

MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS
Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY

APPROVED

by Vice-Rector for Academic Affairs
of the Educational Institution
«Belarusian State Medical University»

Y.A.Sokolov

____.____.2026

STATE EXAMINATION PROGRAM

«SURGICAL DISEASES»

in the specialty 1-79 01 01 «General Medicine»

for sub-residency «General Clinical Practice»

The program of the state examination is developed on the basis of:
the higher education standard in the specialty 1-79 01 01 «General Medicine», approved and put into effect by the Resolution of the Ministry of Education of the Republic of Belarus, dated 30.08.2013 № 88;
the curriculum in the academic discipline «Surgical Diseases» for the specialty 1-79 01 01 «General Medicine», approved 31.08.2016, registration # UD-L.560a/1617/edu.;

the curriculum in the academic discipline «General Surgery» for the specialty 1-79 01 01 «General Medicine», approved 20.08.2014, registration # UD-L.341/1415/p.

the curriculum in the academic discipline «Neurology and Neurosurgery» for the specialty 1-79 01 01 «General Medicine», approved 31.08.2016, registration # UD-L.576a/1617/edu.;

the curriculum in the academic discipline «Anesthesiology and Reanimatology» for the specialty 1-79 01 01 «General Medicine», approved 01.08.2016, registration # UD-L.535a/1617/edu.;

the curriculum in the academic discipline «Traumatology and Orthopedics» for the specialty 1-79 01 01 «General Medicine», approved 27.06.2017, registration # UD-L.601/1718/edu.;

the curriculum in the academic discipline «Oncology» for the specialty 1-79 01 01 «General Medicine», approved 23.07.2018, registration # UD-L.612/1819/edu.;

the curriculum in the academic discipline «Urology» for the specialty 1-79 01 01 «General Medicine», approved 16.11.2017, registration # UD-L.609/1718/edu.;

the curriculum in the academic discipline «Surgical Diseases» for the specialty 1-79 01 01 «General Medicine» Sub-Residency «General Clinical Practice», approved 12.08.2023, registration #UD-L.02/2324/edu.sub.

COMPILERS:

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RECOMMENDED FOR APPROVAL:

by the Department of Surgery and Transplantology with advanced training course and retraining of the Educational Institution «Belarusian State Medical University» (protocol # 14 of 06.03.2025);

by the Council of the Faculty of General Medicine of the Educational Institution «Belarusian State Medical University»
(protocol # _ of _____)

STATE EXAMINATION PROCEDURE

List of academic disciplines included in the state examination:

1. «Surgical Diseases»;
2. «General Surgery»;
3. «Traumatology and Orthopedics»;
4. «Oncology»;
5. «Anesthesiology and Reanimatology»;
6. «Urology»;
7. «Neurology and Neurosurgery».

State examination form and procedure

The state examination is conducted orally using examination cards at an open meeting of the state examination commission (hereinafter referred to as the SEC).

The student is given at least 30 minutes to prepare for the answer to the state examination. In order to clarify the examination mark, the SEC members may ask the student additional questions in accordance with the state examination program. The number of additional questions asked by one of the SEC member should not exceed three.

STRUCTURE OF THE EXAMINATION CARD

An examination card for an oral interview includes five theoretical questions: the first and second – on the academic discipline « Surgical Diseases », the third – on the academic discipline «General Surgery» and «Traumatology and Orthopedics», the fourth – on the academic discipline «Oncology», the fifth – on the academic disciplines «Urology», «Anesthesiology and Reanimatology» or «Neurology and Neurosurgery».

CONTENT OF THE STATE EXAMINATION PROGRAM

1. SURGICAL DISEASES

Acute and Chronic Appendicitis

Acute appendicitis: etiopathogenesis, classification, clinical presentation, diagnosis.

Differential diagnosis of acute appendicitis, principles of treatment.

Specific features of acute appendicitis in children, aged people, pregnant women.

Appendiceal mass: clinical presentation, diagnosis, differential diagnosis, principles of treatment.

Concept of chronic appendicitis: causes, clinical presentation, diagnosis, principles of treatment.

Acute Pancreatitis

Acute pancreatitis: definition, classification, etiology, pathogenesis.

Acute pancreatitis: clinical presentation, diagnosis, differential diagnosis.

Principles of treatment of acute pancreatitis depending on the form and stage.

Complications of acute pancreatitis: clinical presentation, diagnosis, treatment.

Chronic Pancreatitis

Chronic pancreatitis: definition, classification, etiology, pathogenesis, clinical forms.

Chronic pancreatitis: diagnosis, differential diagnosis, treatment, types of surgical procedures.

Complications of chronic pancreatitis: clinical presentation, diagnosis, treatment.

Gallstone diseases. Acute and Chronic Cholecystitis

Gallstone diseases: definition, clinical forms, diagnosis, complications. Theories of stone formation.

Acute calculous cholecystitis: classification, clinical presentation, diagnosis, differential diagnosis, principles of treatment.

Chronic calculous cholecystitis: clinical forms, diagnosis, principles of treatment.

Concept of postcholecystectomy syndrome: types, causes, conservative and surgical management.

Cholestasis syndrome: definition, clinical presentation, diagnosis. Classification, differential diagnosis of jaundices.

Intestinal Obstruction

Intestinal obstruction: definition, classification, etiology, pathogenesis.

Intestinal obstruction: clinical presentation, diagnosis, differential diagnosis of various types of intestinal obstruction.

Differential diagnosis of functional and mechanical intestinal obstruction.

Complications of Gastroduodenal Ulcers

Perforated ulcer: clinical presentation, diagnosis, treatment.

Atypical perforation of gastric and duodenal ulcers: causes, peculiarities of clinical presentation and diagnosis.

Bleeding gastroduodenal ulcer: clinical presentation, diagnosis, principles of conservative treatment.

Bleeding gastroduodenal ulcer: methods of endoscopic hemostasis, indications for surgery, principles of surgical treatment.

Differential diagnosis of gastroduodenal and colonic bleeding.

Mallory-Weiss syndrome: etiology, clinical presentation, diagnosis, surgical tactics.

Gastric outlet obstruction of peptic ulcer etiology: pathogenesis, clinical presentation, diagnosis, principles of conservative and surgical treatment.

Symptomatic ulcers (hormonal ulcers, Zollinger-Ellison syndrome, drug-induced ulcers): causes, principles of diagnosis and treatment.

Blunt Abdominal Trauma

Blunt trauma of the anterior abdominal wall: types of injuries, clinical presentation, diagnosis, principles of treatment.

Blunt abdominal trauma with hollow organ injury: clinical presentation, diagnosis, physician's management during first aid and in the hospital.

Blunt abdominal trauma with parenchymal organ injury of the abdominal cavity: clinical presentation, diagnosis, physician's management during first aid and in the hospital.

Concept of two-phase rupture of a parenchymal organ. Pathogenesis. Clinical presentation. Management.

Blunt abdominal trauma with retroperitoneal organ injury: clinical presentation, diagnosis, management.

Blunt Chest Trauma

Blunt chest trauma: definition, classification, mechanisms of injury, complications, diagnostic methods, and principles of treatment.

Rib fractures: clinical presentation, diagnosis, treatment.

Pneumothorax: causes, classification, clinical presentation, diagnosis, and management.

Hemothorax: causes, classification, clinical presentation, diagnosis, and management.

Peritonitis

Peritonitis: causes, classification, clinical manifestations, principles of diagnosis.

Modern principles of treatment of patients with peritonitis. Rational antibiotic therapy.

Hernias, Complications of Abdominal Hernias

Hernias: definition, anatomy, causes, pathogenesis, classification.

Clinical presentation, diagnosis, and treatment of uncomplicated hernias.

Irreducible hernia: definition, clinical presentation, diagnosis, treatment.

Postoperative hernias: definition, causes, diagnosis, treatment. Causes of hernia recurrence. Prevention of postoperative and recurrent hernias.

Inguinal hernias: classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment.

White (Hunter's) line hernias: clinical presentation, diagnosis, surgical methods.

Umbilical hernias: clinical presentation, diagnosis, treatment. Peculiarities of treating umbilical hernias in children.

Femoral hernia: clinical presentation, diagnosis, differential diagnosis, surgical treatment.

Strangulated hernia: causes, clinical presentation, diagnosis, principles of treatment.

Focal Liver Diseases

Modern methods of diagnosis of focal liver and biliary tract diseases.

Liver cysts: etiology, classification, clinical presentation, diagnosis, differential diagnosis, treatment.

Liver abscesses: etiology, classification, clinical presentation, diagnosis, differential diagnosis, treatment.

Surgery of Parasitic Diseases

Echinococcosis: etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, complications, treatment, prevention.

Purulent Diseases of the Lungs, Pleura, and Mediastinum

Lung abscess: etiopathogenesis, clinical presentation, diagnosis, principles of treatment.

Lung gangrene: etiopathogenesis, clinical presentation, diagnosis, principles of treatment.

Bronchoectatic disease: definition, classification, etiology, pathogenesis, clinical presentation, diagnosis, treatment.

Pleural empyema, pyopneumothorax: definition, etiology, pathogenesis, clinical presentation, diagnosis, treatment.

Mediastinitis: definition, classification, etiology, pathogenesis, clinical presentation, diagnosis, principles of treatment.

Surgery of Veins

Varicose disease of the lower extremities: classification, etiology, pathogenesis, clinical presentation, diagnosis.

Varicose disease of the lower extremities: conservative treatment, indications for surgery, types of surgical interventions.

Thrombophlebitis of superficial veins of the lower extremities: causes, clinical presentation, diagnosis, principles of treatment.

Deep vein thrombosis of the lower extremities: causes, clinical presentation, diagnosis, complications, principles of treatment.

Post-thrombotic disease: etiology, pathogenesis, clinical presentation, classification, examination methods, principles of conservative and surgical treatment.

Portal Hypertension Syndrome

Portal hypertension syndrome: definition, classification, causes, pathogenesis, clinical presentation.

Surgical complications of portal hypertension syndrome: pathogenesis, main clinical manifestations, principles of diagnosis and treatment.

Diabetes Mellitus in Surgery

Management peculiarities of patients with diabetes mellitus in the treatment of emergency and elective surgical pathology.

Diabetic foot syndrome: classification, clinical presentation, diagnosis, treatment.

Management and diagnostic features in acute surgical diseases on out-patient basis

Diagnostic capabilities in out-patient conditions. Features of management in acute surgical diseases in out-patient conditions (at home, in out-patient clinic).

Surgery of Arterial Diseases

Aortic aneurysms: definition, etiology, pathogenesis, classification, clinical presentation, diagnosis, surgical management, complications.

Aortic dissection: definition, etiology, pathogenesis, classification, clinical presentation, diagnosis, surgical management, complications.

Acute arterial ischemia of the lower extremities: causes, clinical presentation, principles of diagnosis and treatment.

Chronic arterial ischemia of the lower extremities: etiopathogenesis, classification, clinical presentation, diagnosis, principles of conservative and surgical treatment.

Atherosclerotic disease of the lower extremities: etiology, pathogenesis, clinical presentation, diagnosis, principles of conservative and surgical treatment.

Obliterating endarteritis: etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment.

Raynaud's disease: clinical presentation, diagnosis, treatment.

Organ and Tissue Transplantation

Main definitions: transplantation, recipient, donor, classification of transplants. Immunological basis of transplantology.

Legal and ethical issues of organ transplantation.

Surgical Diseases of the Small and Large Intestines

Crohn's disease: classification, clinical presentation, diagnosis, complications, conservative therapy, principles of surgical treatment.

Ulcerative colitis: classification, clinical presentation, diagnosis, complications, conservative therapy, principles of surgical treatment.

Intestinal diverticula: classification, clinical presentation, complications, diagnosis, principles of treatment.

Acute and chronic mesenteric ischemia: causes, clinical presentation, diagnosis, surgical tactics.

Intestinal fistulas: classification, clinical presentation, diagnosis, surgical management.

Foreign bodies of the digestive tract: clinical presentation, diagnosis, management.

Diseases of the Rectum

Hemorrhoids: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment.

Complications of hemorrhoids: clinical presentation, surgical management.

Anal fissure: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment.

Perianal abscess: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment.

Fistula-in-ano: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment.

Diseases of the Esophagus and Diaphragm

Classification of surgical diseases of the esophagus. Modern methods of diagnosing esophageal diseases.

Achalasia: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment, complications.

Esophageal diverticula: etiology, pathogenesis, classification, clinical presentation, diagnosis, treatment, complications.

Spontaneous esophageal rupture: pathogenesis, clinical presentation, diagnosis, physician's management.

Chemical burns of the esophagus: causes, clinical presentation, diagnosis, emergency care, complications.

Esophageal strictures: causes, clinical presentation, diagnosis, differential diagnosis, treatment.

Hiatal hernias: classification, clinical presentation, diagnosis, treatment, complications.

Diaphragmatic relaxation: etiology, clinical presentation, differential diagnosis, treatment.

Surgery of Mammary Gland

Inflammatory diseases of the mammary gland (specific and non-specific): clinical presentation, diagnosis, treatment.

Mammary gland injuries: clinical presentation, diagnosis, treatment.

Dishormonal and functional diseases of the mammary gland: clinical presentation, diagnosis, differential diagnosis, treatment.

2. GENERAL SURGERY

Antisepsis: definition, types of modern antisepsis and their brief characteristics.

Asepsis. Sources and routes of infection spread. Concept of nosocomial infection.

Bleeding. Basics of Clinical Transfusiology

Bleeding: definition, classification, pathogenesis, clinical presentation. Methods for determining blood loss volume.

Methods of temporary and definitive hemostasis (mechanical, chemical, physical, biological). Main principles of reestablishing acute blood loss.

General issues of transfusiology. Blood groups. ABO system. Rh-Hr antigen system. Methods for determining blood group, monoclonal antibodies, and standard red blood cells, evaluation of results. Methods for determining ABO blood group and Rh. Possible errors in blood group determination.

Mechanism of action of transfused blood, its components, and preparations. Indications and contraindications for blood transfusion, its components, and

preparations. Hemotransfusion. Order of physician's action during blood transfusion. Hemotransfusion reactions and complications, methods of prevention and treatment.

Mechanical Injuries

Blunt soft tissue injuries: concussion, contusion, rupture. Local and general signs of traumatic injuries.

Wounds. Classification of wounds. Wound healing process. Reparative changes in the wound. Wound healing by primary intention, secondary intention, under a scab. Causes of impaired wound healing. Types of scars.

Principles of general and local treatment of fresh, postoperative, and purulent wounds. Treatment of a purulent wound after surgery. Special features of gunshot wounds management. Primary, secondary, and repeated surgical debridement of wounds: definition, objectives, technique.

Crush syndrome: clinical presentation, primary medical care, principles of treatment.

Thermal Injuries and Electrical Injury

Classification of burns. Formula for describing burns. Clinical presentation depending on the degree of burn. Determining the area and depth of burns. Burn disease and burn shock: causes, manifestations, principles of treatment. Primary medical care for burns. General and local treatment of patients with burns.

General hypothermia: definition, degrees. Frostbite: degrees and depth. Pathogenesis of frostbite, symptoms in the pre-reactive and reactive periods. First aid, principles of treatment for cold injury.

Electrical injury. Mechanism of action of electric current on the body. Local and general symptoms, first aid for electrical injury.

Surgical Infection

Acute purulent surgical infection, etiology and pathogenesis, local tissue reaction, general body reaction. Systemic inflammatory response syndrome, manifestations. Main principles of general and local treatment of acute purulent surgical infection.

Furuncle: etiology, pathogenesis, localization, clinical manifestations, diagnosis, treatment. Furunculosis. Carbuncle: etiology, pathogenesis, localization, clinical manifestations, diagnosis, treatment. Abscess: definition, etiology, clinical manifestations, diagnosis, treatment. Phlegmon: definition, etiology, clinical manifestations, diagnosis, treatment. Erysipelas: etiology, classification, localization, clinical manifestations, diagnosis, treatment.

Hidradenitis: etiology, localization, clinical manifestations, diagnosis, treatment. Parotitis: etiology, clinical manifestations, diagnosis, treatment. Mastitis: etiology, varieties, clinical manifestations, diagnosis, treatment, prevention.

Acute purulent diseases of the lymphatic system (lymphangitis, lymphadenitis): etiology, clinical manifestations, diagnosis, principles of treatment.

Panaritium, phlegmons of the hand: etiology, classification, clinical manifestations, diagnosis, principles of treatment.

Osteomyelitis: etiopathogenesis, clinical manifestations, diagnosis, principles of treatment.

Acute purulent bursitis and acute purulent arthritis: etiology, clinical manifestations, diagnosis, treatment.

Anaerobic clostridial infection: clinical manifestations, diagnosis, principles of general and local treatment, prevention.

Tetanus: etiology, pathogenesis, clinical manifestations, diagnosis, general and local treatment, emergency and elective prophylaxis.

Anaerobic non-clostridial infection: clinical manifestations, diagnosis, treatment, prevention.

Tuberculosis of peripheral lymph nodes: clinical manifestations, treatment. Bone and joint tuberculosis: clinical manifestations, diagnosis, treatment.

Syphilis of bones and joints: clinical manifestations, diagnosis, treatment.

Surgical sepsis: etiology, pathogenesis, clinical manifestations, diagnosis, principles of general and local treatment.

Trophic ulcers: causes, classification, clinical manifestations, general principles of treatment.

Pressure ulcers: localization, stages, clinical manifestations, general principles of treatment, prevention.

3. TRAUMATOLOGY AND ORTHOPEDICS

General Traumatology

Bone tissue regeneration. Physiological and reparative regeneration. Stages of bone callus formation and its types. Primary and secondary healing of bones fractures.

Disorders of reparative regeneration of bone - delayed consolidation and false joint. Causes. Treatment methods.

Definition of "polytrauma"; multiple, combined, associated injuries, their characteristics. Clinical features of polytrauma (syndrome of mutual aggravation, incompatibility of therapy, acute complications of injuries – shock, massive blood loss, toxemia, acute renal failure, fat embolism, thromboembolism, etc.).

Polytrauma: clinical features of the course, medical care at the prehospital stage, choice of timing and volume of surgical interventions.

Emergency medical care for polytrauma at the prehospital stage: methods for identifying life-threatening conditions, methods for their management in patients with musculoskeletal trauma; determining the size of injuries; identifying the main injury.

Choice of anti-shock therapy methods in polytrauma patients. Transport immobilization in polytrauma patients.

Open fractures: classification, clinical manifestations, diagnosis, principles of treatment.

Local complications of trauma: secondary open fractures, damage to major vessels and nerves, acute compartment syndrome, wound infection. Prevention, diagnosis, prehospital and hospital care.

Wound infection of soft tissues, post-traumatic and postoperative osteomyelitis: prevention, diagnosis, and treatment.

General complications of trauma: traumatic shock, fat embolism. Pathogenesis, forms (pulmonary, cerebral, generalized), clinical manifestations, diagnosis, prevention, and treatment.

Rehabilitation of orthopedic and trauma patients (medical, social, domestic, and professional). Main principles, goals, and methods.

Main types of deformities of the limbs and vertebra. Methods of palpation and percussion. Methods for determining range of motion in joints. Methods for measuring limb length and circumference.

Absolute and relative clinical signs of fractures, dislocations. Types of displacement of bone fragments and methods for their determination.

Special diagnostic methods in traumatology and orthopedics. Indications for their use. Radiological signs of fractures, dislocations, and most common orthopedic diseases.

Specific Traumatology

Clavicle fractures: mechanism of injury, clinical manifestations, diagnosis, treatment.

Traumatic dislocation of the acromial end of the clavicle: mechanism of injury, clinical manifestations, diagnosis, treatment.

Fractures of the surgical neck of the humerus: mechanism of injury, clinical manifestations, diagnosis, treatment.

Fractures of the humeral diaphysis: mechanism of injury, clinical manifestations, diagnosis, treatment.

Fractures of the olecranon: mechanism of injury, clinical manifestations, diagnosis, treatment.

Fracture-dislocations of the forearm bones (Monteggia and Galeazzi injuries): mechanism of injury, clinical manifestations, diagnosis, treatment.

Fracture of the radius in the typical site (Colles and Smith fractures): mechanism of injury, clinical manifestations, diagnosis, treatment.

Hand injuries, complications, prevention, and treatment.

Fractures of the scaphoid bone: clinical manifestations, diagnosis, conservative and surgical treatment.

Tendon injuries of the hand and fingers: clinical manifestations, diagnosis, conservative and surgical treatment.

Fractures of the metacarpal bones and phalanges: diagnosis, treatment.

Pelvic bone fractures: mechanism of injury, clinical manifestations, and diagnosis. First aid. Anti-shock therapy at the prehospital stage. Principles of treatment.

Isolated injuries of spinal ligaments. Mechanism of injury, diagnosis, treatment methods. Fractures of transverse processes, arches, and articular processes – diagnosis, treatment.

Vertebral body fractures: mechanisms of injury, diagnosis, treatment methods.

Femoral neck fractures: features of bone regeneration in this area, clinical manifestations of injuries, diagnosis, treatment.

Femoral diaphysis fractures: classification, mechanism of injury, clinical manifestations, diagnosis, treatment methods.

Patellar fractures: mechanism of injury, classification, clinical manifestations, diagnosis, treatment methods.

Meniscal injuries of the knee: classification, clinical manifestations, diagnosis, and treatment.

Injuries to the knee ligaments (collateral and cruciate ligaments, patellar ligament): clinical signs, diagnosis of injuries, treatment methods.

Ankle fractures: classification, clinical manifestations, diagnosis, conservative and surgical treatment methods.

Calcaneal fractures: mechanism of injury, clinical manifestations, diagnosis, treatment.

Fractures of the metatarsal bones and phalanges. Dislocations of the toes. Diagnosis, treatment.

Traumatic dislocations of the clavicle, shoulder, hip. Classification. Mechanism of injury. Clinical manifestations. First aid. Reduction methods. Treatment in the post-traumatic period. Prevention of complications.

Orthopedics

Congenital hip dislocation: etiology, pathogenesis, classification, clinical manifestations, diagnosis, treatment.

Congenital clubfoot: frequency, etiology, pathogenesis, clinical signs, diagnosis, treatment.

Congenital muscular torticollis: frequency, etiology, clinical signs, treatment depending on severity, type of pathology, and age of the child.

Osteoarthritis: etiology and pathogenesis, classification, clinical manifestations, diagnosis, principles and methods of treatment.

Scoliosis: etiopathogenesis, clinical manifestations, X-ray diagnostics, modern conservative and surgical treatment.

Etiology, pathogenesis, pathological anatomy of osteochondropathies. Clinical manifestations of Legg-Calvé-Perthes disease, Osgood-Schlatter disease, Keller I and II disease, Scheuermann-Mau disease. Radiological diagnosis. Treatment. Prevention.

Static foot deformities: etiology, pathogenesis, classification, clinical manifestations, diagnosis, treatment methods.

5. ONCOLOGY

General Oncology

Modern methods of diagnosing malignant tumors.

Modern approaches to the treatment of malignant tumors.

Medical rehabilitation and disability assessment of the oncological patient.

Esophageal Cancer

Clinical picture and diagnosis of esophageal cancer. Differential diagnosis.

Radical and palliative treatment of esophageal cancer.

Non-tumorous esophageal diseases requiring differential diagnosis with esophageal cancer.

Gastric Cancer

Clinical picture of gastric cancer, depending on the localization and growth type of the tumor.

Diagnosis of gastric cancer.

Metastasis in gastric cancer, methods for diagnosing metastases and their morphological verification.

Non-tumorous gastric diseases requiring differential diagnosis with gastric cancer.

Choice of treatment method for gastric cancer.

Lung and Mediastinal Tumors

Clinical picture of lung cancer. Primary symptoms, symptoms of locally spread lung cancer.

Diagnosis of lung cancer, radiological signs. Differential diagnosis.

Methods of instrumental diagnosis for suspected lung cancer and the order of their performance.

Choice of treatment method for lung cancer.

Malignant Lymphomas

General signs of malignant lymphomas. Classification of malignant lymphomas. Etiology.

Clinical presentation of Hodgkin lymphoma, staging.

Clinical presentation of non-Hodgkin lymphomas depending on the morphological variant.

Diagnosis of malignant lymphomas, sequence of diagnostic methods.

Principles of treatment for patients with Hodgkin lymphoma and non-Hodgkin lymphomas. Immediate and long-term complications of treatment.

Classification of lymphadenopathies.

Diagnosis and differential diagnosis of lymphadenopathies of tumorous and non-tumorous etiology.

Colorectal Cancer

Clinical forms of colon cancer.

Clinical forms of rectal cancer.

Clinical symptoms of right-sided and left-sided colon cancer.

Screening studies for colon cancer.

Methods of endoscopic and radiological visualization of colon tumors.

Head and Neck Tumors

Risk factors for developing cancer of the oral cavity and lip. Precursor diseases (precancerous conditions).

Clinical manifestations of cancer of the lip, tongue, and floor of the mouth. Principles of treatment.

Clinical manifestations of cancer of the vestibule, middle, and subglottic regions of the larynx. Principles of treatment.

Clinical manifestations of parotid salivary gland neoplasms. Primary and confirmatory diagnosis.

Peculiarities of the clinical course of papillary, medullary, and anaplastic thyroid cancer.

Diagnosis and treatment methods for papillary and follicular thyroid cancer.

Diagnostic approach in case of an enlarged cervical lymph node.

Soft Tissue and Bone Sarcomas

Clinical manifestations of bone sarcomas. Primary and confirmatory diagnosis.

Clinical manifestations of soft tissue sarcomas. Primary and confirmatory diagnosis.

Principles of treatment of osteosarcoma and Ewing's sarcoma.

Principles of treatment of benign soft tissue tumors and sarcomas.

Skin Tumors

Melanocytic nevi and signs of their malignancy.

Main clinical-morphological forms of melanoma. Features of the clinical course.

Features of the clinical course of skin melanoma. Methods of primary and confirmatory diagnosis.

Principles of treatment of primary and metastatic skin melanoma.

Risk factors for developing skin cancer. Precursor diseases (precancerous conditions).

Features of the clinical course of basal cell and squamous cell skin cancer. Treatment methods.

Clinical signs of atypical (dysplastic) melanocytic nevus.

Breast Cancer

Concept of precancerous breast diseases. Differential diagnosis with breast cancer.

Prevention of breast cancer.

Clinical presentation of breast cancer.

Diagnosis of breast cancer.

Principles of treatment of breast cancer.

Bladder Cancer

Precancerous diseases of the bladder. Differential diagnosis with bladder cancer.

Clinical picture of bladder cancer.

Diagnostic methods for bladder cancer.

Principles of treatment of bladder cancer.

Kidney Cancer

Precancerous diseases of the kidney. Differential diagnosis with kidney cancer.

Clinical picture of kidney cancer.

Diagnostic methods for kidney cancer.

Principles of treatment of kidney cancer.

Prostate Cancer

Precancerous diseases of the prostate gland.

Screening for prostate cancer.

Clinical picture of prostate cancer.

Diagnosis and differential diagnosis of prostate cancer.

Principles of treatment of prostate cancer.

Testicular Tumors

Precancerous diseases of the testis. Differential diagnosis.

Classification of testicular tumors.

Methods for diagnosing testicular tumors, methods for detecting regional and distant metastases.

Clinical picture of testicular tumors.

Principles of treatment of testicular tumors.

Tumors of the Hepatopancreatoduodenal Area

Monitoring of patients with viral hepatitis B and C and liver cirrhosis with regard to oncological awareness.

Ultrasound signs of pancreatic head cancer.

Algorithm for differential diagnosis of metastatic liver involvement in metachronous pancreatic cancer and colorectal cancer.

Tumor markers for pancreatic cancer.

Diagnostic algorithm, from simple to complex, for suspected tumor of the major duodenal papilla.

Main etiological factors of hepatocellular carcinoma.

Main clinical signs of insulinoma and diagnostic algorithm.

Main clinical manifestations of gastrinoma.

Main prognostic factors for pancreatic tumors.

5. ANESTHESIOLOGY AND REANIMATOLOGY

Clinical assessment of the preoperative condition and choice of anesthesia method.

Premedication, its tasks. Medications for premedication.

Types of modern anesthesia. Components of general anesthesia. Periods of general anesthesia.

Endotracheal general anesthesia. Indications, contraindications. Dangers, complications, their prevention and treatment.

Non-inhalation general anesthesia. Types and methods. Indications, contraindications. Complications, their prevention and treatment.

Types of local anesthesia. Indications and contraindications.

Epidural anesthesia. Indications for use. Contraindications. Complications, their prevention and treatment.

Spinal anesthesia. Indications for use. Contraindications. Complications, their prevention and treatment.

Phases of the postoperative period. Significance of pain syndrome in the mechanism of development of functional disorders in the postoperative period.

Main forms of acid-base imbalance and their clinical manifestations. Principles of correction.

Water-electrolyte imbalance. Clinical signs, diagnosis, treatment.

Parenteral nutrition (PN). Objectives, types, indications for PN. Composition of PN.

Pulmonary embolism. Pathogenesis, clinical picture, diagnosis, intensive therapy.

Pathogenesis, clinical picture, diagnosis, intensive care of hemorrhagic shock.

Pathogenesis, clinical picture, diagnosis, intensive care of anaphylactic shock.

Pathogenesis, clinical picture, diagnosis, intensive care of cardiogenic shock.

Pathogenesis, clinical picture, diagnosis, intensive care of sepsis.

Pathogenesis, clinical picture, diagnosis, intensive care of septic shock.

Pathogenesis, clinical picture, diagnosis, principles of intensive care of comatose states.

Terminal states. Pathophysiology, symptoms of terminal states.

Basic cardiopulmonary resuscitation.

Methods for restoring and maintaining airway patency.

Advanced cardiopulmonary resuscitation.

Defibrillation. Indications, technique, indicators of effectiveness, and complications.

Drug therapy during advanced resuscitation.

Clinical signs indicating the brain death, biological death. Procedure for determining brain death.

Post-resuscitation disease: concept, pathophysiology, intensive care, complications.

Acute respiratory failure, its types.

Pathogenesis, clinical picture, diagnosis, intensive care of acute respiratory failure.

Indications and method of oxygen therapy.

Indications and methods of mechanical lung ventilation.

Stages of acute poisoning. Features of intensive care management depending on the stage.

General principles of treatment of acute poisoning.

6. UROLOGY

Acute kidney injury: causes, classification, diagnosis, clinical picture, treatment.

Acute urinary retention. Causes, diagnosis, first aid algorithm.

Macrohematuria. Types, causes, topical diagnosis. Bladder tamponade. Management in hematuria.

Kidney colic: definition, etiology, pathogenesis, diagnosis. Management.

Acute scrotum syndrome in children. Definition. Diagnosis. Management.

Acute pyelonephritis. Classification. Clinical picture. Diagnosis. Treatment of non-obstructive and obstructive pyelonephritis.

Varicocele, definition, classification, diagnosis. Treatment.

Acute prostatitis: clinical picture, diagnosis, treatment.

Urinary tract stones (urolithiasis). Theories of stone formation. Factors of stone formation. Diagnosis.

Urinary tract stones (urolithiasis). Conservative and surgical treatment. Types of surgical treatment.

Benign prostatic hyperplasia. Clinical picture. Diagnosis. Treatment.

Anuria, its types. Causes. Emergency care.

Differential diagnosis between acute urinary retention and anuria.

Urinary incontinence, definition, types, diagnosis, treatment.

7. NEUROSURGICAL DISEASES

Mild traumatic brain injury: clinical picture, diagnosis, treatment.

Moderate traumatic brain injury: clinical picture, diagnosis, treatment.

Severe traumatic brain injury: clinical picture, diagnosis, principles of treatment.

Diffuse axonal injury: mechanics of injury, pathogenesis, clinical picture, diagnosis, principles of treatment.

INFORMATION AND METHODOLOGICAL UNIT**LITERATURE****Main:**

1. Sabiston textbook of surgery: the biological basis of modern surgical practice / [ed. by] Courtney M. Townsend [et al.]. – 21st ed. - [Philadelphia] : Elsevier, 2022. – 2146 p.
2. Garkavi, A. V. Traumatology and orthopedics : textbook / A. V. Garkavi, A. V. Lychagin. – Moscow : Geotar-Media, 2023. – 781 p.
3. Бушма, К.М. Основы анестезиологии = Basics of anesthesiology : учеб. пособие для иностр. студентов учреждений высш. образования по спец. «Лечебное дело» / Бушма, Кирилл Михайлович, Ржеутская, Рита Евгеньевна. - Минск : Новое знание, 2020. –111 с.

Additional:

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