STATE UNIVERSITY OF MEDICINE AND PHARMACY "NICOLAE TESTEMITANU" REPUBLIC OF MOLDOVA

Vice Poet	_	APPROVED actic Process
Of State Medical University "	'Nicolae T	
"	"	2017

$\begin{array}{c} SYLLABUS \\ Course of Surgery for students of V^{th} year of study} \\ Faculty General Medicine \end{array}$

Study years 2018-2019

Chief of Surgical Clinic 2 Conferentiar university V.Cazacoby The Syllabus on surgery for students, V year, Faculty General Medicine includes in total **168** hours (**48** hours of lectures and **120** hours of practical courses). Each of themes includes anatomy-physiological definitions, etiology, pathogenesis, pathology, classification, clinical features, diagnosis, conservative and surgical methods of treatment, indications for surgery, postoperative complications and their prevention.

1. History of surgical clinic N2. Patient's examination (case of history surgical)

History of surgical clinic nr.2. Practical courses have an intension to teach the students to obtain the methods of clinical examinations of patients with surgical pathology, participation on surgical interventions, manipulations and procedures.

Patient's examination (case of history surgical). The aim of this work consists in studying by student the peculiarity of case history. To master the methods of investigation, developing of clinical thinking, the possibility to formulate diagnosis on the basis of laboratory and instrumental data, and to formatted the plan of treatment. Student must examination from 2 to 5-6 patients. Student should know:

- a. Clinical examination of patient with surgical pathology (anamnesis, inspection, palpation, percussion, auscultation, instrumental investigation);
- b. Study the scheme of case history of patient with surgical pathology;
- c. Presentation of patient observation sheet at the end of the practical course.

2. Surgical pathology of thyroid gland. Endemic goiter, sporagic goiter. Basedow disease. Grave's disease (diffuse toxic goiter). The thyroiditis and strumitis – goiter Ridel. Hashimoto's thyroiditis. Cyst of thyroid gland. Cancer of thyroid gland.

Surgical pathology of thyroid gland. Anatomy and physiology of thyroid gland (arterial supply, venous drainger, limphatic drainger, innervation). Method of investigation of thyroid gland – inspection, palpation, laboratory methods, X-ray method (cervical radiography), radiactive iodine update, scynthigraphy, echography, laringoscopy, fine-needle aspiration.

Diffuse and nodular goiter (congenital, sporadic, endemic). Etiology. Pathophysiology. Classification. Epidemiology. Endemic area. Pathology (parenchymal goiter, diffuse goiter, colloid goiter, nodular goiter, cystic goiter) positive and differential diagnosis. Prophylactic, curative medicine and surgery. Indications to surgical. Treatment. Evolution. Progressive clinical forms (form oligosimptomatica, endocrinopatica, neuropathy). Complications. Prognosis.

Hyperthyroidism (*thyrotoxicosis*). Etiology. Pathophysiology (neuroendocrine theory, autoimmune thyroiditis). Classification. Pathology (forms diffuse nodular form unique multiple nodular forms). Symptoms. Clinical forms (primary hipertirioidia, diffuse thyroid hypertrophy, Graves-Basedow disease, toxic thyroid adenoma Plummer). Differential diagnosis. Prophylactic, curative medicine and surgery. Indications to surgical treatment. Evolution. Postoperative complications and prevention of them.

Inflammatory diseases of the thyroid. Thyreoiditis and strumitis acute. Subacute granulomatous thyroiditis (De Quervain thyroiditis). Etiopathogenesis. Clinical manifestations. Positive and differential diagnosis. Medical and surgical treatment.

Thyreoiditis cronic fibrous Ridel and lymphomatous thyroiditis Hashimoto. Etiopathogenesis. Clinical features. Diagnosis. Differential diagnosis. Medical and surgical treatment.

Cyst of thyroid gland. Etiopathogenesis. Clinical manifestation. Diagnosis. Differential diagnosis. Treatment, indications for surgical treatment.

Thyroid cancer. Classification. Pathology. Clinical and laboratory investigations. Positive and differential diagnosis. Indications for surgical treatment. Evolution, complications and prognosis of them.

3. Surgical pathology of endocrine

A. Surgical pathology of parathyroid glands.

Elements of anatomy and physiology of the parathyroid glands.

Primary Hiperparatireodismul Recklinghausen. Notions of secondary and tertiary hiperparatireodismul. Epidemiology. Etiopathogenesis. Pathology. Clinical forms of primary hiperparatireodismului. Positive diagnosis. Clinical and laboratory investigations, biochemical, radiological skeletal, radioimmunoassay, angiography, selective catheterization of the village and mediastinal veins, ultrasound, computed tomography, scintigraphy with Thalium201, nuclear magnetic resonance. Indications for surgical treatment. Complications. Hypercalcemia crisis.

B. Surgical pathology of the adrenal glands.

Hypercorticolism. Cushing's syndrome. Etiopathogenesis. Clinical features. Positive diagnosis. Indications for therapeutic treatment. Principles of surgery. Indications and contraindications for surgical treatment.

Primary aldosteronism (Conn's syndrome). Etiopathogenesis. Clinical features. Positive diagnosis. Indications for therapeutic treatment. Principles of surgery. Indications and contraindications for surgical treatment.

Pheochromocytoma. Etiopathogenesis. Clinical features. Positive diagnosis. Indications for therapeutic treatment. Principles of surgery. Indications and contraindications for surgical treatment.

C. Surgical pathology of thymus.

Myasthenia gravis. Etiopathogenesis. Classification. Clinical and laboratory diagnosis. Test anticholinesterase, electromyography, serological, radiological, scintigrafie Se-methionine, angiography, computer-tomography thoracic. Surgical treatment. Colinergetical crisis.

D. Surgical pathology of the pancreas.

Endocrine pancreas humors categories: Insulinoma - insulin secreting tumors; Zollinger-Ellison syndrome Gastrinoma - gastrin-secreting tumors responsible for ulcers digestive endocrine; unclassified tumors, the tumors is also extremely rare exocrine tumors (glucagon, vipom, somatostatinom, pipom, carcinoid). Clinical diagnosis (Whipple's triad). Paraclinical diagnosis, biochemical, imaging, ultrasound, CT, MRI, ultrasound with translator operator, selective angiography, scintigraphy, biopsy. Surgical treatment.

E. Multiple endocrine disorders: MEN-1, MEN-2A, MEN-2B;

4. Lung and pleura suppurative diseases. Bronchiectasis. Lung abcess. Lung gangrena. Acute and chronic thoracic empyema. Piopneumotorax.

Surgical anatomy of lung. Physiology of respiratory tract. Methods of diagnosis and pulmonary function studies: investigation of respiration function, chest radiography, bronchography, bronchoscopy, thoracoscopy, computed tomography (CT), scanning. Classification of suppurative lung pathology. Investigations morphological and bacteriological.

Bronchiectasis. Definition. Etiology and pathogenesis. Clinical features. Diagnosis. Indications for surgical treatment. Surgical methods. Postoperative complications.

Lung abcess. definition. Classification. Clinical features in stage I and II. Diagnosis. Indications for surgical treatment. Postoperative complications.

Lung gangrene. Definition. Classification. Clinical features. Diagnosis. Indication for surgical treatment. Postoperative complications.

Thoracic empyema acute and chronic. Etiophatogenezis. Pathology. Clasification. Clinical features. Diagnosis. Differential diagnosis. Criteria for assessing the gravity pleurisies purulent. Complex therapeutic principles. Technique of execution of drainage of pleura cavity. Transcutaneous drainage after Monaldi and Bulau. Surgical methods: minimum pleurotomia with pleural drainage, minimum pleurotomia on set of intrapleural fibrinolytic enzymes, thoracic surgery, lung resection, thoracotomy and decortication, early pleurotomia with resection of the coast, pleuro-pulmonary decortication, toracoplastia, muscle transposition, chest drainage

interventions associated open. Treatment conservative and surgical. Indication for surgical treatment. Complications.

Piopneumotorax. Additional methods of examination at piopneumothorax. Clinical features. Features of conservative treatment of piopneumothorax. Diagnosis positive. Treatment. Tactic of treatment of patients with piopneumothorax. Differential diagnostics of empyema pleura and piopneumothorax. Clinic of limited piopneumothorax: roentgenologic signs. Surgical methods, complications.

5. Pleuro-pulmonary diseases non-suppurative.

Hydatid cyst. General. History. Clinical Parasitology (hydatid cyst uncomplicated and complicated). Immunological examination. Paraclinical study: eosinophilia, intradermoreaction Casoni, reaction Weinberg-Pirvu complement fixation methods of double diffusion serological, immunochemical Quchterliy, ELISA reaction (reaction hemoaglutinare indirect contraimunoforeza), Sputum examination. Radiological examination. Computer tomography. Ultrasonography. Brohoscopia. MRI. Positive diagnosis. Differential diagnosis. Surgical treatment of pulmonary hydatidosis and early and late complications.

Pulmonary alveolar echinococcosis. Etiopathogeny. Symptoms. Classification. Positive diagnosis. Complex treatment.

Traumatic pneumothorax. Etiopathogeny. Classification. Symptoms. Positive diagnosis. Complex treatment

Traumatic hemothorax. Etiopathogeny. Classification. Symptoms. Positive diagnosis. Complex treatment.

Spontaneous pneumothorax. Etiopathogenesis. Classification. Symptoms. Positive diagnosis. complex treatment.

Chylothorax. General. Etiopathogeny. Classification. Symptoms. Positive diagnosis. Complex treatment.

Bronchogenic cysts and benign tumors and lung. Etiopathogeny. Pathology. Symptoms. Positive and differential diagnosis. Treatment.

6. Congenital heart disease (CPC).

Non-cyanotic congenital defects: Definition of Congenital Heart Disease, Causes, Incidence, and Risk Factors.

Patent ductus arteriosus. Definition. Incidence. Morphology. Pathophysiology (hemodynamics). Clinical manifestations. Positive and differential diagnosis. Information about surgery. Methods of surgery.

Atrial septal defect. Definition. Incidence. Anatomical types. Pathophysiology (hemodynamics). Clinical manifestations. Positive and differential diagnosis. Information about surgery. Surgical methods.

Ventricular septal defect. Definition. Incidence. Classification. Pathophysiology (hemodynamics) haemodynamics. Clinical manifestations. Positive and differential diagnosis. Information about surgery. Surgical methods.

Aortic stenosis. Definition. Incidence. Classification. Pathophysiology (hemodynamics). Clinical manifestations. Positive and differential diagnosis .. Information about surgery. Surgical methods. Complications.

Pulmonic stenosis. Definition. Incidence. Pathophysiology. Classification (hemodynamics). Clinical manifestations. Positive and differential diagnosis. Information about surgery. Surgical methods. Complications.

Atrioventricular canal (endocardial cushion defect). Alternative Names: Atrioventricular (AV) canal defect; Atrioventricular septal defect; AVSD. Definition of Endocardial cushion defect: causes, incidence, and risk factors. Pathophysiology. Clinical

manifestations. Positive and differential diagnosis. Information about surgery. Surgical methods. Complications.

Cyanotic congenital defects: Definition of Congenital Heart Disease, Causes, Incidence, and Risk Factors.

Tetralogy of Fallot. Definition. History incidence. Pathology. Clinical forms. Classification. Pathophysiology (hemodynamics). Clinical manifestations. Positive and differential diagnosis. Information about surgery. Surgical treatment of tetralogy of Fallot (palliative surgery, total correction), complications.

Coarctation of the aorta. Pathological forms of coarctation of the aorta. Definition. Incidence. Pathophysiology (hemodynamics). Clinical manifestations. Positive and differential diagnosis. Natural evolution and tips operators. Surgery. Results and complications.

7. Acquired diseases of heart. Valvular heart disease. Ischemic heart disease, miocardial postinfarctic aneurysm, pericarditis.

Valvular heart disease. Anatomy and structure of the heart. Valvular apparatus of the heart. Subvalvular structures. Anatomy of the coronary arteries. Etiopathogenesis. Classification. Clinical features. Symptoms. Positive diagnosis. Surgical treatment of valvular heart disease. Mechanical and biological prosthetic valves. Advantages and disadvantages of mechanical and biological prostheses. Surgical methods (annuloplasty, comisurotomie, cordajelor tendon shortening, valvular procedures for reconstruction leaf rear and antrerioare, comisurotomia percutaneous balloon). Results and complications after prosthetic valve early and late. Indications and contrindications for surgical treatment.

Ischemic heart disease. Etiopathogenesis. The clinical classification. Clinical features. Differential diagnosis. Positive diagnosis. Indications and contrindications for surgical treatment.

Myocardial infarction aneurysm. Etiopathogenesis. The clinical classification. Clinical features Diagnosis. Differential diagnosis. Indications and contrindications for surgical treatment. Surgical methods.

Pericarditis. Getting heart anatomy and pericardului. Etiopatogenie. The clinical classification. Clinical features. Diagnosis. Differential diagnosis. Indications and contraindications to surgery. Surgical methods and correction.

8. Surgical pathology of the mediastinum.

Anatomy of the mediastinum. Physiological and pathophysiological of the mediastinum. Classification of mediastinal cysts and tumors. General symptoms of mediastinal cysts and tumors. Special methods of diagnosis (radiology, toracoscopy, spirography, bronhography, puncture and drainage of the mediastinum, radiological tomography, scintigraphy, mediastinoscopy, angiocardiography, ultrasonography, MRT, bronchoscopy, esophagoscopy). Tumors. Thymomas and the syndrom of vena cava superior. Stages diagnosis of mediastinal tumors. Contemporary methods of treatment surgical pathology of the mediastinum. Classification. Clinical features. Diagnosis. Differential diagnosis. Surgical management.

Mediastinal cysts. Classification. Clinical features. Diagnosis and differential diagnosis. Surgical management and corrections.

Trauma of the mediastinum. Emphysema of the mediastinum. Etiopathogenesis. Classification. Clinical manifestation. Diagnosis. Indications for surgery. Surgical methods and corrections. Postoperative complications and treatment.

Mediastinitis. Definition. Etiopathogenesis. Pathology. Classification. Symptoms and signs. Mediastinitelor acute forms (abscess and phlegmon). Mediastinitis primitive and secondary. Mediastinitis non-supurative. Mediastinis chronic, clinical manifestation. Symptoms and signs. Diagnosis. Surgical management and corrections.

9. Surgical pathologic of the diaphragm.

Anatomy of the chest, diaphragm, The cause of diaphragmatic hernia, Clinical features and differential diagnosis of diaphragmatic hernia, Modern methods of treating diaphragmatic hernia. Functional mechanism of the sphincter. Angle by His and valvular mechanism by Gubaroff valve. Diaphragm mechanism. Weaknesses in diaphragm.

Diaphragmatic hernias. Etiology and pathogenesis. Pathology and classification. symptomatology and clinical course. Variants and clinical course and complications. Factors favoring and factors downgraded. Classification. The clinical diagnostic program (anamnesis and physical findings, X-radiography of chest and abdomen, esophagogastroscopy with biopsy and histological investigation, contrast X-radiography of esophagus and stomach in three positions: upward, supine and upside-down position; general blood and urine analyses, coagulogram. Diagnostic differential (gastrointestinal symptoms, cardiovascular disorders, respiratory problems) positive diagnosis (radiology, endoscopy and computed tomography, scintigrafiaesofagului, pH-meters, gauges, pneumoperitoneum, diagnostic thoracoscopy). Clinical forms of hiatal hernias associated with other disorders, coronary disorders, and digestive disorders (triad's: Casten, Saint, Lortat-Jacob). Stages of the operation.

Esophageal hiatal hernias. Definition. Etiopathogenesis. Classification: a). Esophageal hiatal hernias by sliding the diaphragm, b). hiatalui paraesofagiene esophageal hernia of the diaphragm. Etiopathogenesis. Clinical features. Diagnosis differential and positive. Complications (peptic esophagitis, anemia, gastrointestinal bleeding, mechanical complications of gastric volvulus, and strangulation compression of adjacent organs). Conservative and surgical treatment. Surgical procedures sliding hiatal hernias: a). total fundoplication (Nissen-Rossetti procedure); a). 270-180 by abdominal approach partial fundoplication (Toupet procedure, process Dor, procedure Hill), by thoracic approach (procedure: Belsey, Toupet, Allison); C). Laparoscopic fundoplication (Nissen-Rossetti, Toupet).

Traumatic hernias (true and false). Clinical features. Differential and positive diagnosis. Tactics and choice of Treatment

Hernias netraumatice true of the diaphragm. Weak zone of the diaphragm: the triangle sternocostal the crack Larrey hernia, hernia through crack retrosternal Morgan, hernias of Bochdalek triangle area location. Etiopathogenesis. Clinical features. Positive diagnosis. Treatment.

Diaphragmatic relaxation (diaphragmatic eventration). Etiology and pathogenesis. Pathology: in congenital form of a diaphragmatic relaxation revealed muscular aplasia, in acquired – atrophy of muscular fibers. Classification: 1). complete: left-side, right-side; 2). incomplete: anterior, posterior, restricted (partial). Symptomatology and clinical manifestation: general symptomatology, gastrointestinal symptomatology, a phrenocardiac Uden-Ramcheld's syndrome, x-ray revealed the high standing of diaphragmatic dome (to II-III intercostal space), The diagnostic program: anamnesis and physical findings, plain chest x-radiography, esophagogastroduodenoscopy, x-ray examination esophagus and gastrointestinal tract, general blood and urine analyses. Diagnostic and differential diagnostics: pneumothorax, pyopneumothorax, pleurisy; diaphragmatic hernia; cancer of esophagus and cardial part of stomach. Tactics and choice of treatment conservative and surgical. Surgical procedures of treatment (palliative surgery stomach and colon and operations through the plastic diaphragm).

10. Peripheral arterial diseases. Syndrom of cronic arterial insufficiency of the lower extremity. Endarteriitis. Raynaud's disease. Diabetic angyopathy. Atherosclerosis. Aneurysm. Aortoiliac occlusive disease (Leriche's syndrome).

Etiopathogenesis.Clinical features. Diagnosis. Differential diagnosis. Indications for surgical treatment. Surgical methods. Appraisal the ability to work.. Abdominal aortic aneurysm.

Syndrom of cronic arterial insufficiency of the lower extremity. Methods of investigation of patients with vascular pathology.

Atherosclerosis obliterans. Etiopathogenesis. Classification. Clinical features. Diagnosis. Differential diagnosis. Information about surgery. Surgical methods.

Thrombangiitis obliterans (TAO) disease Buerger-Winiwarter. Signs and symptoms, diagnosis, pathophysiology, prevention, treatment, prognosis.

Delimiting the entity trombangiitei obliterans (characteristics of disease onset, location of arterial obstruction, obliteration features of the syndrome evolution, frequency and proportion of risk factors) Ethiopathogeny. Classification. Diagnosis and differential diagnosis. Information about surgery. Surgical methods. Appraisal the ability to work.

Nonspecific artery pressure (Takayasu's disease). Takayasu's disease (also known as "aortic arch syndrome", "nonspecific aortoarteritis" and the "pulseless disease". Etiopathogenesis. Patology. Anatomy. Clinical features. Diagnosis. Characteristic syndromes. Differential diagnosis. The following studies: standard angiography, magnetic resonance angiography, Doppler ultrasound, standard magnetic resonance imaging (MRI) or computed tomography (CT). Information about surgery. Surgical methods.

Angionevroze. Raynaud's disease. Raynaud's syndrome is characterized by a pale to blue to red sequence of color changes of the digits, most commonly after exposure to cold. Etiopathogenesis. Clinical features. Diagnosis. Differential diagnosis. Surgical management and corrections. Treatment.

Aortoiliac occlusive disease Leriche's syndrome, also known as Leriche's syndrome, is atherosclerotic occlusive disease involving the abdominal aorta and/or both of the iliac arteries. Etiopathogenesis. The clinical classification. Symptoms. Diagnosis. Differential diagnosis. Information about surgery. Surgical methods. Appraisal the ability to work.

Diabetic angiopathy. Etiopathogenesis. Clinical features. Diagnosis. Differential diagnosis. Information about surgery. Surgical methods. Appraisal the ability to work.

Abdominal aortic aneurysm. Etiopathogenesis. Classification. Clinical features. Diagnosis. Differential diagnosis. Information about surgery. Surgical methods. Expertise working capacity.

Vascular aneurysm. Etiopathogenesis. Clinical features. Diagnosis. Differential diagnosis. Information about surgery. Surgical methods. Appraisal the ability to work.

11. Insufficiency vascular acute (peripheral entero-mesenteric thrombosis). Surgical pathology of the aorta.

Methods for the examination of patients with aortic pathology its branches, peripheral arteries. Signs and symptoms, risk factors, pathophysiology, diagnosis, prevention, treatment, prognosis, complications.

- A. Entero-mesenteric infarction. Etiopathogenesis. Classification. Symptoms. Paraclinical diagnosis. Surgery. Complications.
- **B.** Syndrome of acute peripheral ischemia. Definition. Etiopathogenesis. Pathology. Syndrome accompanied by ischemia acute. Causes acute peripheral ischemia (arterial trauma, arterial embolism, arterial thrombosis frostbite acute, massive thrombosis venous (phlegmasia coerulea dolens), arterial endothelial damage). Factors that determine the severity of acute ischemia. Sudden occlusion of the artery can be caused by:

Arterial trauma includes three categories of clinical anatomical lesions: contusions, wounds (linear, transverse, oblique, stars, irregular) and section or interruption pressure.

Arterial embolism. Arterial embolism is a sudden interruption of blood flow to an organ or body part due to an embolus adhering to the wall of an artery blocking the flow of blood, the major type of embolus being a blood clot (thromboembolism). Arterial embolism is the major cause of infarction (which may also be caused by e.g. arterial compression, rupture or pathological vasoconstriction). Symptoms may begin quickly or slowly depending on the size of the embolus and how much it blocks the blood flow. Arterial embolism caused by: anervismele arterial, atheromatous plaques, aortic Lueta vegetable. Cholesterol embolism - embolism of cholesterol, often from atherosclerotic plaque inside a vessel.

Venous embolism (paradoxical embolism) is a kind of stroke or other form of arterial thrombosis caused by embolism of a thrombus (blood clot) of venous origin through a lateral opening in the heart, such as a patent foramen ovale. The opening is typically an atrial septal defect, but can also be a ventricular septal defect.

Fat embolism – embolism of bone fracture or fat droplets.

Air embolism (also known as a gas embolism) – embolism of air bubbles. Air embolism extremely rare - can be caused by foreign bodies (bullets, shot, sutures), fragments oral tower, parasites etc. Pathophysiology of acute ischemia. Biochemical changes. Functional changes. Clinical manifestations.

Other causes: tumor cells, parasites, foreign bodies, septic embolism – embolism of puscontaining bacteria etc.

Treatment medical and conservative. Suppression of pain, spasm and promote the removal of collateral circulation. Extingerii secondary thrombosis prevention through treatment is anticoagulant and thrombolytic antiagresant. Rebalancing fluids, ionic and acid-base status. Treatment of heart disease.

Surgical treatment of arterial insufficiency. Embolectomy. Detrombozarea associated with venous patch, replacing the artery with a vein autotransplantation or Dacron prosthesis. Timesheet artery (bypass). Amputation.

C. Aortic dissection (aneurysm aortic acute dissecting). Insufficiency aortic acute caused by aortic dissection is a surgical emergency situation and requires a particularly quickly diagnosis and treatment. Preoperative monitoring of dissection of the aorta includes the provision of adequate ventilation, hemodynamic monitoring and neurological monitoring. Hypertension can cause rupture of an aortic aneurysm and instant death. Definition. Epidemiology. Pathology. Classification of aortic dissection. Etiology. Clinical manifestations and diagnosis. Indications and contraindications for surgical treatment in acute aortic dissection. Complications.

12. Surgical pathology of the esophagus. Achalasia, esophageal diverticulum. Corrosion and stricture of the esophagus. Benign tumors of the esophagus.

Anatomy and physiology of the esophagus. Preoperative evaluation of patients with pathology esophagus. Clinical examination, standard radiographs and contrast. Computer tomography, MRI. Tomography positron-emission. Endoscopic examination. Endoscopic ultrasound examination. Functional testing (esophageal manometry), investigations in detecting gastroesophageal reflux. Esophageal scintigraphy with Technetiu⁹⁹ to identify benign and malignant esophageal capacity. Test Booth and Skinner. Acid perfusion test Bernstein-Baker, pH-meteria and manometria. Chromoscopy with use of various dyes (Lugol's solution, Methylene blue) in order to contrast the mucosal surface. Classification of surgical disorders of the esophagus. Functional pathology of the esophagus.

Congenital esophageal disorders. Etiopathogenesis. Pathology. Classification. Symptoms. Positive diagnosis. Treatment.

Benign diseases of the esophagus (benign tumors). Classification. Etiopathogenesis. Pathology. Symptoms (symptoms dysphagia). Diagnosis: radiographs of the esophagus suggest the diagnosis; esophagoscopy is, performed to confirm the diagnosis and to rule out malignancy. Positive and differential diagnosis. Surgical treatment.

Achalasia. Classification. Etiopathogenesis. Pathology. Symptoms. Positive and differential diagnosis. Treatment.

Diverticula of the esophageal body. Classification. Etiopathogenesis. Symptoms. Positive and differential diagnosis. Treatment complex. Complications.

Esofagitele acute chimice și stenozele esofagiene postcaustice. Etiopatogenie. Tabloul clinic în perioada acută. Primul ajutor medical. Profilaxia stricturilor. Bujare precoce și tardivă. Tratamentul stricturilor cicatriciale ale esofagului.

Caustic injury of the esophagus and esophageal stenosis postcaustic. Corrosive esophagitis is narrowing of the esophagus caused by chemical damage. Risk increases with careless storage of corrosive chemicals, such as lye, kerosene, harsh detergent or bleach. Etiopathogenesis. The clinical manifestations in the period acute. First medical aid. Prophylaxy of strictures. Prevention strictures. Bujar early and late. Treatment of cicatricial strictures of the esophagus.

Stenozele esofagiene postcaustice. Etiologie. Substanțe corozive. Epidemiologie Etiopatogenie. Explorări și investigații. Teste radiologice. Endoscopie. Clasificare. Profilaxia stricturilor. Bujare precoce și tardivă. Tratamentul stricturilor cicatriciale ale esofagului. Principii și metode terapeutice. Dilatație. Tratamentul stricturilor cicatriciale ale esofagului. Tehnici de reconstrucție esofagiene (Tehnica de By-pass, rezecție esofagiană, procedeul Gavriliu (stomac), tehnica Roux, tehnica Herzen, tehnica Yudin-Papo-(jejunul), tehnica Roith, tehnica Kelling, tehnica Orsoni (colonul). Esofagoplastia. Complicații.

Postcaustic esophageal stenosis. Etiology. Corrosive substances. Epidemiology Ethiopathogeny. Exploration and investigation. Radiological tests. Endoscopy. Classification. Prevention strictures. Bujar early and late. Treatment of cicatricial strictures of the esophagus. Principles and therapeutic methods. Extension. Treatment of cicatricial strictures of the esophagus. Esophageal reconstruction techniques (technique by-pass, esophageal resection, the procedure Gavriliu (stomach) technique Roux, technique Herzen, technique Yudin-Papo-(jejunum), technique Roith, Kelling; technique Orsoni (colon). Esophagoplastic. Complications.

Esophageal reflux diseases. Etiopathogenesis. Classification. Symptoms. Positive diagnosis. Examinations for determining of gastroesophageal reflux. Medical and surgical treatment. Barrett's Esophagus. Diagnosis, treatment. Medical and surgical tactics.

Injuries and foreign bodies of the esophagus. Perforations of the esophagus. Instrumentation (e.g., esophagoscopy or dilatation), Boerhaave's syndrome (postemetic rupture of the esophagus). Esophageal foreign bodies. Clinical signs of esophageal foreign bodies. Removal of esophageal foreign bodies. Potential complications.

13. Diseases of operation stomach. Postgastrectomy syndromes: postoperative recurrent ulcer, gastrojejunocolic fistulas, afferente loop syndrome, organic obstruction of anastomosis, postvagotomy syndrome, Dumping-syndrome, alkaline reflux gastritis and esophagitis, maldigestion and malabsorption, chronic anemia after major gastric resection.

Anatomy, histology and physiology of the stomach and duodenum. Phases of gastric secretion. Examination methods and their importance in establishing indicators and types of surgery.

Diseases of operation stomach and postgastrectomy syndrome. Notion. Classification. Contemporary concepts of pathogenesis. Complications early and late.

Peptic ulcer recurrent of anastomosis. Gastrocolic fistula. Etiopathogenesis. Clinical features. Positive and differential diagnosis. Treatment surgery.

Dumping syndrome. Definition. Classification. Symptoms. Positive diagnosis. Medical and surgical treatment.

Afferent loop syndrome. Definition. Classification. Symptoms. Positive diagnosis. Medical and surgical treatment.

Postoperative gastritis and reflux esophagitis. Stenosis of the anastomosis. Definition. Classification. Symptoms. Positive diagnosis. Medical and surgical treatment.

Disorders Hepatobiliopancreatic. Metabolic syndrome and nutrition. Primitive neoplasm of the gastric stump remaining. Definition. Classification. Symptoms. Positive diagnosis. Medical and surgical treatment.

Functional postvagotomy syndrome: gastroesophageal reflux, alkaline reflux gastritis, atonia gastric, asthenia agastrală. Etiopathogenesis. Symptoms. Positive diagnosis. Medical and surgical treatment

Organic postvagotomiy syndrome: ulcer recurrent, dysphagia late, cholelithiasis, diarrhea. Etiopathogenesis. Symptoms. Positive diagnosis. Medical and surgical treatment.

Maldigestion and malabsorption, chronic anemia after major gastric resection. Etiopathogenesis. Symptoms. Positive diagnosis. Medical treatment.

14. Digestive bleeding.

Gastrointestinal bleeding acute. Definition. Etiology. Pathology of the esophagus: esophageal varices, benign and malign tumors, ulcerative esophagitis, burns, trauma, diverticula.

Pathology of the stomach and duodenum: erosive gastritis, syndrome Mellory-Weiss, ulcer stress acute (Curling ulcer, Cushing), medicinal gastric and intestinal, benign and malignant tumors, esophageal hiatal hernias, erosive duodenitis, diverticula, leimomiomul.

Pathology of the liver, biliary tract and pancreas. Hemobilia.

Systemic diseases: disorders of the blood (leukemia, haemophilia, anemia magaloblastic Addison-Birmer) and blood vessels (hemangiomas, Rendiu-Veber-Osler syndrome, hemorrhagic vasculitis), uremia, amyloidosis, etc.

Pathogenesis of acute gastrointestinal bleeding and hemorrhagic shock. Symptoms. Positive and differential diagnosis. The gravity of recurrent digestive bleeding (Orfanidi classification). Predictors of persistent bleeding were recurrent. Digestive bleeding classification endoscopic activity JHA Forrest. Management digestive bleeding recidive ulcer relapse (scale by Baylor).

Diagnostics algorithms of the digestive bleeding. Ulcer bleeding. Algorithm diagnosis and treatment of chronic ulcer bleeding. Evolution and surgical tactics ulcerative and non-ulcerative HDS. Principles of therapeutic treatment. Operative treatment of patients with non-ulcer bleeding ulcer. Complications.

Gastrointestinal bleeding lower. Definition. Etiopathogenesis. Diagnosis and treatment. Evolution and surgical tactics in patients with digestive bleeding.

15. Surgical diseases of the liver: hepatic abscesses, parasitic and nonparasitic cysts. Benign neoplasms of the liver.

Concept anatomical-physiological of the liver. Classification of pathological processes of the liver. Liver pathology exploration methods.

Neparasitic cysts. Classification. Etiopathogenesis. Clinical features. Positive and differential diagnosis. Methods of treatment (medical, surgical, endoscopic). Complications. Prevention.

Parasitic cysts (liver hydatidosis). Etiopathogenesis. Classification. Clinical maniestations. Positive and differential diagnosis. Methods of treatment (medical, surgical, endoscopic). Complications. Prevention. Rare diseases: opistorhoza, alveococcoza, lamblioza.

Hepatic alveolar echinococcosis. Etiopathogenesis. Classification. Clinical manifestations. Positive and differential diagnosis. Methods of the treatment.

Liver abscesses. Classification. Etiopathogenesis. Clinical features. Positive and differential diagnosis. Methods of treatment (medical, surgical, endoscopic). Complications. Prevention.

Benign and malignant liver tumors. Etiopathogenesis. Classification. Clinical features. Positive diagnosis. Differential diagnosis. Principles of liver resection surgery for benign and malignant tumors.

16. Postcholecystectomy syndrome (PCS) - diagnosis and their treatment of contemporary issues. Obstructive jaundice.

Notion. Surgical anatomy of intra- and extra-biliary system. Anatomical variants of the biliary system. Classification PCS by Galperin's.

Which group of diseases include in PCS. Etiopathologie. Clinical manifestations of PCS. Clinical diagnosis (acute biliary obstruction syndrome, syndrome intermittent biliary obstruction syndrome of the acute and chronic, angiocolitis, biliary fistula).

Biochemical laboratory investigations, radiological view of the abdomen: gastroduodenografie, duodenografie with masa contrast duodenografie, fistulography hypotonic conditions, cholangiography, cholangiopancreatography retrograde, percutaneous cholangiography, ultrasound transhepatic-bilioscintigrafie-CT-angiography, fibro-gastro-duodenoscopy.

Causes of unsatisfactory motivating PCS: (diagnostic errors, technical, tactical). Symptoms. Diagnosis positive pre-intra-postoperative. Patient preparation by endoscopic examination. Endoscopic interventions in PCS: papilosfincterotomy with/or without extraction of the stones, dissecting anastomoses bilio-digestive stabilized, recanalization biliary lines magistral, drainage naso-biliary, removal of foreign bodies in the biliary tract.

Postoperative complications. Surgical treatment PCS - reconstructive operation on biliary ducts.

Indications for surgical treatment to restore passage biliary and reconstructive surgery. Biliary drainage procedures with the aim of high biliary decompression and prophylaxis to prevent stenosis and biliary anastomoses, anastomoses training for favorable conditions, for radiological control dynamically, to manage preparation pharmaceuticals and litextractie. Methods drainage of the biliary: Holsted-Picovschi, Robson-Vișnevschi, Kher, Kert, Voelker, Prader-Smith. Postoperative complications.

17. Contemporary diagnosis and treatment of mechanical jaundice and angiocolitei.

Physiology. Bilirubin formation, transformation of heme into bilirubin (bilirubin toxicity, transport, processing and excretion of bilirubin by hepatocytes). Disorders formation and excretion of bilirubin (jaundice with hyperbilirubinemia conjugated and noncojugated). Secretion Bile and its disorders (composition of bile, bile flow with dependent secretion and secretion independent of bile acids. Notion of cholestasis (partial, total, separated intrahepatic and extrahepatic). Mechanisms immune in pathology obstructive jaundice.

Classification of jaundice: hemolytic jaundice, jaundice hepatocellular, jaundice mechanic.

Diagnosis and evalution surgical patient with obstructive jaundice. Evaluation patient to differentiate hepatocellular jaundice from obstructive jaundice (history physical examination, laboratory tests, imaging tests initial screening).

Etiologic diagnosis of obstructive jaundice and determining the level of obstruction (initial screening imaging tests, hepato-biliary ultrasonography, computed tomography, Endoscopic Retrograde Cholangiopancreatography, percutaneous transhepatic colangoiografia).

Etiopathogenic study the etiology obstructive jaundice of benign (jaundice lithyasic, jaundice caused by biliary tract anomalies, cysts congenital common bile duct cysts, Caroli disease and congenital diaphragmatic defects, jaundice produced by iatrogenic stenosis of the bile ducts, jaundice, inflammation of the pancreas product, primary sclerosing cholangitis, caustic sclerosing cholangitis, sclerosing papilo-odditele, internal biliary fistulas spontaneous ruptured hydatid cyst in biliary obstructive adenopathy pericoledociene

Study etiopatogenic al icterului obstructiv de etiologie benigna (icterul litiazic, icterul provocat de anomalii congenitale ale cailor biliare, chisturile congenitale ale coledocului, boala Caroli și defecte congenitale ale diafragmului, icterul produs de stenozele iatrogene ale cailor biliare, icterul produs de procesele inflamatorii ale pancreasului, colangita primara sclerozanta, colangita sclerozanta caustica, papilo-odditele sclerozante, fistulele biliare interne spontane, chistul hidatic rupt în căile biliare, adenopatii pericoledociene obstructive).

18. Portal hypertension. Surgical pathology of the spleen.

Anatomy of portal venous system (morphology normal of portal vein, macrocirculația intrahepatic, microcirculation intrahepatic, morphology portal system in portal hypertension conditions).

Physiology and pathophysiology of portal hemodynamics (portal hemodynamics in physiological hemodynamic, hemodynamics in territory splanhnic, hemodynamics in portal hypertension conditions).

Physiology of portal hipertension. Prehepatic portal lock, intrahepatic portal lock, portal blockage suprahepatic. Portal hipertension clinic.

The main clinical signs: a). collateral circulation, splenomegaly, b). varices esophageal and gastric, c). gastropathy portal hypertensive, d). clinical manifestations rare.

Complications HTP: a). upper gastrointestinal bleeding, b). ascites, c). hepato-renal syndrome, d). porto-systemic encephalopathy.

Portal hipertension laboratory explorations. Exploring radioisotopes: a). portal hypertension, a). noninvasive imaging of portal hipertension, c). portal hipertension invasive explorations.

Evaluation of portal hemodynamics:

- pressure port system (measuring direct and indirect)
- splanhnice flow (hepatic, portal collateral).

Treatment of portal hipertension: a). emergency treatment of acute bleeding episode, b). medical treatment of portal hipertension, c). surgical treatment of portal hypertension. The basic maneuvers and operations in the surgical treatment of portal hipertension. General principles of surgical treatment.

- *A. porto-systemic shunts*: a) selective shunts (shunt spleno-renal distal, meso-caval shunt).
- **B.** Direct interventions on esophageal varices: a). ligation of esophageal varices and gastric varices, b). transsectiunea esophagian, c). devascularizare processes.
 - C. Periteneo-venous shunt surgical treatment of ascites.
 - D. Shunt porto-systemic intrahepatic about transjugular.

Surgical pathology of the spleen. Notion of surgical anatomy. Physiology and functions of spleen. Clinical and paraclinical examination of the spleen. Primary and secondary hypersplenism. Characteristics of hypersplenism.

Splenopatii surgery:

- 1. Splenic abnormalities (mobile spleen, accessories spleens),
- 2. Splenomegaly inflammatory (abscess, tuberculosis, malaria splenomegaly, egyptian splenomegaly syndrome and syndrome Chauffard Still-Felty),
- 3. Splenopatii vascular (arteriovenous aneurysms, splenic vein thrombosis, splenic infarction);
 - 4. Splenomegaly in diseases Neiman-Pick, Gancher, Tay-Sacks,
- 5. Splenomegaly in system diseases (leukemia acute, leukemia chronic myeloid, leukemia chronic lymphocytes, mononucleosis, essential poliglobulia or diseases poliglobulia by Vaquez's),
- 6. Splenomegaly in disorders hematologic: trombocitopenicaidiopatică purpura (Werlhoff diseases), anemia congenital haemolytic (diseases Minkowsky-Chauffard), hemoglobinopathies (thalassemia), enzymopathies- pancytopenia splenic primary (diseases Doan-Wrigt), neutropenia splenic primary,
 - 7. Cysts of spleen: parasitic cysts and neparasitic, pseudocysts of the splenic,
- 8. Tumors of spleen: primary solid malignant (fibrosarcoma, lymphosarcoma, reticulosarcoma, malignant hemangiosarcoma and endoteliosarcoma).

Secondary solid malignant tumors (lymphoma Hodjkin and Non-Hodjkin, metastases from melanoma malignant, carcinoma of lung, mammary, pancreatic, ovarian). Tumors benign - hamartoma, vascular tumors, lipomas, fibromas.

Treatment surgery, indications for splenectomy (absolut, relativ, diagnostic tactical). Laparoscopic splenectomy clasic. Splenectomia. Contraindications. Partial splenectomy. Complications splenectomy - early and late.

19. Surgical pathology of the pancreas. Chronic pancreatitis. Cysts, fistulas and pancreatic tumors.

Chronic pancreatitis. Historical dimension. Anatomy and physiology of the pancreas. Definition. Epidemiology. Etiology. Causes of chronic pancreatitis (toxic and metabolic ideopatic, genetic's, autoimmune recurrence severe of acute pancreatitis, obstructive). Obstructive factors involved in producing chronic pancreatitis. Pathogenesis. Classification (clinical criteria, morphological, etiopathogenic, complications). Etiopathogenic classification of chronic pancreatitis by M.Kuzin, 1984. Clinical manifestations (painful syndrome, exocrine and endocrine of the pancreas, biliary hypertension syndrome, clinical signs induced cysts and fistulas).

Function tests exocrine pancreatitis. methods imaging invasive and non-inavasive (ultrasound examination preoperative and intraoperative, radiography panorama of the abdominal cavity, stomach and duodenum radiogram, CT, CT spirala 3D, magnetic resonance imaging, gastroduodenoscopia, pancreatoscopia retrograde endoscopic, ultrasound examen endoscopic, pancreatocolangiography retrograde endoscopica, phistulography, pancreas scintigraphy with radioactive methionine selenium, oxitreoxon radioactive, arteriography, portography, laparoscopy, tests: morphological, functional, immunological, diagnosis cytological, determination markers of tumor CA 19-9 and CEA spectrum of alpha-amylase izofermentativ).

Diagnosis differential. Medical treatment chronic pancreatitis. Surgery treatment. Indications and contraindications. Types surgery chronic pancreatitis (surgery of the pancreas, biliary tract surgery, surgery on the stomach and duodenum, nervous system surgery, endoscopic surgery, controlled intervention ultrasonography, CT).

Pancreatic cysts and pseudocysts. Classification. Morphological features. Degree of maturation of pancreatic cysts. Clinical manifestations. Diagnosis of pancreatic cysts. Differential diagnosis. Medical and surgical treatment. Diagnosis of pancreatic pseudocyst, algorithm. Surgical management of pancreatic cysts. Expertise. Prognosis.

Pancreatic fistulas. Notion. Etiology. Classification. Evolutionary periods of pancreatic fistula. Positive diagnosis (obiective and instrumental). Treatment surgical. Medical and surgical tactics in the treatment of pancreatic fistulas.

Pancreatic tumors. Etiopathogenesis. Classification. Positive and differential diagnosis. Medical and surgical treatment. Complications of chronic pancreatitis.

20. Surgical diseases of the small intestine and colon.

Anatomy and physiology data of the small intestine and colon. Methods for the examination of small intestine and colon: radiologic exploration, endoscopic, morphological, bacteriological. Classification of surgical diseases of the small intestine.

Diverticular diseases intestinal. Tuberculosis intestinal. intussusception intestinal, volvulus intestinal, chronic ischemia mesenteric, enteritis **radica**, small bowel tumors. Polyps and polyposis of the small intestine. Familial adenomatous polyposis, Spontaneous perforations, Diverticolul Meckel. Etiopathogenesis. Clinical manifestations. Positive and differential diagnosis. Complications. Treatment surgery.

Crohn's diseases. Background, incidence and epidemiology, etiology, pathology, microscopic features. Clinical manifestations. Positive diagnosis and medical and surgical diferențial.Tratamentul. Complications.

Dolicomegacolonul. Hirschprung diseases. Etiopathogenesis. Clinical manifeastations. Positive and differential diagnosis. Complications. Medical and surgical treatment.

Diverticular colonic diseases. Etiopathogenesis. Clinical features. Positive and differential diagnosis. Complications. Medical and surgical treatment.

Ulcerative colitis. Classification. Etiopathogenesis. Clinical manifestations. Positive and differential diagnosis. Local and general complications. Medical and surgical treatment.

21. Surgical pathology of the rectum and perineum.

Anatomy and physiology of the rectum and perineum. Clinical exploration methods, radiological, endoscopic, bacteriological, morphology.

Hemorrhoidal diseases. Notion pathophysiology. Theory vascular and mechanics. Predisponing factors. Classification. Pathology. Clinical manifestations. Complications of hemorrhoidal diseases. Positive and differential diagnosis. Medical treatment and sclerosing surgery.

Anal fissure. Notion. Etiopathogenesis. Pathology. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical treatment. Perirectal acute. Etiopathogenesis. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical diagnosis.

Chronic perirectal. Etiopathogenesis. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical treatment.

Pilonidal sinus. Etiopathogenesis. Clinical manifestations. Positive diagnosis. Medical and surgical treatment.

Rectal prolapse. Etiopathogenesis. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical treatment.

Polyps rectal. Etiopathogenesis. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical treatment.

Rectal injury. Ethiopathogenesis. Classification. Clinical manifestations. Positive diagnosis. Medical and surgical treatment.

22. Intestinal fistulas of the small intestine and colon.

Notion. Anatomical and physiological concepts of the small intestine and colon.

Fistulas small intestine and colon. Principles characteristics of pathology. Etiology. Pathogenesis. Pathophysiological aspects of intestinal fistulas. Pathophysiological reason causing intestinal fistulas. Classification of intestinal fistulas by V.Opel. Structure external and clinical varieties of intestinal fistulas. Clinical manifestations - local and basic. Clinical features of intestinal fistulas proximal and distal. Technical factors that contribute to postoperative fistula. Conduct preoperative and postoperative. Curative tactics. Positive diagnosis in determining sediment and appreciation intestinal fistulae after eliminations character: locating the abdominal wall; X-ray tests with dye: fistulography, gastrointestinal tract passage with BaSO4, irigoscopy, endoscopy by FEGDS, RRS, colonoscopy, laboratory investigations. Local and general treatment. Indications for surgical treatment. Complications postoperative. Tactical errors, technical diagnosis and treatment of intestinal fistulas ileo-colic.

Fistule curative. Noţiune. Clasificarea fistulelor curative. Complication of fistulas (retraction, prolapse, eventration, eviscerations parastoma, necrosis of stoma). Medical examination and rehabilitation of the patients.

23. Syndrome of acute abdomen. Differential diagnosis.

Notion. Clinical signs. Classification. Acute of abdomen traumatic and neutraumatic. Acute abdominal of pain. Definition. Pathophysiology of pain. Types of pain (somatic of pain, visceral of pain, primary and secondary of pain). Diseases causes syndrome of acute abdomen. Consequences of pain. Characterization comparative of pain somatic and visceral.

Acute abdomen. Definition. Diagnostics of pain acute abdomen. 1. History of diseases. The differential diagnosis of pain acute abdominal depending on location. 2. General clinical

examination. 3. Local examination. 4. Clinical and laboratory investigations: (finger study vaginal and rectal; laboratory investigations, radiology, ultrasound. Abdominal puncture, puncture - peritoneal cavity lavage, laparoscopy. Differential diagnosis of pain syndrome of acute abdomen.

Syndrome abdominal of pain recurrent.

24. Syndrome of acute abdomen. Syndrome of false acute abdomen.

Notion. Clinical sings. Diseases causes syndrome of false acute abdomen:

A. General diseases with clinical manifestations of peritonism:

- 1. Metabolic and endocrine diseases: porphyria, uremia ketoacidosis diabetic, hyperlipoproteinaemia idiopathic and acquired (alcoholic) (sd.Zieve), Addison's diseases.
- 2. Hematology: leucosis malignant, hemophilia, purpura Henoch-Schonlein, acute hemolytic crisis (hemoglobino- and enzymopathies erythrocytes).
- 3. Neurological and neuropsychiatries diseases: thoracic-abdominal zone Zoster, epilepsy, psychosis, neurosis.
- 4. Intoxications exogenous: lead, nicotine, nitrite, methanol, etc.
- 5. Collagen's: PAN, LED, dermatomyositis.
- 6. Infections: pleurodinia, mumps, meningitis, etc.

B. Extraperitoneal diseases that mimic of acute abdomen.

- 1.Pleuropulmonary diseases: pneumonia basis basal pleuritis and pleurisies, pulmonary embolism, mediastinitis.
- 2.Cardiovascular diseases: mesenteric infarction, pericarditis, dissecting aortic aneurysm, syndrome of Budd-Chiari.
- 3. Urgently diseases: pyelonephritis, abscess perinefritic, nephrolithiasis, torsion of the testis.
- 4. Locomotion diseases: fracture of spine, thoracic fractures, discopathy acute, hematoma direct muscle of the abdomen.

Syndrome abdominal of pain recurrent. Notion. Clinical features. *Peritonitis*. Abdominal abscesses. Definition. Etiopathogenesis. Classification. Positive diagnosis. Differential diagnosis. Principles of treatment. Evolutions. Complications. Laparotomy "white line".