various surgical diseases	The skill of diagnosis to diagnose and provide outpatient care for various surgical diseases Is able to confidently diagnose	provide the necessary surgical care in an outpatient clinic and day hospital	85-100

Questions to evaluate the preliminary competencies

1. Name the clinical symptoms and tactics of management of patients with acute surgical diseases.
2. Name the clinical symptoms and tactics of management of patients with

oncological diseases.

3. Name the clinical symptoms and tactics of management of patients with purulent diseases of the chest and abdominal cavity.

4. Name the clinical symptoms and tactics of management of patients with injuries of the chest and abdominal organs.

5. Antiseptics for treating wounds.

6. Tools, materials for aspiration-washing treatment of abscess.

7. Criteria for the suitability of blood for transfusion.

8. Preparations for parenteral nutrition.

9. Blood substitutes of hemodynamic and detoxification action.

10. Preparations for hemostasis.

11. Preparations for the correction of water and electrolyte balance.

12. Instruments and medicines required for local infiltration and conduction anesthesia.

13. Instruments and medicines necessary for conduction anesthesia according to Oberst-Lukashevich.

14. Tools, materials and medicines necessary for perirenal blockade.

15. A set of tools, materials and medicines needed for the primary surgical treatment of surgical wounds.

16. Methods of endoscopic, ultrasound and radiological studies and to be able to decipher the results of research.

Control tests are designed for students studying the course "Hospital surgery, pediatric surgery"

Tests are necessary both for the control of knowledge in the learning process, and for the evaluation of knowledge, for setting credits.

When working with tests, the student is invited to choose one option or a combination of answers from the answers given. At the same time, tests are unequal in their complexity. Among the proposed tests there are that contain

several options for correct answers. The student must specify all the correct answers.

Tests are designed for both individual and collective decision. They can be used during classroom or independent work.

The results of the test tasks are evaluated by the teacher on a five-point score scale for issuing attestation or according to the system “credit” - “no credit”. The mark "excellent" is set with the correct answer to more than 90% of the tests proposed by the teacher. A rating of "good" - with the correct answer to more than 70% of tests. A rating of "satisfactory" - with the correct answer to 50% of the tests proposed to the student.

Questions for exam:

1. Syndrome of airway obstruction in purulent diseases of the lungs and pleura. Clinic Diagnosis Treatment
2. Syndrome vascular insufficiency with aortic aneurysms. Clinic Diagnosis. Treatment.
3. Syndrome of portal hypertension. Variants of the venous block. Surgical treatment.
4. Syndrome of dysphagia with chemical burns of the esophagus. First aid. Medical tactics. Bougienage of the esophagus. Operation Ru-Herzen-Yudin.
5. Heart failure syndrome with congenital heart and vascular defects. Differential diagnosis. Treatment.
6. Tactics of drug and surgical treatment of strangulation obstruction.
7. Painful abdominal syndromes in extra-abdominal diseases. Differential diagnosis and treatment.
8. Syndrome of mechanical jaundice with neoplasms of the pancreatic head.
9. Syndrome obturation of the respiratory tract with lung neoplasms.

10. Dynamic obstruction, treatment.
11. Syndrome of airway obstruction with purulent diseases of the lungs and pleura. Clinic. Diagnostics. Treatment.
12. Syndrome vascular insufficiency with aortic aneurysms. Clinic. Diagnosis. Treatment.
13. Indications for surgical treatment of gastric and duodenal ulcers.
14. Acute ischemia of organs and tissues.
15. Syndrome of mechanical jaundice with a benign tumor of the body of the pancreas, differential diagnosis and treatment.
16. Syndrome of airway obstruction with purulent diseases of the lungs and pleura. Clinic, Diagnosis, Differential Diagnosis. Treatment.
17. Complications of acute appendicitis: clinical presentation, diagnosis, treatment.
18. Postthrombophlebitic syndrome: diagnosis, treatment, complications.
19. Syndrome of pain in the lower abdomen with intra-abdominal diseases. Differential diagnosis. Tactic treatment.
20. Syndrome of acute tissue ischemia. Differential diagnosis. Treatment.
21. Syndrome of airway obstruction in inflammatory diseases of the mediastinum and trachea.
22. Dysphagia with chemical burns of the esophagus. Operation Ru-Herzen-Yudin.
23. Syndrome of acute ischemia of organs and tissues. Saveliev classification.
24. Combined abdominal trauma.
25. Lung failure in suppurative diseases of the lungs and pleura.
26. Aortic aneurysm.
27. Dynamic intestinal obstruction.
28. Obstructive syndrome in purulent diseases of the lungs and pleura.
29. Vascular insufficiency with aortic aneurysm.
30. Syndrome of acute ischemia of organs and tissues, Saveliev classification.
31. The syndrome of the superior vena cava.

32. Bleeding from the lower GI tract. Choledocholithiasis.
33. Chronic obstructive pulmonary disease. Clinic, diagnosis, treatment.
34. Pre-cancerous diseases of the stomach clinic, diagnosis, treatment.
35. Vascular hypertension syndrome.
36. Heart Failure Syndrome in Inflammatory Heart Diseases.
37. Syndrome of mechanical jaundice with non-neoplastic diseases of the gallbladder and biliary tract.
38. Syndrome pain in the upper abdomen.
39. Indications for operas. treatment of gastric ulcer and duodenum.
40. Aortic aneurysm syndrome. methods of diagnosis and treatment.
41. Lung cancer, classification, methods of diagnosis and treatment.
42. Gallstones syndrome Bleeding ulcer etiology. Diagnostics. Treatment.
43. Syndrome of heart failure with acquired defects. Classification of mitral defects by B.V. Petrovsky, classification of heart failure according to A.N. Bakulev and E.A. Damir. Diagnostics. Clinic. Treatment.
44. Syndrome airway obstruction in diseases of the trachea and mediastinum. Clinic. Differential diagnosis. Treatment.
45. Indications for operas. treatment of gastric ulcer and duodenum.
46. Combined chest injury.
47. Classification of mitral defects according to B.V. Petrovsky and S.N. Bakulev
48. Gastrointestinal bleeding is not ulcerative etiology.
49. Heart failure with acquired heart defects, classification of mitral defects according to Petrovsky and Bakulev.
50. Lung cancer, modern problems of diagnosis, classification, treatment.
51. Indication for various methods of treatment of peptic ulcer.
52. Lung cancer. Modern classification. relevance of early diagnosis. treatment.
53. Ileofemoral thrombosis. conservative and surgical treatment. complications. postthrombotic syndrome.
54. Biliodigestive fistula. Mirazy syndrome. Diagnostics. Treatment.

55. Lung cancer. Early diagnosis. Classification.
56. Vein thrombosis. Post-thrombotic syndrome.
57. Syndrome of abdominal pain in extra-abdominal diseases. Diagnostics.
58. Syndrome of chronic ischemia of organs and tissues. Diagnostics. Treatment.
59. Dysphagic syndrome in diseases of the esophagus of non-tumor nature. Diagnostics.
60. Syndrome of pain in the lower abdomen with intra-abdominal diseases.
61. Syndrome airway obstruction in diseases of the mediastinum and trachea, as well as with a combined injury of the chest.
62. Syndrome of mechanical jaundice with non-tumor diseases of the gallbladder and extrahepatic bile ducts.
63. Abdominal pain syndrome in the lower abdomen.
64. Syndrome of acute arterial insufficiency.
65. Bronchial obstruction in diseases of the mediastinum and trachea.
66. Pulmonary embolism, Saveliev classification and all about pulmonary embolism
67. Benign tumors of the esophagus.
68. Acute appendicitis: complications, features of the course in children, pregnant women and the elderly.
69. Dysphagia syndrome in esophageal neoplasms. Modern methods of diagnosis and treatment.
70. Syndrome of chronic ischemia of the lower extremities. Diagnosis, Differential diagnosis, classification by Pokrovsky, modern methods of treatment.
71. Pulmonary hypertension syndrome with congenital heart defects. Diagnostic, modern treatment.
72. Acute intestinal obstruction syndrome.
73. Syndrome of airway obstruction on the background of lung cancer.

74. Syndromes of vascular insufficiency on the background of vascular lesion of the brain.
75. Syndrome complicated by. appendicitis.
76. Lung cancer. Modern classification.
77. Syndrome of obstructive jaundice with parasitic cysts and liver tumors.
78. Syndrome of bronchial obstruction in suppurative diseases of the lungs of the pleura.
79. Obstructive intestinal obstruction. Classification of intestinal obstruction.
80. Acquired defects and both classifications - according to Petrovsky and Bokeria
81. Syndrome of airway obstruction in suppurative diseases of the lungs and pleura.
82. Hernias of the esophageal opening of the diaphragm. GERD. Modern methods of diagnosis and treatment.
83. Hernias of the esophageal opening of the diaphragm. GERD. Clinic. Diagnostics. Treatment.
84. Leriche syndrome. Classification of chronic ischemia of the lower extremities according to Fonten-Pokrovsky.
85. Syndrome of mechanical jaundice with parasitic liver diseases. Clinic. Diagnostics. Treatment.
86. Lower limb ischemia syndrome (the classification according to Petrovsky must be known, you may ask). Clinics, differential diagnosis. Treatment.
87. Respiratory failure syndrome with hiatal hernia. GERD. Clinic, treatment.
88. Syndrome of mechanical jaundice. Causes, clinical, differential diagnosis.
89. Complicated appendicitis syndrome.
90. Bronchial obstruction syndrome in lung neoplasm (luminal closure classification, TMN)
91. Heart failure with acquired defects. Classification of Petrovsky and Bakulev.
92. Ischemic heart disease

93. Diseases of the trachea and mediastinum
94. Differential diagnosis of ulcer perforation, appendicitis and cholecystitis.
95. Lymphatic venous insufficiency;
96. The syndrome of the superior vena cava;
97. Mechanical jaundice in non-neoplastic diseases of the biliary tract and ducts.
98. Dysphagia syndrome in malignant tumors of the esophagus.
99. Algorithm for the treatment of dynamic intestinal failure.
100. Congenital heart defects. Fallo Group.

Situational tasks (examples)

Performed using basic knowledge of the academic subject

Criteria for evaluation:

Credited - the student solved the situational problem without errors

Not credited - the student could not solve the situational problem

A 42-year-old patient was diagnosed with Hofmeister-Finsterer for gastric ulcer disease. On the 3rd day, the condition deteriorated sharply. There were pains in the epigastric region, which spread throughout the abdomen. Disturbed by hiccups. An objective study: pale skin; tongue dry, white coated. Pulse on the radial artery rhythmic, 108 per minute. In the lungs vesicular breathing, hard. Local status: abdomen evenly moderately swollen, limitedly involved in the act of breathing, painful in all departments, moderate muscle tension in the epigastric region, and there is a positive Shchetkin-Blumberg symptom. When auscultation intestinal noise is not heard.

What postoperative complication should I think about?

What could lead to this complication?

What is the tactic and further treatment?

***

3 months after resection of 2/3 of the stomach, according to Hofmeister-Finsterer, the patient turned to a local therapist with complaints of marked weakness, appearing 15–20 after eating; feeling hot, sharp sweating; dizziness, palpitations.
What post-gastro-recurrent disorder can be assumed?
Suggest a survey plan with justification.
Is there a need to consult a gastroenterologist, surgeon, gynecologist, endocrinologist?

***

A patient of 36 years old was admitted to the surgical department 4 months after stomach resection according to Hofmeister-Finsterer. The patient notes that 3-4 times a week 40 minutes after each meal there is a feeling of heaviness in the epigastrium, nausea and vomiting of bile, after which there is relief. A “light gap” is possible up to several weeks, usually 2-3. The recommended diet after surgery is trying to follow.
What post-gastro-recurrent disorder can be assumed?
Suggest a survey plan with justification.
Is there a need to consult a gastroenterologist, a surgeon?

***

The patient is 34 years old, during the last 12 years he suffers from peptic ulcer of the duodenal bulb with hypersecretion. Conservative outpatient and repeated inpatient anti-ulcer treatment were found to be ineffective, and therefore resection of the stomach was performed according to Billroth I. After 4 months, fibrogastroscopy revealed a recurrent peptic ulcer of gastroduodenal anastomosis.
Has a peptic ulcer surgery been indicated?
What are the causes of re-ulceration?
Survey plan and further treatment tactics.

***

The patient is 37 years old, 6 years ago there was a perforation of “dumb” duodenal ulcer. For several years after the operation (suturing of perforated ulcer), the patient felt good and did not go anywhere. At the moment, there are pains in the epigastrium and right upper quadrant, outpatient anti-ulcer treatment has begun. With the clinic of gastrointestinal bleeding, the patient was taken from the house by the ambulance team to the surgical hospital where the diagnosis was “Gastrointestinal bleeding. Peptic ulcer of duodenal ulcer. Scar-ulcer deformity of the bulb "confirmed. Bleeding stopped by conservative measures.

What are the further treatment tactics?

Offer the most rational scheme of anti-ulcer treatment.

***

Patient, 57 years old. Operated in a surgical clinic 6 months ago for acute destructive pancreatitis, was discharged for outpatient treatment after 8 weeks with complete healing of the wound in a satisfactory condition. With repeated emergency admission to the clinic complains of dull arching pain in the upper abdomen, weakness, indisposition, poor appetite. Eating is accompanied by nausea, and occasionally vomiting. The body temperature is low-grade during the last week. Leukocytosis 12x109; urinary diastasis 128 units. On palpation of the abdomen - above the navel on the left is determined by a rounded education, immobile, painful, measuring 14□18 cm.

What is your presumptive diagnosis?

What additional research methods are needed?

***

A patient 48 years old, 6 months ago was operated for acute pancreatitis with purulent-necrotic complications. Formed pancreatic fistula closed after 3 months. At present, the patient has complained of a slight dull pain in the epigastric region, aggravated after a meal. After a physical examination, a volume education in the

umbilical region with dimensions of 15x17 cm of a dense – elastic consistency, painless, is determined.

What is your presumptive diagnosis?

What additional research methods are needed?

***

A 49-year-old patient was admitted to the therapeutic department with complaints of dull, almost constant epigastric pain, aggravated after ingestion of fatty foods. Notes weakness, for 3 months lost 6 kg of body weight. Often repeated diarrhea, copious fetid stool. Abuses alcohol. A month ago, appeared yellowness of the skin and sclera. An objective examination of the gallbladder is not palpable, the liver does not go out from the edge of the costal arch.

Your preliminary diagnosis?

What do you do for differential diagnosis?

***

Patient, 67 years old. Appealed to the clinic with complaints of severe skin itching, aching pain in the epigastric region and right hypochondrium, weakness, lack of appetite, the presence of jaundice, which appeared two months ago and is growing rapidly. Attacks of severe pain never noted. When inspecting the sclera and the patient's skin is sharply jaundiced, skin turgor is lowered, there are many scratches on it. The belly is soft. The liver is enlarged. In the right hypochondrium, a slightly painful formation of a non-crushing consistency, oval in shape, is palpable.

What is a presumptive diagnosis?

What methods of additional research?

What kind of consultation will be required?

***

Patient, 42 years old. Operated 15 days ago for acute destructive pancreatitis, peritonitis. The operation was performed - abdominal pancreas, cholecystostomy,

drainage of the abdominal cavity. Currently, pain in the abdomen and the surgical wound, body temperature rises in the evenings up to 38 degrees is troubling. The bandage in the area of the surgical wound (drainage channel) was abundantly soaked in scarlet blood.

What is the complication that occurred in the patient?

Further tactics.

What studies do you need to clarify the diagnosis?

***

Patient, 17 years old. Operated on destructive appendicitis, local peritonitis. Appendectomy with drainage of the abdominal cavity (PVC tube) was performed. Drainage from the abdominal cavity removed after 3 days. On the 7th day after the operation, the infiltrate is determined in the area of the wound, dense, painful. Within the last 2 days, the temperature was raised to 38°C – 39°C; the number of blood leukocytes – 18x109. During the revision of the surgical wound, up to 50 ml of pus with an unpleasant odor was released. Symptoms of peritoneal irritation no.

What complication did the patient have?

What additional methods can clarify the diagnosis?

***

Patient, 67 years old. For a large ulcer of the duodenal ulcer (chronic large ulcer penetrating into the pancreas, complicated by profuse bleeding), an emergency resection of the stomach was performed according to Billroth II. On the 5th day after the operation, pain appeared in the right hypochondrium; drainage (PVC tube and rubber glove) produces a large amount of odorless greenish liquid. At the same time the stomach remains soft, there are no symptoms of peritoneal irritation.

During the day, dressings are abundantly wetted with a greenish discharge; dressings have to be changed more than 10 times a day.

What complication arose?

What are the reasons for the occurrence of this complication?

List possible preventive measures for this complication.

***

Patient, 55 years old. Operated on for acute obstructive intestinal obstruction. Hartman operation performed. On the 5th day after the operation, the patient had severe pain in the lower abdomen. An objective study: moderate abdominal distension and tenderness in the lower parts; doubtful symptom Shchetkina-Blumberg; noises of intestinal peristalsis single. Stoma from the level of the skin gray, dull peritoneum; flabby wall. The mucous membrane of black and purple color.

What is the complication after surgery?

What are the likely causes of this complication?

What treatment tactics will you take?

***

Patient, 52 years old. He entered the surgical department with complaints of nausea, abdominal pain, cramping in nature, absence of stool for three days. Gases go bad. When viewed condition of moderate severity. Tongue dry, white coat coated at the root. Pulse 88 beats / min, rhythmic. HELL 130/80 mm Hg Art. The abdomen is evenly moderately swollen, with palpation painful in all departments; “splashing noise” is determined; noises of intestinal peristalsis sluggish, isolated. Symptom Shchetkina-Blumberg negative. In the left lateral area of the abdomen, a dense formation of 5–4 cm is determined by palpation; it is inactive and painful.

Your preliminary diagnosis?

What diagnostic methods will you confirm?

If surgical intervention is indicated, to what extent?

***

Patient, 32 years old. Delivered by the SSMP team in the surgical department with complaints of nausea, repeated vomiting; pain in the stomach cramping character. Sick during the day.

History: operated 2 years ago for perforated duodenal ulcer. When viewed condition of moderate severity. Pale skin. The tongue is dry, at the root lined with brown bloom. Pulse 92 beats / min, rhythmic. HELL 90/70 mm RT. Art. The abdomen is swollen, painful on palpation, tense in all departments. Noise of intestinal peristalsis increased. Symptom Shchetkina-Blumberg negative. On the survey radiograph of the abdominal cavity Kloyber's small bowls.

Your preliminary diagnosis?

What diagnostic methods will you confirm?

If surgical intervention is indicated, to what extent?

***

Patient, 79 years. A history of coronary heart disease, hypertension, diabetes mellitus. In an emergency order for acute intestinal obstruction, a mid-mid-laparotomy was performed. The revision revealed bloated loops of the small and large intestine to the middle third of the sigmoid colon. In an abdominal cavity a muddy serous and hemorrhagic exudate.

In the middle 1/3 of the sigmoid colon, a tuberous formation of 6–5–3 cm is determined by palpation, circularly covering all layers of the intestinal wall. Lower education intestine slept. There are dense whitish nodes in the right lobe of the liver with dimensions of 1.0-1.5 cm in diameter.

What kind of intestinal obstruction in question?

Choose the best method of intra-and postoperative intestinal decompression.

How much surgical intervention is possible in this situation?

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Patient, 42 years old. Delivered to the duty surgical department after 6 hours from the moment of illness. Operated on an emergency basis for acute intestinal

obstruction. During laparotomy, a conglomerate formed by loops of the small intestine was found in the abdominal cavity. When revising the dark-cherry-colored loop conglomerate, the mesentery of the small intestine is twisted around its axis.

What kind of intestinal obstruction in question?

What methods do you assess the viability of the gut?

Scope of surgery for viable bowel?

The volume of surgery for necrosis of the intestine?

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Patient, 35 years old. Three months ago, she was operated on at a general surgical hospital for a sigmoid colon tumor (poorly differentiated adenocarcinoma with germination of all layers of the intestinal wall and metastases into regional lymph nodes) complicated by acute intestinal obstruction. Hartman operation performed. Subsequently, the oncologist was not observed. I turned to the clinic to the surgeon with a request to give a referral for a reconstructive surgery.

Your treatment tactics?

Patient examination plan, and in what medical institution it is better to implement it?

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A man during a fight got stabbed in the left half of the chest. In the emergency room on duty surgery, the pallor of the skin, tense neck veins, and tachycardia attract attention. Auscultation in the left half of the chest breathing is weakened, deaf tones of the heart. Wound in the 4th intercostal space on the mid-clavicle line; 2.5 cm long; external bleeding stopped.

What is your presumptive diagnosis?

What research is necessary to conduct the patient?

What treatment will you offer this patient?

***

A 44-year-old patient, after hypothermia, had a temperature of 38-39 ° C, pains appeared in the right half of the chest, aggravated by breathing; unproductive cough. The temperature was kept for 8 days, despite the anti-inflammatory treatment. Then, the patient began to separate purulent sputum with an unpleasant odor in the amount of 200 ml / day. After that, the temperature dropped to 37.3-37.1; improved general condition.

What is a presumptive diagnosis?

Offer your surgery plan

***

A nursing woman, 4 weeks after birth, had pain in the left breast. Iron increased in volume. The next day, the body temperature rose to 39□ C, a headache, a feeling of weakness, lost appetite. Breastfeeding has become painful. During the examination, it was found that the left mammary gland is enlarged, there is a lymphangitis. Palpation of iron diffusely painful; local infiltrates and fluctuations are not defined.

Suppose the disease, specify the form of inflammation.

With what diseases is it necessary to conduct a differential diagnosis.

Describe a treatment plan

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A patient, 43 years old, suffers from gastric ulcer (ulcer up to 1.5 cm in diameter in the lower 1/3 of the body of the stomach) for about 3 years. Conservative treatment included the use of antisecretory drugs; there was scarring of the ulcer. There was an episode of gastrointestinal bleeding with hospitalization in the surgical department. Repeatedly performed a biopsy of the ulcer. Morphologically confirmed the benign nature of ulceration.

Offer the patient a survey plan and treatment regimen.

Do you find mistakes in treatment and tactics?

Are there indications for surgery, how much is preferable?

***

A 38-year-old patient receives conservative treatment (antibiotics, physiotherapy) for the alleged periappendicular infiltrate. Local manifestations of the inflammatory process subsided somewhat, but the subfebrile temperature is maintained, the ESR is increased. The infiltrate sizes did not decrease within a month.

What should the attending physician suspect?

What research methods can clarify the diagnosis?

***

Patient 43 years. A year ago, it was operated on for the nodular goiter of the left lobe of the thyroid gland (enucleation was performed). Histological preparations are not preserved. A month ago, I found a dense lymph node in the projection of the neurovascular bundle on the left, which gradually increases in size and at the time of inspection reaches 2 cm in diameter. In the left lobe of the thyroid gland a poorly contoured fuzzy seal up to 1 cm in diameter is determined by palpation.

1. Between what diseases will you conduct differential diagnostics?

The most likely diagnosis?

Suggest a surgery plan.

***

Patient 26 years. For many years, notes the presence of pigment formation on the chest wall. Recently noticed a change in color: from brown it became pink-purple. In the last 2 weeks, the “mole” began to bleed with a minor injury, which was the reason for going to the doctor. On examination: on the right side of the chest wall there is a plaque formation of an elongated shape, towering above the surface, with wavy contours, brown tones on the periphery and pink in the center, measuring

4.5□2.0 cm, in the center - an exophytic formation of 0.8 cm in diameter with expression.

Between what diseases will you conduct differential diagnostics?

What kind of specialist consultation is needed?

The most probable diagnosis?

***

Patient 65 years. I got sick 3 days ago when moderate paroxysmal abdominal pain and nausea began to bother me. Then the pain intensified, appeared unformed stool "with blood." The condition of the patient is of moderate severity. Body temperature 37.5 C. Pulse 100 beats / min, rhythmic. The abdomen is somewhat enlarged; soft, painful in the left flank and epigastria. Symptom Shchetkina-Blumberg negative. Positive symptom of Mondor. Due to the lack of effect of conservative therapy, laparoscopy was performed, during which it was found that: in the abdominal cavity, a large number of hemorrhagic effusions, small intestinal loops are purple-cyanotic, the wall of the intestine and its mesentery are sharply swollen.

What disease can I think about?

What is the surgical tactic?

How much surgery is most rational for this pathology?

What are the criteria for viability of the intestine?

***

Sick 34 years. For the last 5 years, he has noted pains in his left foot and lower legs when walking, can pass without stopping only 50-60 m. Active movements in the joints of the affected limb in full, sensitivity on the foot is reduced. The pulsation of the femoral and popliteal arteries is distinct, not determined on the arteries of the foot.

What disease can I think about?

Suggest a survey to clarify the diagnosis.

What treatment is indicated for the patient?

***

A 62-year-old patient on the 4th day after an emergency cholecystectomy suddenly suffered choking, chest pain, loss of consciousness. On examination: cyanosis of the face and upper half of the body. Pulse 120 beats / min, blood pressure 80/50 mm Hg Heart sounds are rhythmic, weakened; 2nd tone accent on the pulmonary artery. Revealed a moderate swelling of the right lower limb, increased vascular pattern in the inguinal region.

What complicated the postoperative period?

Optimal survey plan?

Specify the prevention of this complication.

***

A 52-year-old patient who was admitted to the on-call surgical hospital with an acute abdomen clinic underwent diagnostic laparoscopy. On examination of the abdominal cavity, a large amount of hemorrhagic fluid was detected; on the greater omentum, intestinal mesentery - spots of fat necrosis. The gallbladder is tense, enlarged.

Your diagnosis?

Is it possible to translate diagnostic laparoscopy into therapeutic?

Offer the most rational volume of operation.

***

Patient 58 years. Was admitted to the surgical clinic on day 3 of the onset of the disease with complaints of pain in the right hypochondrium and epigastric pain, nausea, repeated vomiting. Suffering from asthma. The condition is severe, acrocyanosis. NPV 25 / min. Pulse 110 beats / min, blood pressure 140/90 mm RT. Art., body temperature 38,5□C. Tongue dry, white coated. The abdomen with superficial palpation is sharply painful and tense in the right hypochondrium. The

positive symptoms of Ortner, Murphy, Gergievsky-Mussi. White blood cell count $18x10^9$ / l.

1. Your preliminary diagnosis?
2. What research is needed to confirm the diagnosis?
3. Identify treatment tactics.

***

The patient is 52 years old, routinely operated on for chronic calculous cholecystitis. Performed cholecystectomy from the mini-access. 5 days after the operation, a clinic of progressive obstructive jaundice developed, with an ultrasound picture of a complete block of hepaticocholedochus at the level of the gate of the liver. During relaparotomy, a ligature was detected on the crossed hepaticocholedochus in the portal fissure of the liver. Distal common hepatic duct not found.

Formulate a diagnosis based on intraoperative data.

List the most likely causes of this complication.

Possible volumes of surgery in the event of this complication.

***

The patient is 26 years old. Received on day 4 of the onset of the disease. The collected history and clinical picture at the time of the examination does not raise any doubts that the patient has acute appendicitis. But in the right iliac region, a dense, immovable formation measuring 10 - 12 cm, moderately painful to palpation, is palpated. Leukocytosis $12x10^9$, formula shift to the left. Body temperature 37.5℃.

What is your presumptive diagnosis?

What additional research methods are appropriate to clarify the diagnosis and determine the surgical tactics?

***

A patient with a clearly limited perpendicular infiltrate, subfebrile temperature and a satisfactory condition on the 4th day after admission and 9th day from the onset of the disease had pains in the lower abdomen, the temperature rose to 39 ° C. The stomach is not swollen, participates in the act of breathing; mild, deep palpation is available in all departments except the right iliac region, where sharp pain and positive Shchetkin-Blumberg symptom are determined. When digital rectal examination of the overhang of the anterior wall of the rectum and pain is not.

Your preliminary diagnosis?

How to confirm the diagnosis?

Formulate the indications for operation and justify the volume.

***

A 20-year-old patient who was operated on 8 hours ago for acute gangrenous appendicitis developed weakness, dizziness and a bandage in the area of drainage, was moderately soaked with blood. Pale skin, pulse on the radial artery of weak qualities, HR - 102 per minute; blood pressure 80- and 40-mm Hg. The operating surgeon has appointed an emergency control of the number of red blood cells and hemoglobin and hemostatic therapy.

What complication after appendectomy developed in a patient?

Comment on the actions of the surgeon in this situation;

Optimal treatment tactics?

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In a 71-year-old patient, in the right inguinal region, palpation determines the formation above the inguinal ligament, 6x5 cm in size, of a soft-elastic consistency, painless, that does not descend into the scrotum. Elements of the spermatic cord are not thickened, the pulsation of the inferior epigastric artery outwards from the formation. The symptom of "cough shock" is positive; education is easily reset into the abdominal cavity.

Formulate a clinical diagnosis.

Formulate the indications for surgery.
Assign a survey plan, necessary tests for the operation, preoperative preparation.
Recommend best practices for surgery.

***

The patient was operated on for the strangulated right femoral hernia. During the operation, surgeons cut the scar-modified tissue outward from the hernial sac, in order to eliminate the strangling ring, which led to abundant bleeding, which was stopped. In the process of hemostasis, the strangulated loop of the intestine slipped into the abdominal cavity. The operation is completed with Bassini femoral canal plasty.
What were the technical and tactical mistakes of the surgeon?
List signs of bowel vitality.

***

A 24-year-old patient was diagnosed with duodenal ulcer. When fibrogastroscopy confirmed chronic ulcer with a diameter of 0.4 cm with its localization on the back of the duodenal bulb. According to the analysis of gastric juice on an empty stomach, hypersecretion is present, and after stimulation with histamine, the acidity figures are high. The motor – evacuation function of the stomach and duodenum is not impaired.
Determine the optimal treatment tactics.
Assign an anti-ulcer treatment regimen.
Is there any indication for surgical treatment?

***

A 53-year-old patient during fibrogastroscopic and X-ray studies confirmed a chronic ulcer on the lesser curvature in the middle body of the stomach with a diameter of 1.5 cm. The ulcer history is 20 years, the exacerbation of the disease 2-3 times a year. The result of a biopsy with an ulcer is a chronic ulcer.

Determine the optimal treatment tactics.

Assign an anti-ulcer treatment regimen.

Is there any indication for surgical treatment?

***

The patient is 19 years old for 4 days notes fever and pain in the occipital region. From the age of 10 he suffers from diabetes and is constantly receiving insulin. The condition for admission is severe, there is restless behavior; the skin is cold, pronounced cyanosis of the lips. The number of respiratory movements 36 per minute. Pulse 116 beats / min. HELL 90/60 mm RT. Art. The abdomen is soft, painless; liver, spleen are not enlarged.

Local status: in the occipital region and on the back of the neck, a dense, immobile infiltrate, sharply painful on palpation, measuring 7–8 cm, is determined. Small abscesses and skin necrosis are noted in its center.

Formulate a clinical diagnosis.

Schedule a survey.

Your treatment tactics, the amount of surgery?

Criteria for the assessment of "test" on the basis of the results of the academic semester:

1. Lack of passes for lectures and practical classes
2. Active work in the classroom.
3. Preparation of the message and presentation on the proposed topic.
4. Test credit test

Criteria for evaluating the oral response, colloquiums

“5 points” is given to a student, if he gives the right answers to the questions discussed, which are distinguished by the depth and completeness of the topic, can draw conclusions and summarize, give reasoned answers that are logical and consistent.

“4 points” is given to a student, if he gives the right answers to the questions discussed, which differs in the depth and completeness of the topic, knows how to draw conclusions and generalizations, but one or two mistakes are allowed in the answers.

“3 points” is given to a student, if he gives answers to the questions discussed, which do not fully reveal him, there is no logical structure of the answer, it makes several mistakes.

“2 points” is given to a student, if he gives answers to the questions discussed, which show that he does not own the material of the topic, cannot give reasoned answers, serious mistakes are made in the content of the answer.

Evaluation tools for current certification

Control tests are designed for students studying the course "Hospital Surgery, Pediatric Surgery."

Tests are necessary both for the control of knowledge in the process of the current intermediate certification, and for the assessment of knowledge, the result of which can be the setting of credit.

When working with tests, the student is invited to choose one answer from three to four proposed. At the same time, tests are unequal in complexity. Among the proposed there are tests that contain several options for correct answers. The student needs to specify all the correct answers.

Tests are designed for both individual and collective decision. They can be used in the process and classroom, and independent work. The selection of tests necessary for the control of knowledge in the process of intermediate certification is done by each teacher individually.

The results of the test tasks are assessed by the teacher on a five-point scale for issuing attestation or according to the “test” system - “no test”. The mark "excellent" is set with the correct answer to more than 90% of the tests proposed by the teacher. A rating of "good" - with the correct answer to more than 70% of tests. A rating of "satisfactory" - with the correct answer to 50% of the tests proposed by the undergraduate.

Examples of test tasks.

1. Leriche syndrome is

a) brachiocephalic non-specific arteritis

b). atherosclerotic occlusion of the abdominal aortic bifurcation

c). distal limb capillaropathy

d). migratory thromboangiitis

e). occlusion of the inferior vena cava

2. The presence of a patient with acute arterial insufficiency of the extremity numbness, cooling and pain corresponds to

a). And 1 a

b). And 1 b

c). And 2 a

d). And 2 b

e). And 3 a

3. The most severe forms of purulent arthritis are caused

a). staphylococcus

b). pneumococcus

c). we wash

d). with a pyocyanic stick

e). hemolytic streptococcus

4. The most common cause of pulmonary embolism is thrombophlebitis.

a). facial veins

b). deep veins of the lower extremities and pelvic veins

c). deep veins of the upper limbs

d). superficial veins of the lower extremities

e). superficial veins of the upper extremities

5. Pylephlebitis is thrombophlebitis.

a). splenic vein

b). inferior mesenteric vein

c). vein of the mesentery of the appendix

d). portal vein

e). hepatic vein

6. With the movement of the stone from the gallbladder into the choledoch, it does not develop:

a). hepatic colic

b). jaundice

c). purulent cholangitis

d). stenotic papillitis

e). portal hypertension

7. Postcholecystectomy syndrome may be due to:

a). cicatricial stenosis of the common bile duct

b). Choledoch stone not found during surgery

c). stenosis of the large duodenal papilla

d). duodenostasis

e). all listed

8. Intraoperative methods for studying extrahepatic biliary tract include:

a). palpation of the choledochus

b). choledochoscopy

c). intraoperative cholangiography

d). probing choledoch

e). all of the above

9. For rectal cancer stage 2, 15 cm from the anus is shown.

a). Hartmann operation

b). abdomino-perineal extirpation of the rectum, colostomy

c). anterior resection of the rectum

d). perineal rectal amputation

e). double barrel colostomy

10. Obligatory precancer of the colon include

a). juvenile polyps

b). single colon polyp

c). regional enteritis

d). terminal ileitis

e). diffuse familial polyposis

11. Symptoms of appendicular infiltrate are all except:

a). subfebrile temperature

b). Rovzing's symptom

c). profuse diarrhea

d). leukocytosis

e). palpable tumor formation in the right iliac region

12. The impossibility of determining the pulsation of the abdominal aorta in the epigastrium in acute pancreatitis is called symptom:

a). Mayo-Robson

b). Mondor

c). Kerah

d). Cullen

e). Resurrection

13. Detection during laparoscopy of serous effusion and plaques of steatonecrosis corresponds to:

a). swollen pancreatitis

b). fat pancreatonecrosis

c). hemorrhagic pancreatic necrosis

d). purulent pancreatitis

e). such changes are not characteristic of acute pancreatitis

14. The best way to open the subphrenic abscess is:

a). thoracolaparotomy

b). lumbotomy

c). two-stage transpleural access

d). Fedorov laparotomy

e). extra pleural extraperitoneal method

15. With abscess Douglas space is shown:

a). puncture through the abdominal wall

b). healing enemas

c). opening through the abdominal wall

d). puncture, dissection and drainage through the rectum

e). conservative treatment

16. To diagnose colorectal cancer, first of all

a). digital rectal exam and sigmoidoscopy

b). occult blood test

c). laparoscopy

d). ultrasound examination of the pelvic organs

e) laparotomy

17. The palliative surgery for cancer localization in the pyloric anthrax is

a). gastrostomy

b). pyloroplasty

c). gastrojejunostomy

d). gastroduodenoanastomosis

e). proximal gastrectomy

18. Radical operations for stomach cancer are

a). distal subtotal gastrectomy

b). proximal subtotal gastric resection

c). gastrectomy

d). advanced combined operations

e). all listed operations

19. Symptoms of varicose saphenous veins of the lower extremities are all of the following, except

a). swelling of the distal extremities in the evenings

b). intermittent claudication

c). signs of trophic disorders of the skin of the leg

d). cramps at night

e). visible enlargement of the saphenous veins

20. In case of failure of the communicative veins of the lower extremities, the most appropriate operation should be considered

a). Babcock

b). Narat

c). Madelunga

d). Troyanova - Trendelenberg

e). Linton

21. The main methods of treatment of nonspecific spontaneous pneumothorax is

a). thoracotomy

b). pleural puncture and air aspiration

c). thoracoscopy with subsequent drainage of the pleural cavity

d). drainage of the pleural cavity with active aspiration

e). observation

22. Spontaneous pneumothorax most often occurs.

a). with lung abscess

b). with pulmonary echinococcus

c). with central lung cancer with atelectasis and decay in the atelectasis zone

d). cavernous pulmonary tuberculosis

e). with bullous lung disease

23. The patient's temperature rose to 39 ° C 15 days ago, pains appeared in the first half of the chest. Diagnosed lower lobe pneumonia. 7 days ago, I began to cough up spitting purulent sputum, 2 days ago - sudden severe chest pain, shortness of breath. Breathing over the right lung is poorly heard, in the lower parts of the right lung shortening of percussion sound. The most likely complication of pneumonia is

a). exudative pleurisy

b). spontaneous pneumothorax

c). fibrous pleurisy

d). pyopneumothorax

e). abscessing

24. The complication is not typical for operations on the thyroid gland is

a). bleeding

b). air embolism

c). fat embolism

d). tracheal damage

e). lesion of recurrent nerve

25. The first clinical sign of acute burn toxemia is

a). anemia

b). diuresis normalization

c). fever

d). dysproteinemia

e) pain