

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ
БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ
1-я КАФЕДРА ХИРУРГИЧЕСКИХ БОЛЕЗНЕЙ
2-я КАФЕДРА ХИРУРГИЧЕСКИХ БОЛЕЗНЕЙ

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КОНТРОЛЬНЫЕ ВОПРОСЫ ПО ХИРУРГИЧЕСКИМ БОЛЕЗНЯМ

EXAMINATIONAL QUESTIONS ON SURGICAL DISEASES

Методические рекомендации



Минск БГМУ 2018

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Представлены контрольные вопросы и ситуационные задачи по основным темам хирургических болезней, в которых отражены как классические, так и новые, прогрессивные методики обследования и лечения пациентов с различными острыми заболеваниями органов брюшной полости, с травмами живота и груди, с заболеваниями сосудов, сердца, лёгких, щитовидной железы, сахарным диабетом.

Предназначены для студентов 4–6-го курсов медицинского факультета иностранных учащихся, обучающихся по специальности «Лечебное дело» на английском языке.

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GENERAL RECOMMENDATIONS

These guidelines are designed taking into account the educational programs of surgical diseases of 4–5 courses.

The purpose of this work is to estimate the integrated level of theoretical knowledge of students on the topic. It allows unifying the requirements to the level of preparation and excluding the possibility of missing any important issue of the topic.

The study of each topic is desirable to start with its theoretical analysis, with an obligatory examination and discussion of patients with the same disease, but with a different course of the disease. The focus is on clinical presentation, diagnosis and surgical tactics. The formation of competent clinical thinking is possible only with the direct work of students with patients, the acquisition of personal experience in the analysis of laboratory and special research methods.

The level of mastering the topic is controlled by active participation of the student in the course of working with patients, and also on the basis of answering the control tasks. For resident surgeons, more detailed and profound answers and a well-grounded, consistent solution of situational tasks should be envisaged. As an objective, it is necessary to use radiographs, scintigrams, CT results, MRI and other special research methods.

Answers can be given orally or in written form. Time to solve the task is determined by the teacher, depending on the level of complexity of the topic, the overall level of training of the group. The recommended time is 40–50 minutes.

TOPIC «APPENDICITIS»

Task N 1

1. Anatomic and physiological features of the appendix.
2. Syndrome diagnosis of acute appendicitis. Give the characteristics of these syndromes.
3. Clinical features of the pelvic localization of appendicitis.
4. Preoperative complications of acute appendicitis.
5. Intraoperative signs of Crohn's disease, diverticulitis and mesadenitis.

Task N 2

1. Morphology of the appendix and its significance in the pathogenesis and clinic of acute appendicitis.
2. What symptoms will you look for to diagnose acute appendicitis?
3. Variants of atypical appendix localization and methods of its detection.
4. Appendicular infiltrate: compound elements, development time, clinical manifestations and diagnostic methods.
5. List the operational access to the appendix. Which layers of the anterior abdominal wall you will have to incision?

Task N 3

1. Blood supply, lymph drainage and innervation of the appendix and their significance in the clinic of acute appendicitis.
2. What additional research will you do to clarify the diagnosis of acute appendicitis?
3. Peculiarities of the clinical picture with retrocaecum and retroperitoneal location of the appendix.
4. Classification of chronic appendicitis, morphological changes in the appendage.
5. List the methods of appendectomy and give their characteristics.

Task N 4

1. What is the most frequent mistakes of appendicitis diagnoses at the pre-hospital stage?
2. Classification of acute appendicitis, macro- and micro-changes.
3. What is causes of left-sided acute appendicitis and its diagnostic methods.
4. Treatment of appendicular infiltration.
5. Having laparoscopy performed in a woman with pain in the right ileal region, blood found in the abdominal cavity. What should be the next actions of the surgeon?

Task N 5

1. Clinical features and diagnosis of chronic appendicitis.
2. Clinical features of the subhepatic location of the appendix.
3. Complications during appendectomy.
4. Differential diagnosis of acute appendicitis and kidney diseases.
5. Method of draining of appendicular abscess.

Task N 6

1. Features of the clinical picture of acute appendicitis in 2 half of pregnancy.
2. Variants of the location of the appendix in relation to the caecum and their significance in the clinic of acute appendicitis.
3. X-ray signs of chronic appendicitis.
4. Explain the mechanism of biphasic pain in acute appendicitis.
5. At the exploration of abdominal cavity normal appendix discovered but patient had clinical sign of acute appendicitis. What should the surgeon do?

Task N 7

1. Clinical features of appendicitis in children. List appendicular symptoms.
2. Differential diagnosis of acute appendicitis and impaired ectopic pregnancy.
3. The tactics of the doctor (therapist, surgeon) in case of a questionable signs of acute appendicitis.
4. Caecum with appendix is not visible in the wound. What should surgeon do?

Task N 8

1. Clinical features of acute appendicitis in aging patients.
2. Ways of spread of infection in acute appendicitis.
3. Differential diagnosis of acute appendicitis and diseases of the stomach and duodenum.
4. Clinical picture of pylephlebitis.
5. The surgeon and gynecologist at a joint examination of the patient can not decide whether she has appendicitis or adnexitis. What do they have to do?

Task N 9

1. The pathogenesis of pain in acute appendicitis.
2. Complications after appendectomy.
3. Differential diagnosis of bile duct disease and acute appendicitis.
4. Postoperation care of the patient after appendectomy.
5. A patient with a clinical picture of acute appendicitis, peritonitis refuses surgery. What may be the actions of the doctor?

Task N 10

1. What additional studies may performed to clarify the diagnosis of acute appendicitis?
2. Differential diagnosis of acute pancreatitis and acute appendicitis.
3. List of the diseases in which there is pain in the right iliac region.
4. Indications for abdominal drainage after appendectomy.
5. Severe sick patient with diabetes had an unclear clinic and suspicion of acute appendicitis. What should the surgeon do?

TOPIC «HERNIAS»

Task N 1

1. Anatomy of the inguinal channel.
2. Main signs of non-complicated hernia.
3. Complications of hernia.
4. Types of surgical procedures in inguinal hernia.
5. During surgery for hernia, after the opening of hernia sac the big amount of yellow effusion has been found. What is the diagnosis and surgical management?

Task N 2

1. Anatomy of the femoral channel.
2. Classifications of ventral hernias by localization and stage.
3. Main signs of hernia strangulation.
4. White line hernias: clinical forms, diagnosis, management.
5. Patient with strangulated hernia was admitted in the hospital after 4 days from the disease onset. Edema and hyperemia at the site of hernia are present. What is the diagnosis and surgical management?

Task N 3

1. Anatomy of umbilical region.
2. Classification of ventral hernias by etiology.
3. Hernias pathogenesis.
4. Types of umbilical hernia.
5. Painful, solid structure was found in inguinal area. The structure is not reducible in peritoneal cavity. Duration of the diseases is 2 days. There are no signs of intestinal obstruction. The patient is 85 years old, has ischemic heart disease, atrial fibrillation. What is the diagnosis and surgical management?

Task N 4

1. Hernia parts.
2. Types of hernia strangulation.
3. Differential diagnosis of inguinal hernias.
4. Types of surgery in femoral hernia.
5. During surgery for hernia, after the opening of hernia sac the strangulated sigmoid colon of black color was found. The patient is 75 years old, has severe cardiac disease. What is the management?

Task N 5

1. Types of hernia strangulation, mechanisms, surgical management.
2. Features of management of umbilical hernia, types of surgery.
3. Internal abdominal hernias.
4. Differential diagnosis of femoral hernia.
5. While opening the hernia sac strangulated organ was absent. Hemorrhagic effusion is observed in peritoneal cavity. The disease had started 3 days ago. What is the management?

Task N 6

1. Rare types of abdominal hernias.
2. Causes of incarcerated hernia.
3. Features of surgery in congenital hernia.
4. Differential diagnosis of umbilical hernia.
5. Patient has been feeling pain in inguinal region for 5 days. Local swelling, hyperemia and tenderness can be observed. What is the diagnosis and surgical management?

Task N 7

1. Clinical manifestations, diagnostics and etiology of diaphragmatic hernias.
2. Types of repair of inguinal channel.
3. Causes of recurrence hernia.
4. Mechanism and clinical manifestations of Richter's strangulation.
5. While opening the hernia sac the small intestine with inflamed diverticulum was found. What is the management?

Task N 8

1. Sliding hernia: pathogenesis, clinical manifestations and features of management.
2. Types of surgery in white line hernia.
3. Why strangulated hernia shouldn't be reduced by force?
4. Obturator hernia: localization, clinical manifestations, diagnostics, features of management.

5. While opening the hernia sac the clear effusion was found. In the hernia sac there are two loops of viable small bowel. After the incision of strangulated ring the hemorrhagic effusion was observed. What is the diagnosis and surgical management?

Task N 9

1. Classification of umbilical hernia. Anatomical and clinical features.
2. Causes of pain in non-complicated hernia.
3. Signs of bowel viability in strangulated hernia.
4. True and false hernias.
5. Signs of inflamed and phlegmonous hernias.

Task N 10

1. Traumatic and incisional hernias. Features of management.
2. Complications of strangulated hernia.
3. Features of surgery in strangulated hernia complicated by phlegmon.
4. Differences in direct and indirect hernias.
5. Patient's complains are difficulties in urination, frequent urination by small urine portions. Urination occurs after the compression of patient's inguinal hernia. What is the diagnosis and surgical management?

TOPIC «ACUTE PANCREATITIS»

Task N 1

1. Anatomy and physiology of the pancreas.
2. Diagnostics of acute pancreatitis.
3. Clinical manifestation of acute pancreatitis.
4. Draining procedures in infected necrotizing pancreatitis.
5. Patient with gallstone disease presented with acute pancreatitis. Upper endoscopy shows stone stuck in major duodenal papilla. What is the diagnosis and surgical management?

Task N 2

1. International classification of acute pancreatitis (Atlanta, 1992 and its revisions).
2. Local complications of acute pancreatitis in the early (sterile) phase.
3. Small-invasive treatment methods for acute pancreatitis complications.
4. Features of indigestion in acute pancreatitis.
5. A patient has severe epigastric pain, periodic vomiting with bile. He is in anxious. Abdomen is soft, negative peritoneal signs. What is the initial diagnosis? Diagnostic and management.

Task N 3

1. Etiology of acute pancreatitis.
2. Scales for assessment of acute pancreatitis severity and prognosis.
3. Features of abdominal signs in acute pancreatic.
4. Principles of treatment for purulent complications of acute pancreatitis.
5. On a third day after the cholecystectomy with investigation of bile ducts, the patient condition has worsen: increasing in pain, ileus, high level of amylase in a blood test, tachycardia. Your diagnosis and management.

Task N 4

1. Pathogenesis of acute pancreatitis (enzymatic theory).
2. Features on inflammatory syndrome in acute pancreatitis.
3. Local complications of acute pancreatitis in late (septic) phase.
4. Differential diagnosis of acute pancreatitis.
5. During surgery for necrotizing pancreatitis you see, that pancreas is enlarged, with multiple focuses of necrosis and pus, necrotic phlegmon of retroperitoneal fat. What is your diagnosis and management?

Task N 5

1. Aggressive factors in pathogenesis of acute pancreatitis.
2. Features of pain in acute pancreatitis (causes of pain, intensity, extent, and irradiation).
3. Systemic complications of acute pancreatitis.
4. Principles of treatment for severe acute pancreatitis.
5. Woman of 62 years is being operated for necrotizing pancreatitis after the 16 days from the disease onset. Opening the omental sac you have observed 200 ml of pus. In the body of pancreas there are two necrotic focuses 4 and 3 cm that bordered from the rest of the pancreas. Describe what you do next during the surgery.

Task N 6

1. Phases of acute pancreatitis.
2. The scale for assessment of acute pancreatitis severity according to CT findings (Balthazar).
3. Features of pain in acute pancreatitis (causes of pain, intensity, extent, and irradiation).
4. Role of infection in pathogenesis of acute pancreatitis.
5. During laparotomy hemorrhagic exudate and swelling of a omentum were found. What is the diagnosis and management?

Task N 7

1. Diagnostic studies for acute pancreatitis.
2. Clinical signs of acute pancreatitis (Körte's sign, Voskresenskiy's sign, Mayo-Robson's sign, Mondor's sign, Cullen's sign, Halsted's sign, Grünwald sign).
3. Early phase of acute necrotizing pancreatitis: features of clinical manifestations and management.
4. Principles of treatment for moderately mild pancreatitis.
5. Patient of 56 years undergone surgery for acute destructive cholecystitis. There were no peritoneal effusion, the gallbladder was 8×5 cm without stones, common bile duct 6 mm. Pancreas was enlarged, swollen and peripancreatic edema were observed. What is your management?

Task N 8

1. Definitions: acute pancreatitis, necrotizing pancreatitis, sterile pancreatitis, infected pancreatitis, acute necrotic collection, acute pancreatic fluid collection, acute pseudocyst, walled-off necrosis.
2. Clinical and laboratory criteria of acute pancreatitis severity.
3. The late phase of acute pancreatitis: features of clinical manifestations and treatment.
4. Indications for surgery in acute pancreatitis, types of surgical procedures.
5. Patient of 34 years old was admitted in a hospital. He had had alcohol intake for one week before. The complaints were encircling upper abdominal pain, multiple vomiting with bile, temperature 37.5 °C, fatigue. In epigastric area the painful mass 10×10 cm could be palpated. Your initial diagnosis and management.

Task N 9

1. Ranson and Glasgow score systems for detecting the acute pancreatitis severity.
2. Early and late complications of acute pancreatitis.
3. Causes of intoxication in acute pancreatitis.
4. Principles of treatment for mild acute pancreatitis.
5. Patient with acute pancreatitis had been treated conservatively for one week. His condition worsen, delirium developed, high amylase level was in urine. What is the management?

Task N 10

1. Definitions: systemic inflammatory response syndrome, organ failure (SOFA scale criteria), transient and persistent organ failure, multiple organ failure.

2. Methods to intoxication decreasing in acute pancreatitis and its complications.
3. Signs of acute pancreatitis during laparoscopy.
4. Clinical and diagnostic features in postoperative pancreatitis.
5. After the severe epigastric pain condition of the patient improved, but his abdomen began to enlarge, signs of ascites could be detected. What is your diagnosis and management?

TOPIC «DISEASES OF BILIARY TRACT»

Task N 1

1. Anatomy and physiology of the liver and gallbladder.
2. Classification of cholelithiasis.
3. The composition of bile, its functions. Regulation of secretion and excretion.
4. Morphological changes of the ampulla of Vater in stenosis.
5. A patient of 45 y.o., suffering from cholelithiasis for a long time, was admitted to a surgical hospital with pain in the right upper quadrant and epigastric areas and vomiting. Her condition is of moderate severity, with an objective examination determined icteric sclera and skin, tachycardia, muscle tension of the anterior abdominal wall, paresis of the intestine. From the laboratory data — leukocytosis and a high level of amylase. Which of the methods of instrumental diagnostics should be applied first?

Task N 2

1. Classification of diseases of the liver and biliary tract.
2. Clinical presentation, diagnosis of acute cholecystitis.
3. Peculiarities of the anamnesis and clinical signs of acute cholangitis.
4. Indications for emergency surgery for acute cholecystitis, types of operations.
5. During the operation at the 82 y.o. patient the gangrene of a gallbladder, a biliary peritonitis is found out. What should the surgeon perform?

Task N 3

1. Classification of acute cholecystitis.
2. Laboratory and instrumental methods for diagnosing gallbladder diseases.
3. Anomalies of bile ducts and ducts of the pancreas.
4. Indication for urgent surgery and types of surgery for acute cholecystitis.
5. The anatomy of the Calo Triangle.

Task N 4

1. Peculiarities of the clinical presentation of chronic cholecystitis and cholelithiasis.
2. Plan of examination of patients with acute cholecystitis.
3. Instrumental methods of examination of patients with obstruction of the terminal part of common bile duct.
4. Methods for intraoperative examination of bile ducts.
5. Six months after cholecystectomy, the patient developed intense jaundice. What is surgical management?

Task N 5

1. Differential diagnosis of diseases of the bile ducts.
2. Complications of acute cholecystitis.
3. X-ray signs of stenosis of the ampulla of Vater.
4. Selection of surgery for pathology of the bile ducts.
5. Six months after the cholecystectomy, the patient complains of recurrent pain attacks and intermittent jaundice. What are your diagnosis and management?

Task N 6

1. Factors contributing to the gallstone formation, their biochemical composition.
2. Special methods of examination of biliary tract.
3. Etiology and pathogenesis of acute cholecystitis.
4. Indications for drainage of common bile duct after cholecystectomy, types of drainage and drainage technique.
5. A patient of 75 years old suffering from ischemic heart disease developed jaundice. The stenosis of ampulla of Vater is diagnosed. What is your management?

Task N 7

1. Clinical presentation of bile ducts strictures.
2. Liver enzymes in the diagnosis of diseases of the liver and biliary tract.
3. Surgical interventions for cholangiolithiasis, their types.
4. X-ray and special instrumental methods for diagnosing stenosis of the ampulla of Vater.
5. During laparotomy, a gangrenous gallbladder, necrotizing pancreatitis, hemorrhagic effusion were found. What is surgical tactics?

Task N 8

1. Instrumental diagnostics of cholangiolithiasis.
2. Peculiarities of surgical management in acute cholecystitis in senile patients.

3. Intraoperative diagnostics of stenosis of the ampulla of Vater stenosis and its degree.

4. Indications for cholecystostomy, its types and postoperative management.

5. Several hours after cholecystectomy, bleeding from abdominal drainage was found. What should be done?

Task N 9

1. Etiology, clinical presentation and diagnostics of acute cholangitis.

2. Criteria which are used to choose between surgery and conservative treatment in acute cholecystitis.

3. Bile fistula: etiology, localization, clinical presentation, diagnostics and tactics.

4. Indications for surgery for chronic cholecystitis.

5. A patient with a pericystic mass in the right upper quadrant and ultrasound signs of acute cholecystitis noted, that pain has increased suddenly after 2 days from the onset of the disease and symptoms of irritation of the peritoneum along the right lateral canal and in the right iliac region appeared. What is appropriate surgical management?

Task N 10

1. Management of biliary pancreatitis.

2. Clinical presentation and peculiarities of surgical tactics in cholangitis.

3. Specific symptoms of acute cholecystitis.

4. Methods of surgery for stenosis of the ampulla of Vater.

5. The patient 68 years old with ischemic heart disease, acute cholecystitis has resolved. What is the further management?

TOPIC «GASTRODUODENAL ULCER DISEASE»

Task N 1

1. Anatomy of stomach and duodenum.

2. Anamnestic and clinical features in peptic ulcer.

3. Classifications of gastrointestinal bleeding.

4. Modern methods for gastric secretion measurement. Their role in choosing of surgery type.

5. What is the management of patient with multiple vomiting with blood and clots? Patient is in severe hemorrhagic shock.

Task N 2

1. Physiology of stomach and duodenum.
2. Causes of gastroduodenal bleedings according to anamnesis, clinical signs, laboratory tests, and diagnostic studies.
3. Features of clinical picture of penetrating ulcer.
4. Classification of gastric outlet obstruction.
5. During laparotomy for perforated peptic ulcer, you cannot find the perforation itself. What are your next steps?

Task N 3

1. Variants of clinical course of perforated ulcer.
2. Assessment the bleeding severity by clinical signs and laboratory tests. Detection the source of bleeding.
3. Conservative treatment for gastric outlet obstruction.
4. Stages and clinical manifestation of penetrating peptic ulcer.
5. After the 2 days from surgery on stomach, severe pain in abdomen irradiating to the right shoulder developed. What is the diagnosis and management?

Task N 4

1. Etiology of gastroduodenal ulcers.
2. "Small sings" of peptic ulcer malignant transformation.
3. Forrest classification of gastroduodenal bleeding.
4. Contraindication to gastric resection in perforated ulcer.
5. During surgery for massive intestinal bleeding, no pathology of stomach, liver, spleen was observed. What is the possible source of bleeding?

Task N 5

1. Features of anamnesis in peptic ulcer.
2. Stages and clinical manifestations of gastric outlet obstruction.
3. Types of vagotomy procedures.
4. Causes, clinical manifestations, diagnostics and management of sealed ulcer perforation.
5. Patient of 23 years has had 5 admissions to a hospital for peptic ulcer disease during last two years. Every time there was good treatment result. What is the further management for such patient?

Task N 6

1. Classification of gastrointestinal bleeding and its importance.
2. Differential diagnosis between pyloric spasm and stenosis.
3. Diagnostics of perforated ulcer.
4. Type of surgical procedures for perforated ulcer.

5. Patient with complaints of «coffee-ground» vomiting, dizziness and fatigue was admitted. He had had melena a 12 hours before the admission. In anamnesis patient describe surgery for perforated ulcer. After the surgery patient had periodic vomiting, night abdominal pain, weight loss. On admission: patient of a low weight, pale, pulse rate 110 per min, blood pressure 100/60 mm Hg. Abdomen is soft, tenderness in epigastrium. Per rectum — melena. Your initial diagnosis. Further investigations. Management.

Task N 7

1. Callous gastric ulcer: clinical manifestation, diagnostics and management.
2. Features of peritoneal syndrome in perforated ulcer.
3. Indications for surgery for gastroduodenal ulcer (absolute and relative).
4. Choosing of surgical procedure for gastric ulcer.
5. What is the management of a patient suspected for having perforated ulcer and who hasn't pneumoperitoneum on the X-Ray abdominal film?

Task N 8

1. Diagnostics of ulcer malignant transformation.
2. Causes of gastric outlet obstructions by peptic ulcer disease.
3. Methods of bleeding source detection.
4. What is the atypical ulcer perforation?
5. What will you do when you found sealed ulcer perforation and absence of peritonitis during laparoscopy?

Task N 9

1. Essential laboratory tests and diagnostics studies for diagnosis of ulcer bleeding, detection of blood loss and determining the further management.
2. Complications of penetrating ulcer.
3. Pathogenesis of pain according to ulcer localization.
4. Differences of gastric resection in peptic ulcer and cancer.
5. During surgery for duodenal ulcer, the surgeon found bile leakage. What is the diagnosis and further treatment?

Task N 10

1. Intraoperative diagnostics of perforated ulcer. Types of surgery.
2. Clinical manifestation and diagnostics of hemorrhage from varicose esophageal veins, in Mallory syndrome, and hemobilia.
3. Modern pathogenesis of gastroduodenal ulcer disease.
4. Diagnostic methods for sealed ulcer perforation.
5. During surgery for penetrating ulcer, connection between stomach and transverse colon was found. Management.

TOPIC «INTESTINAL OBSTRUCTION»

Task N 1

1. Classification of intestinal obstruction.
2. Features of anamnesis and clinical picture of intestinal obstruction.
3. Causes of congenital intestinal obstruction.
4. Palliative and multiple procedures for intestinal obstruction due to a neoplasm.
5. In a patient of 57 years old with acute intestinal obstruction, a rectum cancer was found. What are the actions of the surgeon?

Task N 2

1. Essential radiographic, endoscopic and laboratory studies for diagnosis of intestinal obstruction.
2. Types of functional intestinal obstruction and their clinical differences.
3. Clinical features of cancer in the right and left colon.
4. Radical operations for tumor intestinal obstruction.
5. During surgery for acute intestinal obstruction, intussusception of the ileum into the cecum was found. What is the tactic of the surgeon?

Task N 3

1. Differential diagnosis of functional and mechanical intestinal obstruction.
2. Objective symptoms of acute intestinal obstruction and the mechanism of their development.
3. Causes of spasmodic form of intestinal obstruction.
4. Types of operations for cancer of the right colon (radical and palliative).
5. A 73-year-old patient has a sigmoid colon obturation with a calcified stone. The gut is viable, the patient's condition is severe. What is the type of surgery?

Task N 4

1. Invagination: clinical picture, diagnosis and etiology.
2. Causes of paralytic intestinal obstruction.
3. Treatment-and-diagnostic complex by Maslov–Vishnevsky. Therapeutic components and their sequence.
4. Types of surgery for cancer of the left colon, complicated by intestinal obstruction.
5. A 84 y.o. patient has sigmoid volvulus with gangrene. What is surgical tactics?

Task N 5

1. Pathophysiological and clinical features of strangulation and obturation in intestinal obstruction.
2. Types of intestinal obstruction due to the adhesions and the mechanism of their development.
3. Features of clinical manifestation of mesenteric intestinal obstruction.
4. Types of operations for cancer of the transverse colon.
5. A 63-year-old patient has complete intestinal obstruction due to resectable cancer of the cecum. What are the actions of the surgeon?

Task N 6

1. Acute adhesive intestinal obstruction: clinical picture, diagnosis, treatment.
2. Features of radiological diagnosis of intussusception.
3. Types of mesenteric intestinal obstruction.
4. Describe the operation by the Hartmann method.
5. During surgery for the suspected high intestinal obstruction, an acute distention of the stomach was found. What is the tactic of the surgeon?

Task N 7

1. Sigmoid volvulus: clinical picture, diagnosis and treatment.
2. Treatment methods for intussusception.
3. Clinical picture of high intestinal obstruction.
4. Types of operations for mesenteric intestinal obstruction.
5. A 12-year-old child has an obturation of the small intestine with an ascariasis. What is the tactic of the surgeon?

Task N 8

1. Acute gallstone intestinal obstruction: clinical picture, diagnosis and treatment.
2. Pathomorphological changes in the intestinal wall in intestinal obstruction.
3. Clinical picture of low intestinal obstruction.
4. Types of operations for adhesive intestinal obstruction.
5. In a 50-year-old patient during surgery for sigmoid cancer, a single metastasis was found in a liver. The tumor was removable. What is the tactic of the doctor?

Task N 9

1. Pathogenesis of acute intestinal obstruction.
2. Mechanism of development of gallstone intestinal obstruction.
3. Endoscopic diagnosis of intestinal obstruction.
4. Methods of bowel decompression.

5. On surgery for acute intestinal obstruction, cancer of the rectosigmoid part of the large intestine with perforation was found. What is the tactic of the surgeon?

Task N 10

1. Clinical manifestations of chronic duodenal obstruction.
2. Treatment methods for acute functional intestinal obstruction.
3. Volvulus of the cecum: clinical picture, diagnosis and treatment.
4. Types of operations for congenital obstruction of the gastrointestinal tract.
5. On an operation a small bowel volvulus was found. The gut was viable but overfilled by fluid and gas. What is the tactic of the surgeon?

TOPIC «PERITONITIS»

Task N 1

1. Causes of peritonitis.
2. Pockets and curvatures of the peritoneum and their clinical significance.
3. Clinical features of peritonitis in carcinomatosis.
4. What is the treatment for peritonitis.
5. After appendectomy for 4 days there are paresis of the intestine, tension of the abdominal muscles, elevated temperature. Rectal examination shows the tenderness of the rectum anterior wall. What is the diagnosis and tactics of the surgeon?

Task N 2

1. Anatomy of the peritoneum.
2. Clinical classification of peritonitis.
3. Forms and clinical features of tuberculous peritonitis.
4. Who with peritonitis needs preoperative preparation, its duration and extent.
5. The patient has an appendicular mass. On 10th day the pain in the right inguinal region increased, spread to the lower half of the abdomen. The palpable mass disappeared. What are your diagnoses and tactics?

Task N 3

1. Physiological functions of the peritoneum.
2. Clinical features and clinical course of streptococcal peritonitis.
3. Classification of chronic peritonitis.
4. Choice of methods of anesthesia in surgery for peritonitis

5. A patient with a previously diagnosed sigmoid colon diverticulum had a short-term pain attack, there was a slight muscle straining, mainly in the lower abdomen. The temperature is 38.8 °C, the pulse is 100 beats per minute. What are your diagnosis and tactics?

Task N 4

1. Pathogenesis of acute peritonitis.
2. Clinical features and clinical course of gonococcal peritonitis.
3. Floors of the abdominal cavity: borders, ways of communication between each other.
4. Surgical approaches in peritonitis and their reasons.
5. In surgery for strangulated hernia, a gut was of doubtful viability, in the hernial sac — hemorrhagic exudate, in the abdominal cavity — similar exudate. What is the diagnosis and plan of the surgeon's actions?

Task N 5

1. Stages of acute peritonitis and their characteristics.
2. Pneumococcal peritonitis: clinical picture, diagnosis and treatment.
3. Chronic omentitis.
4. Sequence of the surgeon's actions when peritonitis is found intraoperatively.
5. During laparotomy, purulent exudate was found in the small pelvis and in the left mesenteric sinus, the appendix is thickened, hyperemic, with fibrin overlapping. What is the diagnosis, the extent of the operation, the management in the postoperative period?

Task N 6

1. Pathological changes in the peritoneum in different stages of peritonitis.
2. Ways of contamination of the abdominal cavity.
3. Diagnostic syndromes in different stages of peritonitis.
4. Rational antibiotic therapy for acute peritonitis.
5. After the attack of «stabbing» epigastric pains, irradiated in the back, the patient's state did not improve, the pain syndrome remained. Hepatic dullness was preserved, there was a slight muscle tension in the epigastrium. Dry tongue, pulse of 96 bites per min. What is the diagnosis and tactics of a surgeon?

Task N 7

1. Intraoperative diagnostics and extent of surgery in total peritonitis.
2. Treatment for peritonitis.
3. Clinical picture, diagnosis and treatment of pelvic abscesses.
4. Microflora, which causes the development of acute peritonitis.

5. During X-Ray examination of the stomach in a patient with a history of ulcer disease, epigastric pain increased. After 10 hours the pain spread throughout the abdomen, the abdomen tensed, no peristalsis, the tongue is dry. What is the diagnosis, the tactics of the family doctor, the surgeon?

Task N 8

1. Factors that caused endotoxemia in peritonitis.
2. Differential diagnosis of chest diseases from acute peritonitis.
3. Extracorporeal methods of detoxification.
4. Causes of aseptic peritonitis.
5. In a patient with clinical picture of acute cholecystitis, muscle tension and pain spread along the right lateral canal, the general state worsened, multiple vomiting of bile appeared, and leukocytosis increased. Gallbladder was palpable and painful. What is your diagnosis and tactics?

Task N 9

1. Methods of extracorporeal detoxification in peritonitis.
2. Differential diagnosis of diseases that mimics peritonitis, but does not require surgical treatment.
3. The most common site of intraabdominal abscesses. Their clinical picture and diagnostics, methods of treatment.
4. Indications for tamponade of the abdominal cavity during surgery for peritonitis.
5. During surgery for appendicitis, a murky, yellowish effusion was found that spreads along the right lateral canal. The appendix is not affected. What is the diagnosis and tactics of the surgeon?

Task N 10

1. Complications of peritonitis in the early and late postoperative periods.
2. Subdiaphragmatic abscesses: clinical picture, diagnosis and treatment.
3. The importance of special methods in the diagnosis of acute peritonitis.
4. Correction of metabolic disorders and immune status in acute peritonitis.
5. On the 3rd day of the illness the patient is weak, adynamic, has dry tongue, multiple vomiting, mild abdominal distention, and slight tension in the right half and suprapubic region, tachycardia, leukocytosis 20 000. What is the diagnosis and tactics of the surgeon?

TOPIC «DISEASES OF THE HEART AND PERICARDIUM»

Task N 1

1. Classification of heart diseases.
2. Open arterial duct: clinic, diagnosis, treatment.
3. Mitral stenosis: etiology, clinic, diagnosis.
4. Exudative pericarditis: clinic, diagnosis, treatment.
5. A 32-year-old patient has a predominantly mitral insufficiency. What treatment should you choose?

Task N 2

1. Classification of congenital heart diseases.
2. Defect of the interatrial septum: clinic, diagnosis, treatment.
3. Mitral failure: a clinic, diagnosis, treatment.
4. Adhesive pericarditis: etiology and pathogenesis.
5. The patient 12 years old suffers from an open arterial duct and pulmonary hypertension 4th stage. What treatment should you choose?

Task N 3

1. Defect of interventricular septum: clinic, diagnosis, treatment.
2. Surgery of mitral stenosis.
3. X-ray signs of pericarditis.
4. Abnormal drainage of pulmonary veins.
5. Describe the radiograph of the patient with mitral insufficiency.

Task N 4

1. Congenital stenosis of the aortic aperture of the form: clinic, diagnosis, treatment.
2. Lutembosh syndrome: pathological anatomy, clinic and diagnosis.
3. Methods of prosthetics of the mitral valve.
4. Clinical picture with constrictive pericarditis.
5. Describe the radiograph of the patient with mitral stenosis.

Task N 5

1. Isolated stenosis of the pulmonary artery: hemodynamic alterations, clinical presentation, diagnosis, treatment.
2. Violation of the rhythm of heartbeats, treatment.
3. Diagnosis of the mitral valve of the heart.
4. Degrees of pulmonary hypertension in the open arterial duct.
5. General contraindications for surgical treatment of patients with heart defects.

Task N 6

1. Triad of Fallot: pathological anatomy, hemodynamic alterations, diagnosis, treatment.
2. Coronary insufficiency: etiology, clinic, diagnostics, surgical methods of treatment.
3. Insufficiency of the aortic valve: etiology, clinic, diagnostics, surgical treatment.
4. Clinic of cardiac decompensation with adhesive pericarditis.
5. Modern minimally invasive methods of coronary artery pathology correction.

Task N 7

1. Tetrad of Fallo: compound components, hemodynamic alterations, clinical presentation, diagnosis, treatment.
2. Complete transverse cardiac blockade.
3. Insufficiency of the pulmonary artery valve: clinic, diagnosis, treatment.
4. X-ray signs of aortic stenosis.
5. Indications for surgery in the pathology of the aortic valve.

Task N 8

1. Pentad of Penta: compound components of the disease, clinic, diagnosis, treatment.
2. Classification of heart defects.
3. Indications and contraindications to surgical treatment of mitral heart disease.
4. Insufficiency of the pulmonary artery valve.
5. Methods of surgery of an interventricular septal defect.

Task N 9

1. Mitral-aortic stenosis: clinic and diagnosis, surgical treatment.
2. Incomplete anomalous drainage of pulmonary veins: diagnosis and treatment tactics.
3. X-ray endovascular methods of heart examination.
4. Surgery of coarctation of the aorta.
5. Indications for intracavitary heart examination.

Task N 10

1. Coarctation of the aorta: clinical presentation, diagnosis, treatment.
2. Insufficiency of the tricuspid valve: clinic, diagnosis, treatment.
3. Aneurysms of the heart: etiology, clinical presentation, diagnosis, treatment.

4. Surgery of the open ductus arteriosus.
5. A patient of 45 years has mitral-aortic stenosis, circulatory insufficiency of the III stage. What treatment should you choose?

TOPIC «ARTERIAL DISEASES»

Task N 1

1. Anatomy of the arterial system of legs.
2. Clinical presentation of obliterating atherosclerosis of the arteries of the legs.
3. Mechanism and stage of development of arterial aneurysm.
4. Drug treatment for thrombosis of the arteries.
5. A 54-year-old patient has signs of ischemia of both legs. The amplitude of the pulse of the femoral artery is reduced, systolic pulse is determined above it. What is your survey plan? What treatment should you choose?

Task N 2

1. Classification of arterial diseases.
2. Clinical presentation and diagnosis of obliterative thrombangiitis.
3. Causes of embolism of the arteries of the legs.
4. Methods of aorto- and arteriography.
5. An elderly patient on the 2nd day after resection of the stomach suddenly developed acute cardiovascular insufficiency, hypotension, cyanosis of the upper half of the trunk. What diagnosis do you make? What treatment should you choose?

Task N 3

1. Classification of vascular diseases.
2. Lericq's syndrome: a clinical presentation and diagnostics.
3. Methods of examination of arteries and veins.
4. Indications for surgical treatment of chronic arterial insufficiency.
5. A patient of 50 years old has pain at rest in the area of toes. Pulsation is determined only on the femoral artery, on the popliteal artery and the arteries of the foot — it is not found. What kind of diagnosis do you make? What treatment should you choose?

Task N 4

1. Clinical presentation and diagnosis of chronic violations of visceral circulation.
2. Traumatic vascular injury: classification, clinic, diagnosis and treatment.

3. Clinical signs of arterial injury of lower extremities.
4. Choice of the method of surgical treatment of aortic aneurysm.
5. The patient suddenly felt an acute pain in his right shin. Pulsation is determined only on the femoral artery, below there is no ripple. What kind of diagnosis do you make? What treatment should you choose?

Task N 5

1. Congenital malformations of blood vessels: classification, clinical presentation, diagnosis and treatment.
2. Pathophysiological mechanisms of the emergence of «intermittent claudication».
3. Classification of chronic arterial insufficiency in Fontaine–Pokrovsky.
4. Medications used to treat diseases of the arteries of the legs.
5. A 69-year-old patient has epigastric pain after eating, a feeling of heaviness, discomfort. At an endoscopy of a pathology in a stomach and an intestine it is not revealed. What kind of diagnosis do you make? What treatment should you choose?

Task N 6

1. Takayasu syndrome: a clinical presentation, diagnosis and treatment.
2. Plantar symptoms in occlusive lesions of leg arteries.
3. Differential diagnosis of exfoliating aortic aneurysm and «acute abdomen».
4. Methods of surgical treatment of embolism of arteries.
5. The patient does not have pulsation on the vessels of the lower extremities. It has gangrene of the nail phalanx of the first toe. What is your diagnosis? Which treatment should you choose?

Task N 7

1. Clinical presentation, diagnosis and treatment of acute arterial insufficiency.
2. Etiology, pathogenesis and places of the most frequent localization of the exfoliating aortic aneurysm.
3. Special methods for the study of peripheral circulation.
4. Clinic and treatment of thromboembolism of the main vessels.
5. The patient was taken to the emergency room 6 hours after the onset of severe pain in the legs. Pulsation of both femoral arteries is not determined. What is your diagnosis? Which treatment should you choose?

Task N 8

1. Obliterating thromboangiitis (Vinivarther–Burger disease): etiology, clinical presentation, diagnosis and treatment.

2. Clinical manifestations of vascular lesions in patients with diabetes mellitus.
3. The volume of necessary diagnostic studies for embolism and thrombosis.
4. Treatment of patients with obliterating endarteritis.
5. 8 hours ago, the patient experienced an embolism of the right popliteal artery, there are signs of foot ischemia. Which treatment should you choose?

Task N 9

1. Coarctation of the aorta: etiology, clinical presentation, diagnosis and treatment.
2. Features of pain syndrome with obliterating leg diseases.
3. Indications for surgery and types of surgical operations for acute arterial obstruction of the arteries of the legs.
4. Methods of surgical treatment of patients with obliterating atherosclerosis of the arteries of the legs.
5. A patient with an aneurysm of the abdominal aorta has clinical manifestations of profuse gastric bleeding. What is the diagnosis and actions of the surgeon?

Task N 10

1. Raynaud's disease: etiology, clinical presentation, diagnosis and treatment. What is the difference between Raynaud's disease and syndrome.
2. Stages of acute ischemia of the lower limb and their clinical manifestations.
3. X-ray diagnostics of forms of occlusal injuries of the arteries of the legs.
4. Principles of endovascular x-ray surgery.
5. At the patient of 40 years last 4 years suffers from a pain in fingers, the muscular force is reduced, the chilliness of hands is present. On the nail phalanx of the second finger, an ulcer 0.5 cm in size, the pulsation of the arteries is good. What is your diagnosis? Which treatment should you choose?

TOPIC «VARICOSE VEINS»

Task N 1

1. Clinical anatomy and physiology of leg veins.
2. Stage of varicose veins.
3. Differential diagnosis of primary varicose veins.
4. Definition of sclerotherapy.
5. The treatment of superficial leg vein thrombosis.

Task N 2

1. Perforator veins of the legs.
2. Classification of varicose veins (CEAP).
3. Syndrome of Parkes–Weber–Rubashov.
4. Methods of operations: crossectomy and stripping.
5. Anatomy of sapheno-femoral junction.

Task N 3

1. The role of perforating veins in the pathogenesis of varicose veins.
2. Congenital diseases of the venous system.
3. Ultrasound methods in the diagnosis of varicose veins.
4. Endovenous approaches to the treatment of varicose veins.
5. After delivery, the patient developed pain in the leg, swelling, cyanosis.

Make a diagnosis and propose treatment.

Task N 4

1. Valves of veins and its role in the pathogenesis of varicose veins.
2. Test of Brodie–Trojanov–Trendelenburg, its interpretation.
3. Chronic venous insufficiency.
4. Technique of crossectomy.
5. The patient has a venous ulcer on the internal malleolus of the tibia.

What diagnostic study should be performed?

Task N 5

1. How blood flows through the veins from the bottom to the upper.
2. Clinical manifestations of superficial veins thrombophlebitis.
3. Syndrome of Clippele–Trenaunay.
4. Laser technologies in treatment of varicose veins.
5. The woman, 58 years has a bleeding from a ruptured varicose enlarged node on the left tibia in the projection of the great saphenous vein. What should be first aid?

Task N 6

1. What kind of violations of venous blood flow in case of varicose veins.
2. Classification of varicose veins (CEAP).
3. Pathogenesis of varicose veins.
4. Phlebography and the technique of their execution.
5. 1 year after varicose veins surgery the conglomerate of varicose veins appeared in the groin. Why did it happen?

Task N 7

1. Methods of diagnosis of varicose veins.
2. Complications of varicose veins.
3. Tumescence anesthesia in the treatment of varicose veins.
4. Indications for surgery and choice of method of surgery for varicose veins.
5. Anatomy of sapheno-popliteal junction.

Task N 8

1. Clinical manifestations of varicose veins.
2. Thrombophlebitis of superficial veins: causes, pathogenesis, clinical manifestations, treatment.
3. Duplex vein mapping.
4. Medication of varicose veins.
5. You are examining women, 20 years old, pregnancy 38 weeks. In the past month, the patient notes the appearance moderately expressed phlebectasia in thigh. What treatment should appoint the patient for the remaining period of pregnancy?

Task N 9

1. Complications of chronic venous insufficiency.
2. Clinical manifestations of varicose veins.
3. Describe methods of determining the failure of valves perforating veins.
4. Treatment of thrombophlebitis of the great saphenous vein.
5. The patient was operated 3 years ago for varicose veins disease. Currently, there are varicose veins on the posterior-medial surface of the cruris. What is a relapse?

Task N 10

1. Clinical signs of the valves insufficiency of the saphenous veins.
2. Prevention of varicose veins disease. Compression stocks.
3. Anatomy of the deep veins of the lower extremities.
4. The technique of endovenous surgery.
5. Women 27 years old complains on moderately dilated superficial veins in the left tibia on the outer surface. Ultrasound examination revealed no insolvent of veins valves. What treatment should be offered to this patient?

TOPIC «DISEASES OF LUNGS AND PLEURA»

Task N 1

1. Surgical anatomy of lungs.
2. Congenital lung diseases: types of anomalies, clinical manifestations and therapeutic tactics.
3. Etiology and pathogenesis of pleuritis.
4. Principles of antibacterial therapy for suppurative lung diseases.
5. Radiologic examination revealed a globular tumor on the periphery of the lower lobe of the right lung. Schedule an examination plan.

Task N 2

1. Clinical lung physiology: respiratory volume, reserve volume of entry and exit, total lung capacity, vital capacity of lungs, etc.
2. Classification of diseases of the lungs and bronchi.
3. Clinical picture of pleural empyema.
4. Indications for surgical treatment of acute lung abscess.
5. Four months after thoracoplasty, a bronchopleurotic fistula remains due to chronic pleural empyema. What should you do?

Task N 3

1. Classification of lung abscesses. Etiology and pathogenesis.
2. Malformation of the trachea and bronchi.
3. X-ray methods of examination: contrast and contrastless.
4. Methods of treatment of lung cysts.
5. The patient after lobectomy in the early period developed weakness, tachycardia, lowering blood pressure, falling HB. What is your diagnosis and management?

Task N 4

1. Classification, etiology and pathogenesis of bronchiectasis.
2. Benign bronchopulmonary tumors: clinical picture, diagnosis, treatment.
3. Endoscopic methods of investigation the tracheobronchial tree. Interpretation of findings.
4. Types of surgical procedures for the lung abscesses.
5. The patient 50 years old had right-sided pleurisy. Puncture received hemorrhagic content. Make an examination plan.

Task N 5

1. Clinical and diagnostic features of lung abscess, depending on the stage of the disease.
2. Classification of lung cysts, clinical picture of infected lung cyst.

3. Ways of contamination of the lungs and pleura.
4. Spontaneous pneumothorax: etiology, clinical picture, diagnosis, treatment.
5. The 45-year-old patient with history of frequent pneumonia, on admission to the hospital had complains of coughing, sputum discharge. What is the investigation plan?

Task N 6

1. Lung gangrene: clinical picture, diagnosis and treatment.
2. Methods of examination of a patient with pleurisy.
3. Differential diagnosis of bronchiectasis and lung cancer.
4. Surgical methods of treatment of patients with pleural empyema.
5. The patient has hemoptysis within a week. Causes and plan of examination.

Task N 7

1. Clinical picture, diagnosis and treatment of chronic lung abscess.
2. Tracheo-esophageal fistula: clinical picture, diagnosis and treatment tactics.
3. Technique of sputum examination and evaluation of the findings.
4. Differential diagnosis of infected cyst and lung abscess.
5. Patient 47 years old has infiltration of the upper lobe of the right lung. There is cyanosis of the face, expansion of the cervical veins. What is your tactic?

Task N 8

1. Factors that are involved to the development of suppurative lung diseases.
2. Clinical picture and diagnosis of the first stage of lung abscess.
3. Complications of bronchiectasis.
4. Methods of bronchography and bronchoscopy.
5. At the patient of 75 years old at chest X-ray the atelectasis of a bottom lobe of the right lung is found. Make an examination plan.

Task N 9

1. Clinical picture and diagnosis of the second stage of lung abscess.
2. Features of clinical manifestation of the lung gangrene.
3. General principles of examination and preparation of patients with pulmonary infections for surgery.
4. Types of surgery for bronchiectasis.
5. Two segments of the lower lobe of the right lung are affected by bronchoectasies. Abundant sputum in the postural drainage position. Make a surgery plan.

Task N 10

1. Chronic lung abscess: formation time, clinical picture, diagnosis, treatment.
2. Complications of suppurative lung diseases.
3. Features of therapy in pleurisy.
4. Ways of antibiotics administration for suppurative diseases of the lungs.
5. The patient with gangrene of the left lung deteriorated rapidly. Objectively there was blunt sound on percussion with a clear upper boundary. What happened and what is your tactic?

TOPIC «DISEASES OF THE COLON AND RECTUM»

Task N 1

1. Classification of colorectal diseases.
2. Surgical anatomy and pathophysiology of rectal veins.
3. Acute paraproctitis (perianal abscess): classification, clinical picture and diagnosis.
4. Precancerous diseases of the rectum.
5. The patient has severe pain in the anus, high fever, act of defecation is painful. What is the diagnosis and management?

Task N 2

1. Anatomy of the rectum.
2. Stages of clinical course of hemorrhoids.
3. Factors predisposing to the development of acute and chronic paraproctitis (perianal abscess and fistula-in-ano).
4. Morphological changes in the colon with ulcerative colitis.
5. At the beginning of the defecation act, scarlet blood is allocated from the rectum, hemoglobin — 87 gram per liter. What is your diagnosis and tactics?

Task N 3

1. Chronic paraproctitis (fistula-in-ano): classification, clinical picture, diagnosis.
2. Clinical picture of nonspecific ulcerative colitis.
3. Benign tumors of the large intestine.
4. Methods of physical and special examination of patients with hemorrhoids.
5. During rectoscopy a single polyp was removed from the upper third of the rectum ampoule. Histological examination revealed atypical cells. What is your tactic?

Task N 4

1. Anaerobic paraproctitis: clinical picture, diagnosis and treatment features.
2. Conservative treatment of fistulas of the rectum.
3. Early signs of colorectal cancer.
4. Predisposing and producing factors of hemorrhoids.
5. After the acute paraproctitis, the patient has a fistula, from which the fecal content is released. What is your diagnosis and tactics?

Task N 5

1. Classification of hemorrhoids.
2. Diagnostics of acute paraproctitis (perianal abscess).
3. Radiological findings in ulcerative colitis.
4. Special methods of investigation for the diagnosis of rectal diseases.
5. During rectoscopy, the rectum was perforated in the ampulla. What is the surgical tactic?

Task N 6

1. Hemorrhoids, as an illness and hemorrhoids as a symptom.
2. Classification of pararectal fistulas (fistula-in-ano).
3. Endoscopic view in ulcerative colitis.
4. Indications for colonoscopy and laparoscopy for diseases of the colon.
5. The patient has painful swollen hemorrhoids. What is your diagnosis and tactics?

Task N 7

1. Anal fissure: causes, localization, clinical picture, diagnosis and treatment.
2. Differential diagnosis of thrombosis and inflammation of the hemorrhoids.
3. Colon polyps: clinical picture, diagnosis, treatment.
4. Treatment of anaerobic paraproctitis (perirectal abscess).
5. The patient suffers from hemorrhoids for a long time. Recently, the nodes dropped out even after repositioning. What is your tactic?

Task N 8

1. Complications of hemorrhoids, their clinical manifestations.
2. Rectal prolapse: classification, clinical picture, treatment.
3. Surgical complications of ulcerative colitis.
4. Methods of conservative and surgical treatment of anal fissure.
5. There are strong throbbing pains in the anus, high fever, edema extending to the perineum and gluteal regions. What is your diagnosis and tactics?

Task N 9

1. Localizations of perirectal abscesses, features of diagnosis.
2. Conservative and surgical methods for treating hemorrhoids.
3. Perirectal abscess: classification, clinical picture and treatment.
4. Surgical methods of treatment of rectal fistulas.
5. Above the anus at 6–7 cm at the middle line close to the coccyx, there is swelling, hyperemia, tenderness. What is your diagnosis and tactics?

Task N 10

1. Benign tumors of the colon and rectum: clinical manifestations, diagnostics.
2. Differential diagnosis of bleeding from the rectum.
3. Injuries and foreign bodies of the rectum: clinical picture, diagnosis, treatment.
4. The extent of surgical intervention in perianal abscess.
5. A patient suffers from hemorrhoids for 10 years with frequent bleeding lately, blood is excreted along with the feces and after the act of defecation. What is your diagnosis and tactics?

TOPIC «CHRONIC PANCREATITIS»

Task N 1

1. Classification of chronic pancreatitis.
2. Insufficient exocrine function in chronic pancreatitis.
3. Intraoperative signs of chronic pancreatitis.
4. Medical therapy of chronic pancreatitis.
5. A 49-year-old woman has a 24-hour history of nausea, vomiting, escalating epigastric pain radiating to her back, and fever (temperature up to 38.5 °C). Medical history is remarkable for depression, cholecystectomy (because of gallstones) 5 months ago, and appendectomy during childhood. She takes fluoxetine 20 mg daily for depression. Physical examination reveals a tender epigastrium as well as tenderness in the right upper quadrant. Laboratory studies reveal the following serum levels: amylase, 14.500 U/L; lipase, 9300 U/L; aspartate aminotransferase, 500 U/L; alanine aminotransferase, 449 U/L; alkaline phosphatase, 420 U/L; total bilirubin, 1.9 mg/dL; calcium, 9.7 mg/dL; triglycerides 430 mg/dL; and leukocyte count, $16 \times 10^{12}/\text{mm}^3$. Which of the following is the most likely cause of this patient's pancreatitis?
 - a) alcohol abuse;
 - b) fluoxetine administration;
 - c) gallstones;
 - d) hypercalcemia;
 - e) hypertriglyceridemia.

Task N 2

1. The study of exocrine insufficiency in chronic pancreatitis.
2. Causes of chronic pancreatitis (a classification of TIGARO).
3. Definition of clinical symptoms in chronic pancreatitis (Voskresensky's, Mayo-Robson, Malle-GI).
4. Causes and clinical manifestations of pancreatic fistula.
5. A contrast-enhanced CT scan of the abdomen in a 51-year-old man with a history of alcohol abuse confirms the presence of renal calculi and incidentally reveals a 4-cm pancreatic pseudocyst near the tail of the pancreas that does not appear to communicate with the pancreatic duct. The patient has had 3 successive attacks of acute pancreatitis over the past 2 years, the most recent occurring 4 months ago, and has recovered from each attack with conservative measures. He no longer consumes alcohol and currently feels well. Which of the following is the most appropriate next step in managing this patient's pancreatitis?
 - a) observation;
 - b) endoscopic drainage of the cyst;
 - c) percutaneous drainage of the cyst;
 - d) surgical drainage of the cyst;
 - e) distal pancreatectomy with cyst removal.

Task N 3

1. Anatomy and physiology of the pancreas.
2. Physical examination of patients with chronic pancreatitis.
3. What is the mechanism of pancreatic cysts formation.
4. Magnetic resonance imaging in the diagnosis of chronic pancreatitis.
5. A 62-year-old man with known chronic pancreatitis caused by alcoholism reports a 10 kg weight loss over the past 3 months and frequent, greasy, and malodorous stools. A 72-hour fecal fat collection confirms steatorrhea. The patient no longer consumes alcohol and reports no abdominal pain. Which of the following is the most appropriate first-line treatment for this patient?
 - a) administration of enteric-coated pancreatic enzyme replacement tablets with meals and snacks and concurrent use of calcium-containing antacids;
 - b) administration of non-enteric-coated pancreatic enzyme replacement tablets with meals and snacks with concurrent dosing with a histamine-2-blocker;
 - c) endoscopic placement of a pancreatic duct stent;
 - d) institution of a low-fat diet (less than 20 g fat/day);
 - e) subcutaneous administration of octreotide 200 µg 3 times daily.

Task N 4

1. Differential diagnosis of chronic pancreatitis.
2. Insufficiency of the endocrine function of the pancreas in chronic pancreatitis.
3. The volume of laboratory diagnostics in chronic pancreatitis.
4. Possibilities of endoscopic treatment of chronic pancreatitis complications.
5. What are the different types of pancreatic cysts.

Task N 5

1. Clinical manifestations of chronic pancreatitis.
2. Examination of the patient with chronic pancreatitis.
3. What histological changes occur in the pancreas in chronic pancreatitis.
4. What are the general principles of treatment of chronic pancreatitis.
5. Patient 46 years old, a year ago suffered an acute inflammation of the pancreas. He has abdominal mass in the epigastric region, gradually increasing in size. The patient complains of moderate abdominal pain after a meal. The examination diagnosed a cyst of the body of the pancreas 7 cm in diameter with signs of acute inflammation. The flow of bile is not broken. What could be the treatment tactics?

Task N 6

1. How to estimate endocrine insufficiency in chronic pancreatitis.
2. Clinical variants of manifestations of chronic pancreatitis.
3. Endoscopic ultrasound in the diagnosis of chronic pancreatitis.
4. Principles of pain treatment in patients with chronic pancreatitis.
5. What are the different types of pancreatic cysts?

Task N 7

1. What are the most common causes of chronic pancreatitis?
2. Differential diagnosis of chronic pancreatitis.
3. What is the mechanism of formation of cysts in chronic pancreatitis?
4. What should be the diet in chronic pancreatitis?
5. During the surgical treatment of the peritonitis, rupture of cysts in the pancreas was found. What should be the actions of the surgeon?

Task N 8

1. Physiology of the pancreas
2. Laboratory diagnosis of chronic pancreatitis.
3. Complications of chronic pancreatitis. Pain control in chronic pancreatitis.
4. Enzyme replacement therapy in chronic pancreatitis.
5. The role of MRI in the diagnosis of chronic pancreatitis.

Task N 9

1. The definition of chronic pancreatitis.
2. Differential diagnosis of chronic pancreatitis and pancreatic cancer.
3. Methods of diagnosis of chronic pancreatitis.
4. Medical treatment of chronic pancreatitis.
5. A 49-year-old woman has a 24-hour history of nausea, vomiting, escalating epigastric pain radiating to her back, and fever (temperature to 38.5 °C). Medical history is remarkable for depression, cholecystectomy (because of gallstones) 5 months ago, and appendectomy during childhood. She takes fluoxetine 20 mg daily for depression. Physical examination reveals a tender epigastrium as well as tenderness in the right upper quadrant. Laboratory studies reveal the following serum levels: amylase, 14.500 U/L; lipase, 9300 U/L; aspartate aminotransferase, 500 U/L; alanine aminotransferase, 449 U/L; alkaline phosphatase, 420 U/L; total bilirubin, 1.9 mg/dL; calcium, 9.7 mg/dL; triglycerides 430 mg/dL; and leukocyte count, $16 \times 10^3/\text{mm}^3$. Which of the following diagnostic tests is most appropriate to determine if gallstones are the cause of the patient's pancreatitis?
 - a) endoscopic retrograde cholangiopancreatography;
 - b) contrast-enhanced computed tomographic (CT) scan of the abdomen;
 - c) percutaneous cholangiogram;
 - d) plain radiographs of the abdomen;
 - e) ultrasonography of the right upper quadrant.

Task N 10

1. Causes of pain in chronic pancreatitis.
2. Methods the diagnosis of chronic pancreatitis.
3. The locations of the biliary tract and of the ducts of the pancreas.
4. Surgical treatment of chronic pancreatitis: indications, types of operations.
5. The patient had an attack of severe pain in the epigastrium and left hypochondrium. After 2 days the pain decreased, but the abdomen began to increase in the size and showed signs of ascites. What is the diagnosis? How can this case treated?

TOPIC «POSTCHOLECYSTECTOMY SYNDROME. TRAUMA OF BILE DUCTS»

Task N 1

1. Anatomy and physiology of liver and gallbladder.
2. Classification of postcholecystectomy syndrome.
3. The true recurrence of the stone formation of the common bile duct: causes, clinical presentation, diagnosis, treatment.

4. Morphological changes of the ampulla of Vater in case of stenosis.

5. A patient, 46 years old, who had undergone a cholecystectomy 3 years ago because of cholelithiasis, had an attack of epigastric pain. 1 day later the patient turned yellow. During examination in terminal part of common bile duct 6 mm stone was revealed. Your diagnosis and possible treatment options for this patient?

Task N 2

1. Bile formation, regulation of bile secretion.

2. Postcholecystectomy syndrome: definition of the concept, etiology, pathogenesis.

3. False recurrence of the stone formation of the common bile duct («retained» stones): clinical presentation, diagnosis, treatment.

4. Laboratory diagnostics of postcholecystectomy syndrome.

5. The patient was found to have jaundice, skin itchiness, acholic stool 6 months after cholecystectomy. Direct bilirubin is increased up to 86 $\mu\text{mol/l}$, as well as AST, ALT, alkaline phosphatase. Common bile duct in its terminal part is not revealed by ultrasound, in the zone of confluence diameter of the duct is up to 16 mm, the intrahepatic ducts are dilated to 6 mm. Pancreas without peculiarities. Markers of viral hepatitis are negative. Your presumable diagnosis, treatment?

Task N 3

1. Anatomy of the biliary tract. Triangle and quadrangle of Kalo.

2. Stenosing papillitis: causes, clinical presentation, diagnosis, management.

3. Methods for intraoperative examination of bile ducts.

4. Minimally invasive methods of treatment of postcholecystectomy syndrome.

5. 8 months after cholecystectomy, a pain has appeared in the right upper quadrant, jaundice. Skin itching is absent, the stool is of ordinary color. Indirect bilirubin has increased up to 54 $\mu\text{mol/l}$, as well as increased AST, ALT. Common bile duct in its terminal part is not found by ultrasound, intrahepatic ducts are not dilated. Pancreas has no signs of pathology. Markers of viral hepatitis are positive. Your diagnosis? Your management?

Task N 4

1. Anomalies of bile and pancreatic ducts.

2. Active adhesion process in the subhepatic space: causes, clinical presentation, diagnosis, principles of treatment.

3. Instrumental methods of examination of patients with obstruction of the distal portion of common bile duct.

4. Cholangitis: causes, clinical presentation, treatment.

5. Six months after cholecystectomy, the patient developed intense jaundice. What is surgical management?

Task N 5

1. Variability in cystic duct anatomy and arterial blood supply.
2. Biliary postcholecystectomy syndrome: etiology, characteristics.
3. X-ray signs of stenosis of the ampulla of Vater.
4. Selection of the operation for bile duct diseases.
5. Six months after the cholecystectomy, the patient experiences recurrent pain attacks, intermittent jaundice. What are your diagnosis and tactics?

Task N 6

1. Factors that promote the formation of stones in the bile ducts, their biochemical composition, size.
2. Special methods of examination of biliary tract.
3. Classification of strictures of bile ducts.
4. Indications for common bile duct drainage after cholecystectomy, types of drainage and drainage technique.
5. A patient of 75 years old with ischemic heart disease, developed jaundice. The stenosis of the ampulla of Vater is diagnosed. What is your management?

Task N 7

1. Structure and function of the major duodenal papilla (ampulla of Vater).
2. Functional disorders of biliary tract: options, clinical presentation, diagnosis, principles of treatment.
3. Clinical presentation of stricture of bile ducts.
4. Surgical interventions for cholangiolithiasis, their types.
5. A 56-year-old patient was operated on for destructive cholecystitis (with a rise in bilirubin in blood up to $63 \mu\text{mol/l}$) 2 years ago. He was admitted to hospital with complaints on pain in the right upper quadrant, and moderate jaundice. On examination: the skin and sclera are slightly yellowish. The abdomen is soft, painful in the right upper quadrant. According to the US examination: the gallbladder is removed, common bile duct is distended up to 1.3 cm, it is impossible to exclude the stone in its distal part. Your diagnosis, tactics, what was the mistake during the first operation?

Task N 8

1. Morphological and functional connection of the gallbladder, bile ducts with other organs of the abdominal cavity.
2. Diagnosis of trauma of the bile ducts.
3. Clinical presentation and peculiarities of surgical management in cholangitis.

4. Differential diagnostics of postcholecystectomy syndrome.

5. Patient M., 44 years old, was admitted to the surgical department with complaints of dull aching pain in the epigastric area, right upper quadrant. From past history: periodically was observing a darkening of urine and discoloration of a stool. One year ago she experienced a cholecystectomy. Your preliminary diagnosis and plan of examination?

Task N 9

1. The composition of bile, its function. Regulation of secretion and excretion.

2. Non-biliary postcholecystectomy syndrome: etiology, characteristics.

3. Prevention of bile duct trauma.

4. X-ray and special instrumental methods for diagnosing stenosis of the ampulla of Vater.

5. The patient, 30 years old, emotionally unstable, 2 years ago undergone a cholecystectomy. After the operation, 6 months later, pain has appeared in the right upper quadrant, heaviness in the epigastric area after food intake, periodic vomiting with an admixture of bile, especially after stress. In the X-ray study with barium of the stomach and duodenum, pendular movements of barium in the lower-horizontal branch of the duodenum were detected. What is the diagnosis and tactics of treatment of the patient?

Task N 10

1. Reasons for the development of postcholecystectomy syndrome.

2. Classification of bile duct trauma.

3. Syndrome of the long stump of the cystic duct: causes, clinical presentation, diagnosis, treatment.

4. Management of choledocholithiasis, strictures of bile ducts, stenosis of the major duodenal papilla.

5. A patient with postcholecystectomy syndrome, choledocholithiasis is suffering with obstructive jaundice. Conservative treatment, as well as endoscopic sphincterotomy, were not effective. Jaundice is increasing. What is the further treatment?

TOPIC «SURGICAL TREATMENT OF PARASITIC DISEASES. LIVER DISEASES»

Task N 1

1. Classification of surgical diseases of the liver.

2. Special methods of examination of the small and large intestine.

3. Echinococcosis of the liver: etiology, epidemiology, pathogenesis, morphology.

4. Clinical presentation, diagnosis, differential diagnosis of opisthorchosis.

5. Patient S., 52 years old, was admitted at the surgical department with complaints of general weakness, fever, malaise, frequent stool with mucus, blood, sometimes in the form of «crimson jelly». From the past history it was revealed that the patient has spent 2.5 months in the Middle East. He used poorly purified water. At present the general condition of the patient is severe. The abdomen is slightly tense, moderately painful on palpation in the right iliac area, where a painful tightly elastic, tumor-like formation is defined. Symptoms of irritation of the peritoneum are doubtful. At rectal examination — on a glove feces with blood streaks. With the survey radiography of the abdominal cavity, the accumulation of gas under the right dome of the diaphragm is determined. What kind of infectious disease is the patient ill with? What complication developed in the patient? What is your plan for screening and treatment?

Task N 2

1. Surgical anatomy of the liver.
2. Differential diagnosis of nonparasitic liver cysts.
3. Clinical presentation of liver hydatid disease, stages of disease, complications.
4. Treatment of opisthorchosis, indications for surgical treatment, types of operations.
5. Patient K., 42 years old, 2 weeks ago returned from Central Asia, presented with complains of pain in the right upper quadrant. During his trip he experienced amoebic dysentery. At present his condition is severe, the temperature is 39 °C, and the liver is enlarged, painful. At ultrasound a focal mass with diameter of up to 9 cm in the right lobe of the liver was determined. Diagnosis? Treatment plan?

Task N 3

1. Surgical anatomy of the lungs.
2. Non-parasitic liver cysts: etiology, pathogenesis, clinical presentation, diagnosis.
3. Diagnosis and differential diagnosis of liver hydatid disease, special examination methods.
4. Surgical treatment of cysticercosis: indications, types of operations, prognosis.
5. Patient G., 17 years old, was admitted to the surgical department with complaints of cramping abdominal pain without clear localization, bloating, vomiting with intestinal contents. In childhood, he was treated for helminthic invasion. From the anamnesis of the disease: his condition worsened rapidly, without any preliminary signs, there were cramping pains in the abdomen, constipation, bloating and the subsequent occurrence of vomiting. During

abdominal palpation, a painful tumor-like formation of a pasty consistency was determined, which, when palpated, can disappear and then reappear. At abdominal X-ray, fluid levels are seen in the distended bowel loops (Clauber's bowl). What is the possible cause? Who is the source of the infection? Which organs are affected most often with this parasite? What complication did this patient develop? What are the principles of treatment of this complication?

Task N 4

1. Details of blood supply of the liver.
2. Abscesses of the liver: etiology, pathogenesis, clinical presentation, diagnosis.
3. Indications for emergency surgery for liver hydatid disease.
4. Clinical presentation, diagnosis of cysticercosis.
5. The patient has P. 3 years old, pain in the right side of the abdomen, the liver is enlarged, contains a round-shape fluctuating tumor 14 cm in diameter. In the blood — hypereosinophilia. Preliminary diagnosis? Diagnosis and treatment plan?

Task N 5

1. Venous outflow from the liver. System of portal vein.
2. Treatment of nonparasitic liver cysts, indications for surgical treatment, types of surgical interventions.
3. Clinical presentation, diagnosis, differential diagnosis, complications of lung hydatid disease.
4. Amebiasis: etiology, pathogenesis, clinical presentation.
5. According to the chest X-ray study of organs, a multi-compartment cystic tumor of the lower lobe of the left lung with calcification sites was detected in the forestry worker. He doesn't smoke. Epidemiological and hereditary anamnesis does not contain anything suspicious. Socially adapted, has enough income. Patient has no complains. At physical examination no diseases was found. From further examination, the patient refuses because of the absence of complaints. Your preliminary diagnosis? What additional methods of examination will you offer to this patient?

Task N 6

1. Lymphatic outflow and innervation of the liver.
2. Differential diagnosis of liver abscesses.
3. Classification, etiology, pathogenesis and morphology of lung hydatid disease.
4. Diagnosis, differential diagnosis, indications for surgical treatment for amebiasis.
5. The patient 35 years ago had an appendectomy. After the operation, high temperature, leukocytosis, were maintained for a long time. Discharged on

day 20 in a satisfactory condition. After 5 days, the temperature was raised up to 39 °C. On admission, the condition is severe, the sclera and skin are icteric, the heart rate is 120 minutes per minute, the tongue is moist, the abdomen is soft, painful in the right upper quadrant, without signs of peritonitis, liver is enlarged + 5 cm, painful. Leukocytosis of the blood $20.2 \times 10^9/l$, blood sedimentation rate 50 mm/h. Your diagnosis? Tactics?

Task N 7

1. Blood supply of lungs.
2. Non-parasitic liver cysts: clinical presentation, diagnosis.
3. Alveococcosis: classification, etiology, epidemiology, pathogenesis.
4. Surgical treatment of echinococcosis of the lungs, indications, types of surgical interventions.
5. On the medical examination of a patient of 52 years, focal mass of the liver (cyst?) was revealed. The patient is examined by the surgeon. It was decided to conduct a diagnostic puncture of this focal mass under the ultrasound guidance. During manipulation, the patient develops severe anaphylactic shock. What can be the reason of this complication? How could this complication be prevented? What was the mistake? What is the correct management of patients with a newly diagnosed liver cyst?

Task N 8

1. Classification of surgical parasitic diseases.
2. Blood supply of the small intestine.
3. Clinical presentation, diagnosis, differential diagnosis of ascariidosis.
4. Opisthorchiasis: etiology, epidemiology, pathogenesis of the disease.
5. Patient of 39 years old 2 months before experienced a blunt abdominal trauma. After the trauma, during 1 week, pain in the right upper quadrant and right side of the chest were present, then subsided without treatment. At that time patient didn't seek for medical help. 2 days ago, without any apparent reason, pain appeared in the right upper quadrant, the body temperature increased to 39.5 °C. On examination, the condition is moderately severe; the skin is of ordinary color. The tongue is moist, abdomen is soft, painful in the right upper quadrant, and the liver is enlarged up to 6 cm, painful. What is your presumptive diagnosis? What methods of confirming the diagnosis can you use? What is further management?

Task N 9

1. Special methods of examination of patients with liver diseases.
2. Surgical treatment of liver abscesses: indications, types of surgical interventions.
3. Clinical presentation, diagnosis, treatment of liver alveococcosis.

4. Indications for surgical treatment, types of surgical interventions for ascaridosis.

5. A 43-year-old patient was admitted to the department of hepatic surgery with a diagnosed large (20×18 cm), smooth hydatid cyst of the right liver lobe. The diagnosis is clear, operation is scheduled. During the evening round, the patient noted that 15 minutes ago, when trying to get up, there was diffuse pain in the abdomen. On examination: cyst is almost not palpable. Tenderness and pain are observed in the whole abdominal cavity. What has happened? What is surgical management?

Task N 10

1. Abscesses of the liver: a clinical presentation, diagnostics, differential diagnosis.

2. Surgical treatment of liver hydatid disease, indications, types of surgical interventions.

3. Ascariidosis: etiology, epidemiology, pathogenesis of the disease.

4. Clinical presentation, diagnosis, differential diagnosis of opisthorchiasis.

5. A 56-year-old patient, a resident of Middle Asia, complains on pain in the right upper quadrant for several months; a month ago, for the first time the body temperature rose to subfebrile, then to febrile figures, the pain has increased. In the past, the patient had nettle-rash and itching of the skin. At admission, the patient's condition is relatively satisfactory. There is no jaundice. The appetite is not disturbed. The right costal arch is raised, the right upper quadrant bulges out. The enlarged liver is palpated, a dense, elastic, round, painful mass is defined along its lower edge, most of which is behind the costal arch. Leucocytosis of blood $13.6 \times 10^9/l$; blood sedimentation rate — 54 mm/h. What disease can be assumed in the patient? What diagnostic methods can you apply? Your tactics?

TOPIC «JAUNDICE»

Task N 1

1. Anatomy and topography of the liver and biliary tract.

2. Causes of mechanical jaundice.

3. The physiology of bilirubin metabolism.

4. Surgical tactics in obstructive jaundice.

5. Through the common bile duct drain after cholecystectomy up to 1.0 liter of bile is discharged per day. Stool is discolored. What is your surgical approach?

Task N 2

1. Jaundice. Definition of the concept. Classification of jaundice.
2. Clinical presentation, diagnosis of hemolytic jaundice.
3. Features of the anamnesis and clinical signs of mechanical jaundice due of malignant origin.
4. Indications for emergency surgery for mechanical jaundice, types of surgical interventions.
5. A 82-year-old patient, suffering from mechanical jaundice, by CT examination of the abdominal cavity organs was found to have a focal mass in the region of the liver hilum with compression of the right and left hepatic ducts. Diagnosis? Therapeutic tactics?

Task N 3

1. Differential diagnosis of jaundice.
2. Biochemical blood, urine and feces analysis for differential diagnosis of jaundice (dissociation syndrome).
3. Methods of intraoperative examination of bile ducts.
4. Indications for urgent surgery and types of surgical procedures for mechanical jaundice.
5. The anatomy of the Calot triangle.

Task N 4

1. Clinical presentation of hepato-cellular jaundice.
2. Plan of examination of jaundiced patients.
3. Instrumental methods of examination of patients with obstruction of the distal portion of common bile duct.
4. Mechanism of bile formation and biliary excretion.
5. Six months after cholecystectomy, the patient developed intense jaundice. What is the surgical approach?

Task N 5

1. Preoperative preparation of patient with obstructive jaundice.
2. Pathogenesis of obstructive jaundice.
3. Specific instrumental methods of examination in jaundice.
4. Selection of the type of surgical intervention in obstructive jaundice.
5. A patient with intermittent jaundice was diagnosed with a «valve» stone in common bile duct, the latter is dilated up to 2 cm. Cholecystectomy was performed 7 years ago. What is the optimal approach?

Task N 6

1. Clinical presentation of hepato-cellular jaundice.
2. Conservative treatment of obstructive jaundice.
3. Laboratory diagnosis of jaundice.

4. Indications for external drainage of bile ducts with obstructive jaundice, types of drainage and drainage technique.

5. A patient of 75 years old, suffering from ischemic heart disease, developed jaundice. The stenosis of the ampulla of Vater is diagnosed. What is your management?

Task N 7

1. Clinical presentation of cholestatic cholangitis.
2. Enzyme hepatogram in the diagnosis of diseases of the liver and biliary tract.
3. Operative interventions for obstructive jaundice, their types and timing.
4. The essence of two-stage surgical treatment for obstructive jaundice.
5. Six months after the cholecystectomy, the patient developed intense jaundice. What is the surgical approach?

Task N 8

1. The importance of minimally invasive methods of surgical treatment of obstructive jaundice.
2. Peculiarities of surgical approach in obstructive jaundice in senile patients.
3. Intraoperative diagnosis of stenosis of the ampulla of Vater and the degree of its severity.
4. Indications for cholecystostomy, its types and postoperative management.
5. Soon after the operation of cholecystectomy, blood is abundantly drained from the abdominal cavity. What should be done?

Task N 9

1. Physiology of the liver and biliary tract.
2. Criteria for choosing conservative or surgical treatment in obstructive jaundice.
3. Tumors of the hepatobiliary area as a cause of obstructive jaundice: genesis, localization, clinic, diagnosis and tactics.
4. Indications for surgery in the delayed period after resolution of obstructive jaundice.
5. During operation for obstructive jaundice of the patient 78 years of age an inoperable tumor of the head of the pancreas and liver metastases were found. Hemodynamics is unstable. What is the surgical approach?

Task N 10

1. The main mechanisms of the bile ducts permeability alteration.
2. Clinical presentation and features of surgical management in obstructive jaundice, complicated by cholangitis.

3. Peculiarities of postoperative period in patients with obstructive jaundice.

4. Variants of surgical interventions for stricture of bile ducts.

5. 8 months after cholecystectomy, the patient is experiencing bouts of abdominal pain, and intermittent jaundice. What are your diagnoses and management?

TOPIC «BLUNT ABDOMINAL TRAUMA»

Task N 1

1. Classification of abdominal injuries.

2. Clinical picture and diagnosis of isolated damage to the gallbladder and extrahepatic bile ducts.

3. Radiological diagnostics of the abdominal organs injuries.

4. The choice of surgery for a spleen injury.

5. During surgery for a blunt abdominal injury, a significant amount of light yellow liquid was found in the abdominal cavity. What is the diagnosis and tactics of the surgeon?

Task N 2

1. Damage to the anterior abdominal wall: clinical manifestations, diagnosis and treatment.

2. Classification of liver trauma.

3. Instrumental methods of diagnosis of abdominal injuries.

4. The extent of surgery for liver ruptures.

5. A patient with a blunt abdominal trauma on day 5 deteriorated rapidly; there appeared a sign of peritonitis, the red blood cells and hemoglobin levels decreased. What is the diagnosis and tactics of the surgeon?

Task N 3

1. Pathophysiological and clinical manifestations of damage to the hollow organs of the abdominal cavity.

2. Classification of pancreatic injuries.

3. Clinical symptoms of rupture of the anterior abdominal wall muscles.

4. Surgical tactics for intramesenteric hematomas.

5. In the patient 65 years old during a colonoscopy pain appeared in the left half of an abdomen, there were an easy muscles straining, tenderness, a positive Blumberg sign. What is your diagnosis and further tactics?

Task N 4

1. Pathophysiological and clinical manifestations of damage to the parenchymal organs of the abdominal cavity.
2. Classification of spleen injuries.
3. Clinical symptoms of kidney damage.
4. Methods for detecting free gas in the abdominal cavity.
5. Two weeks after the liver injury, the patient had pain in the right upper quadrant, weakness, hectic temperature, pale skin, marked inflammatory syndrome from the peripheral blood. What is your diagnosis and further tactics?

Task N 5

1. Clinical picture and diagnosis of liver damage with injuries of the liver capsule.
2. Clinical and laboratory diagnosis of pancreatic damage.
3. Methods for detecting free fluid in the abdominal cavity.
4. Surgical tactics for damage to the duodenum.
5. Three months after the pancreas injury, the patient developed a protrusion in the left epigastrium, an elastic consistency, painless. The temperature and the blood test are normal. What is the diagnosis and tactics of the surgeon?

Task N 6

1. Clinical picture and diagnosis of liver damage without damaging the integrity of the liver capsule.
2. Clinical features, diagnosis and surgical tactics in the combined trauma of the abdominal and thoracic cavities.
3. The technique of diagnostic laparoscopy.
4. Intraoperative diagnosis of duodenal lesions.
5. During surgery for abdominal trauma there was found that a bowel was detached from the mesentery for 40 cm. What is the tactic of the surgeon?

Task N 7

1. Gastric injuries: classification, clinical picture, diagnosis and treatment.
2. Damage to the omentum: clinical picture, diagnosis and treatment.
3. Posttraumatic pancreatic fistula, therapeutic tactics.
4. Diagnostic value and technique of diagnostic peritoneal lavage.
5. The patient after a blow to the stomach determines a dense, painful tumor located in the upper part of the right rectus abdominis muscle. What is the diagnosis and tactics of the surgeon?

Task N 8

1. Damage to the pancreas: clinical picture, diagnosis and treatment.
2. Isolated peritoneal lesions: clinical picture, diagnosis and treatment.
3. Surgical tactics with retroperitoneal hematomas.
4. Special methods of diagnostics for the abdominal injuries.
5. Therapeutic tactics for posttraumatic hematomas of the liver.

Task N 9

1. Damage to the small intestine: clinical picture, diagnosis and treatment.
2. Posttraumatic hemobilia: clinical picture, diagnosis and treatment.
3. Types of operations for traumatic cysts of the pancreas.
4. Diagnosis of retroperitoneal hematoma.
5. The patient was found to have a gallbladder detachment from the liver during the operation. What are the actions of the surgeon?

Task N 10

1. Damage to the large intestine: clinical picture, diagnosis and treatment.
2. Posttraumatic pancreatitis: features of the clinical course and treatment tactics.
3. Importance of radiological methods with using contrast media for injuries of abdominal organs.
4. Types of operations for pancreatic fistulae.
5. A patient 19 years old after an abdominal injury had a rupture of the sigmoid colon. He admitted to the clinic 3 days after the disease, there were signs of diffuse peritonitis. What is the tactic of the surgeon?

TOPIC «CHEST TRAUMA»

Task N 1

1. Classification of chest damages.
2. Diagnostics of penetrating chest wounds.
3. Causes, clinical picture and diagnosis of spontaneous pneumothorax.
4. Methods of treatment for hemothorax.
5. The patient of 29 years old admitted to the hospital after 30 minutes from the stab wound, which immediately caused a pulsing bleeding. Several times he lost consciousness for a short time. Skin was pale, blood pressure 95/40 mm Hg. The wound was at the level of the 4th intercostal space, 3 cm to the left of the parasternal line. Your diagnosis and treatment tactics?

Task N 2

1. Classification of the pericardium and heart injuries.
2. Clinical picture and diagnosis of blunt chest trauma.
3. Types of pneumothorax, clinical manifestations.
4. Therapeutic tactics for uncomplicated fractures of the ribs.
5. The patient of 35 years old entered the department 3 hours after a penetrating knife wound of the chest in the 6th intercostal space on the left. The complaints were of small pain in the left side of the chest with a deep breath. The patient's condition was satisfactory. In a day there was a sharp deterioration, suddenly there was severe pain in the chest and abdomen. What is your diagnosis and tactics?

Task N 3

1. Clinical manifestations and diagnosis of lung injuries.
2. Etiology and pathogenesis of pleuropulmonary shock.
3. Etiology and mechanism of development of closed pneumothorax.
4. Technique of the pleural cavity puncture.
5. Describe the X-Ray film of the patient with a penetrating heart wound.

Task N 4

1. Etiology, clinical picture, diagnosis and treatment of spontaneous pneumothorax.
2. Sources of bleeding into the pleural cavity with chest injuries.
3. Clinical picture of open pneumothorax, therapeutic tactics.
4. Prevention and treatment of postoperative respiratory failure.
5. Rules of blood reinfusion.

Task N 5

1. Clinical picture, diagnosis and treatment of the heart and pericardium injuries.
2. Clinical picture and diagnosis of clotted hemothorax.
3. Etiology and pathogenesis of posttraumatic pleural empyema.
4. Methods of thoracotomy and thoracocentesis.
5. Techniques of procaine (novocaine, Vishnevskiy's) block for fracture of ribs.

Task N 6

1. Reliable symptoms of lung injuries in penetrating chest wounds (four).
2. Clinical picture and causes of valvular (tense) pneumothorax.
3. Prevention of pleural empyema.
4. Diagnosis of infected hemothorax.
5. Methods of pericardium puncture by Marfan and Larrey.

Task N 7

1. Clinical picture, diagnosis and treatment of spontaneous pneumothorax.
2. Clinical manifestations of the mediastinal emphysema and principles of treatment.
3. Clinical and radiological signs of cardiac tamponade.
4. Clinical and radiological manifestations of pneumohemotorax.
5. Describe the technique of suturing the wounds of the heart.

Task N 8

1. Clinical picture and diagnosis of thoracoabdominal injuries.
2. Clinical manifestations of the sternum fracture.
3. First aid and treatment for the tense pneumothorax.
4. Prevention and treatment of clotted hemothorax.
5. A 37-year-old patient was stabbed in the left half of the thorax at the level of 4 ribs along the midclavicular line. He came to the hospital himself, complained of suffocation, pain in the left half of the chest. Condition was satisfactory, pulse 120. After 3 hours, there was a sharp deterioration. What is your diagnosis and tactics?

Task N 9

1. Clinical picture and diagnosis of injuries of the posterior mediastinum organs.
2. Clinical picture and diagnosis of double fractures of ribs (flail chest).
3. Clinical and special methods of examining the heart with blunt trauma.
4. Diagnosis and treatment of acute pleural empyema.
5. Describe the technique of closed heart massage.

Task N 10

1. Clinical picture, diagnosis and treatment of aortic injuries.
2. First aid for the increasing emphysema of the mediastinum.
3. Foreign bodies of the lungs and pleura: clinical picture, diagnosis and treatment.
4. Diagnosis of on-going bleeding into the pleural cavity.
5. Describe the technique of chest puncture.

TOPIC «SURGERY OF SPLEEN AND DIAPHRAGM»

Task N 1

1. Spleen torsion: clinical presentation, diagnosis, treatment.
2. Aplasia of the diaphragm: diagnosis, clinical presentation.
3. Spleen cyst: definition, classification, clinical presentation.
4. Classification of hiatal hernias.

5. The patient, 43 years old, complains of pain behind the breastbone and a burning feeling, which are worsening after food intake and lying down. In the standing position, pain and burning are decreasing. In blood tests — moderate hypochromic anemia. What disease can it be?

Task N 2

1. Abscess of the spleen: etiology, clinical presentation, diagnosis, treatment.
2. Diaphragmatitis: causes, clinical presentation, diagnosis, treatment.
3. Splenic cyst: complications, modern methods of surgical treatment.
4. Clinical presentation of diaphragmatic hernias.
5. During laparoscopic splenectomy for idiopathic thrombocytopenic purpura, the operator found an additional spleen 1 × 1 cm in the pancreatic tail region. What is the surgical approach?

Task N 3

1. Anatomy of spleen, its location in the abdominal cavity, the relationship with other organs, mechanisms of fixation, patterns of blood supply to the spleen.
2. Hernias of weak areas of the diaphragm: etiology, types, presentation, diagnosis, treatment.
3. Abscess of the spleen: definition, etiology, classification, clinical presentation, diagnosis, complications, treatment.
4. Surgical treatment of hiatal hernia.
5. Patient A., 62 years old, complained of pain behind the breastbone with irradiation in the left shoulder, acid eructation, nausea. She has never been examined before, although it lasts around 10 years. What is your preliminary diagnosis? What is further examination?

Task N 4

1. Splenic vein thrombosis: causes, clinical manifestations, diagnosis, treatment.
2. Relaxation of the diaphragm: etiology, classification, clinical presentation, treatment.
3. Spleen torsion: clinical presentation, diagnosis, surgical approach.
4. Diagnosis of a hiatal hernia.
5. The patient, 20 years old, during a preventive examination, was found to have an increase of spleen. In infancy, he suffered umbilical sepsis. With further examination of the patient, 2nd degree varicose veins of the esophagus and expansion of the hemorrhoidal veins were revealed. What is your preliminary diagnosis? What other studies should be performed to clarify the diagnosis?

Task N 5

1. The role of the spleen as an organ of the immune system.
2. Traumatic hernia of the diaphragm: causes, classification, clinical presentation.
3. Splenomegaly: definition, causes, clinical presentation, treatment.
4. X-ray signs of the hiatal hernia.
5. Patient T., 28 years old, was admitted with the signs of gastric bleeding: repeated vomiting containing unchanged blood. Twice he noted tarry [currant jelly] stool. It started 6 hours ago, there is no gastric ulcer in past history. Blood analysis: Hb 82 g/l; Er. 2.8. What is the diagnosis you are suggesting? Decide the management.

Task N 6

1. Classification of diseases of the spleen.
2. Diagnosis of diaphragm traumas.
3. Difference between splenomegaly and hypersplenism.
4. Phrenopericardial hernia: causes, diagnosis, clinical presentation, treatment.
5. When performing a laparotomy for a blunt abdominal trauma with spleen injury, the surgeon found a rupture in the area of the splenic hilum with continuing intra-abdominal bleeding. It was decided to perform a splenectomy. What actions can an operator take to prevent the development of post-splenectomy hyposplenism?

Task N 7

1. The anatomy of the diaphragm, the relative position of the natural openings of the diaphragm and its weak points.
2. Hypersplenism: definition, causes of development, classification, diagnosis, modern methods of surgical approach.
3. Clinical and radiological symptoms of diaphragmatic relaxation.
4. Surgical approach to the diseases of spleen in case of diseases of the blood system: anemia, hemoblastosis, thrombocytopenic purpura.
5. The patient was admitted to the surgical department with suspicion of a tumor-like mass of the spleen. With ultrasound and MRI, multiple liquid formations of the spleen with its increase to 16 × 8 cm were revealed. It was revealed from an anamnesis that the patient came from Middle Asia. What kind of disease should you suspect? What is the management and extent of the treatment?

Task N 8

1. Pathogenesis of pulmonary and cardiovascular disorders in diaphragmatic hernias.

2. Hyposplenism: definition, causes of development, classification, outcomes, modern methods of prevention.

3. Splenic artery aneurysm: definition, causes, clinical presentation, diagnosis, complications, surgical options.

4. Hernia of Bochdalek: etiology, clinical presentation, treatment.

5. Young man, aged 18, was revealed by the chest X-ray to have a high position of the left dome of the diaphragm, reaching the II–III ribs. The mobility of the diaphragm is severely limited. The left costodiaphragmatic recess is pointed. The vital capacity of the lungs is reduced by 10 %. Function of the gastrointestinal tract is not altered. The patient denies any injury in the past history. What is your preliminary diagnosis? What is further management?

Task N 9

1. Classification of diseases and traumas of the diaphragm.

2. Clinical and laboratory manifestations of hypersplenism.

3. Differential diagnosis of spleen cysts of parasitic and non-parasitic origin.

4. Parasternal hernia (hernia of Larrey–Morgagni): etiology, clinical presentation, treatment.

5. A patient, 60 years old, suffering from chronic leukemia during the last 5 years, after a sudden strike to abdominal stop, suddenly noted the appearance of weakness, malaise, which are gradually increasing. Objectively: the enlarged spleen, slightly painful, is palpable in the left hypochondrium. What kind of diagnosis can be assumed in a patient? What additional research methods need to be done? What is the further managing?

Task N 10

1. The main functions of the diaphragm, the causes of increased intra-abdominal pressure, the causes of the dysfunction of cardiac pulp.

2. Anomalies in the development of the spleen: clinical presentation, outcomes.

3. Spleen infarction: definition, causes of development, clinical presentation, diagnosis, complications, treatment.

4. Clinical presentation of hiatal hernia.

5. A 28 year old patient with a clinical presentation of an acute abdomen was admitted to the emergency hospital after an car accident. During an emergency laparotomy, the small intestine loop was incarcerated in the fissured defect in the area of the left lumbocostal part of the diaphragm. The same defect is present in the area of the right lumbocostal part of the diaphragm. Your diagnosis? What kind of surgery does the patient need?

TOPIC «PORTAL HYPERTENSION»

Task N 1

1. Classification of forms of portal hypertension depending on the level of the portal block.
2. Clinical manifestations of the prehepatic, role of collateral pathways in compensation of portal hypertension.
3. Differential diagnosis of diseases of the esophagus and portal hypertension.
4. Methods of conservative treatment of portal hypertension.
5. In a patient with a pancreatic cyst with celiacography, a significant dilation and break of the splenic vein, splenomegaly is observed. What is your diagnosis and management?

Task N 2

1. The posthepatic portal hypertension: causes, clinical presentation, diagnostics.
2. Anatomy of the portal system.
3. Differential diagnosis of diseases of the stomach and duodenum and portal hypertension.
4. Minimally invasive techniques in the treatment of portal hypertension (TIPS).
5. In a patient with gastric bleeding, the liver is enlarged, there is ascites, veins of the anterior abdominal wall are dilated. Propose a diagnosis and determine the management.

Task N 3

1. Intrahepatic block of portal blood circulation: causes, clinical presentation, diagnosis.
2. Portosystemic anastomoses, their clinical significance in liver diseases.
3. Budd–Chiari syndrome: pathophysiology, clinical manifestations.
4. Operations aimed at creating roundabout ways of outflow of venous blood from the portal system.
5. A patient with a prolonged hemorrhoidal bleeding is found to have an enlarged liver, ascites. What is your diagnosis and management?

Task N 4

1. Prehepatic block of portal blood circulation: causes, clinical presentation, diagnosis.
2. Pathogenesis of bleeding from varicose veins of the esophagus.
3. Chiari disease: causes, mechanism of development and clinical manifestation.

4. Operations aimed at reducing the flow of blood into the portal system.
5. In the early postoperative period, there is a recurrent esophageal bleeding. What is your diagnosis and management?

Task N 5

1. Clinical manifestations of portal hypertension.
2. Anatomy and pathophysiology of the prehepatic portal hypertension.
3. Pathogenesis of ascites in portal hypertension.
4. Types of surgical portosystemic shunts.
5. At esophagoscopy, bleeding from varicose veins of the esophagus was detected, which could not be stopped by conservative therapy and endoscopic hemostasis. Define the management.

Task N 6

1. Mixed form of portal hypertension: causes, clinical presentation, diagnosis.
2. Difference between splenomegaly and hypersplenism.
3. Anatomy and pathophysiology of the intrahepatic portal hypertension.
4. Application of Sengstaken–Blakemore tube for controlling acute variceal bleeding.
5. After 2 days of esophageal varices tamponade by Sengstaken–Blakemore tube, the bleeding has stopped. What is your further management?

Task N 7

1. Methods of roentgenological diagnostics of portal hypertension.
2. Anatomy and pathophysiology of the prehepatic portal hypertension.
3. The pathogenesis of splenomegaly in portal hypertension.
4. Operations aimed at disconnection of portosystemic anastomoses.
5. A patient with anemia, leukopenia, thrombocytopenia has an enlarged liver and spleen, ascites. What is your diagnosis and management?

Task N 8

1. Clinical manifestations of portal hypertension depending on the stage and level of block.
2. Clinical manifestations and diagnostics of bleeding from varicose veins of the esophagus and stomach.
3. Special methods of examination in portal hypertension.
4. Operations aimed at increasing the arterial inflow to the liver.
5. The patient has 42 years of age, the liver is enlarged, ascites is prominent. Ascites was removed by puncturing of the abdominal wall for more than 20 times. Propose your management.

Task N 9

1. Differential diagnosis of diseases of blood and portal hypertension.
2. Clinical and laboratory manifestations of hypersplenism.
3. Most common causes of intrahepatic portal hypertension.
4. The technique of TIPS.
5. After performing a direct portosystemic anastomosis, high-grade encephalopathy appeared, levels of transaminases, residual nitrogen have increased. What are the reasons of this?

Task N 10

1. Differential diagnosis of liver diseases (hepatitis, cancer, echinococcosis) and portal hypertension.
2. Main clinical manifestations of portal hypertension.
3. Pathogenesis and clinical presentation of portal hypertension in the case of cirrhosis due to heart failure.
4. Collateral portosystemic anastomoses.
5. The patient experiences recurrent bleeding from the varicose veins of the esophagus. What is your management?

TOPIC «TRANSPLANTATION OF ORGANS AND TISSUES»

Task N 1

1. Definition of the basic concepts: transplantation, recipient, donor.
2. Indications for kidney transplantation.
3. Complications of liver transplantation: types, clinical presentation, diagnosis, treatment.
4. Types of intestinal transplantation.
5. At the beginning of the 20th century, A. Carrel, engaged in organ transplantation in animals, noted that the organ taken from another animal is rejected, and the organ taken from the animal and re-implanted to it, is engrafted. What is the explanation of the phenomenon of rejection?

Task N 2

1. Classification of transplants (by type of transplant, by type of donor, by the site of implantation of the organ).
2. Types and techniques of kidney transplantation.
3. Indications for heart transplantation.
4. Complications after intestinal transplantation.
5. A young patient, who has an identical twin brother, needs a kidney transplant. The brother agrees to give one of his kidneys. What is the name of such transplantation?

Task N 3

1. Essential principles of organ transplantation.
2. Criteria for selection of the donor and recipient. Contraindications to kidney transplantation.
3. Technical features of heart transplantation.
4. Possibilities of cellular technologies in the treatment of diabetes mellitus.
5. A child, 14 years old, needs a liver transplant. Mother agrees to transplant her left lobe of the liver to her son. What is the name of such transplantation?

Task N 4

1. Data on the first transplants of the kidneys, liver, heart in the Republic of Belarus and in the world.
2. Complications after kidney transplantation: types, clinical presentation, diagnosis, treatment.
3. Criteria for selection of the donor and recipient. Contraindications to heart transplantation.
4. Types of lung transplantation.
5. Allogenic kidney transplantation was performed to 41 year old patient. After surgery, immunosuppressive therapy is prescribed. What does this therapy include and why is it necessary?

Task N 5

1. Essential principles of organ transplantation. Coordination of donation. Team of multi-organ withdrawal. The concept of the waiting list for transplantation.
2. Features of postoperative management of patients after kidney transplantation. Immunosuppressive therapy.
3. Autotransplantation, heterotopic and orthotopic heart transplantation, cardiopulmonary complex transplantation, transplantation of the second heart into the thorax.
4. Indications and contraindications for intestinal transplantation.
5. A middle-aged patient suffering from liver cirrhosis underwent liver transplantation from a deceased donor. The recipient's liver is removed. What is the name of such a transplantation?

Task N 6

1. Methods of organ preservation for transplantation.
2. Modern immunosuppressive therapy: the characteristics of immunosuppressive agents, the mechanism of their action, side effects and complications caused by immunosuppressive agents; their correction.

3. Prevention and treatment of infectious complications after cardiac transplantation.

4. Indications and contraindications for lung transplantation.

5. The patient, 44 years old, underwent allogenic liver transplantation. Four weeks after the operation, rejection of the transplanted organ was observed. Donor organ was compatible by ABO-groups of blood and PLA-antigens. What is the reason for rejection? What kind of rejection reaction did the patient experience?

Task N 7

1. Problems of organ donation. Categories of donors (living related donors, «brain death», «non heart beating donor» donors).

2. Types of liver transplantation. Transplantation from live and deceased donors.

3. Complications after heart transplantation: rejection. Classification. Immunosuppressive therapy.

4. Possibilities of cellular technologies in the regeneration of bone tissue.

5. The patient, 50 years old, suffers from severe combined heart disease, the estimated life expectancy is 6 months. Of the concomitant pathology, the patient has insulin dependent diabetes mellitus. Can this patient be a recipient?

Task N 8

1. Concepts of clinical, biological and brain death.

2. Indications for liver transplantation. Criteria for selection of donor and recipient. Contraindications to liver transplantation.

3. Technical features of pancreas transplantation.

4. Complications after lung transplantation: clinical presentation, diagnosis, treatment.

5. A 12-year-old boy, who received deep burns of his feet, undergoes a skin transplant, taken from his body. What is the name of this type of transplantation?

Task N 9

1. Clinical, electrophysiological, morphological signs of brain death.

2. Peculiarities of postoperative management of patients after liver transplantation. Immunosuppressive therapy.

3. Indications and contraindications for pancreas transplantation.

4. Features of preparing patients for organ transplantation.

5. A four-month-old boy was transplanted with a heart-lung complex, and his healthy heart was transplanted to a three-month-old girl. What is the name of this type of transplantation?

Task N 10

1. The concept of organ rejection. Mechanisms of transplantation immunity.
2. The main stages of liver transplantation.
3. Complications after pancreas transplantation: types, clinical presentation, diagnosis, treatment.
4. Stem cell transplantation.
5. The liver of the deceased donor was divided into two parts; bigger one was transplanted to an adult patient, and the smaller part to a child. What is the name of this type of transplantation?

TOPIC «DIABETES SURGERY»

Task N 1

1. Classification of diabetes mellitus.
2. What are the causes of «pseudoperiodic» in patients with diabetes.
3. What are the features of the treatment of gastroduodenal bleedings in patients with diabetes.
4. Surgical treatment of acute purulent-inflammatory diseases of the skin and subcutaneous tissue in patients with diabetes.
5. During examination of the patient with dry gangrene of I toe of the foot revealed no pulse in the arteries of the foot. What additional methods of examination can you propose? What could be tactics of the surgeon?

Task N 2

1. What are the clinical manifestations of anaerobic non-clostridial infection of soft tissues.
2. What are the causes of violations of regeneration of wounds in diabetes.
3. What are the features of arteries lesions in diabetes.
4. Principles of surgical treatment of purulent-necrotic complications of diabetic foot syndrome.
5. During examination of the patient with osteomyelitis of phalanx of I toe and cellulitis of the plantar surface of the foot revealed the presence of satisfactory pulsation of the arteries of the foot. What could be tactics of the surgeon?

Task N 3

1. Classification of diabetic foot syndrome.
2. What are the features of surgical operations in diabetes.
3. What are the types of foot lesion at the neuropathic form of diabetic foot syndrome.

4. What are the clinical manifestations of neuroischemic form of diabetic foot syndrome.

5. The patient in the presence of decompensated diabetes (blood glucose of 26.0 mmol/l, metabolic acidosis) appeared vomiting, abdominal pain, Kussmaul breathing. The body temperature is not elevated, on examination, the abdomen marked tenderness and muscle defense in all departments. Make a plan of further examination and treatment of the patient.

Task N 4

1. What is revascularization? What is its role in the treatment of patients with diabetic foot syndrome.

2. What are the features of surgical interventions in diabetes.

3. Clinical manifestations of ischemic forms of diabetic foot syndrome.

4. What are the causes of wound complications in patients with diabetes.

5. The patient with diabetes after injection in hip caused swelling, painful on the periphery, with the usual view of skin and crepitus defined on palpation. What is the possible diagnosis and treatment?

Task N 5

1. The conception of critical limb ischemia. Its connection with the classification of Fontaine–Pokrovsky.

2. What are the types of revascularization operations in patients with ischemic form of diabetic foot syndrome.

3. What are the clinical manifestations of neuropathic forms of diabetic foot syndrome.

4. What are the differences between neuropathic and ischemic forms of diabetic foot syndrome.

5. The patient has an extensive cellulitis and the skin gangrene of the plantar surface of his foot. The pulse on the popliteal artery is determined. What could be tactics of the surgeon?

Task N 6

1. What are the features of surgical interventions in patients with diabetes?

2. What is the treatment of ischemic forms of diabetic foot syndrome?

3. What are the Indications for surgical treatment ischemic diabetic foot syndrome?

4. What are the clinical features of anaerobic non-clostridial infection?

5. The patient with diabetes complains of constant pain in the foot, decreasing only when lowering the limbs from the bed. A pulse is on the femoral artery, the hair on the foot is missing. The sensitivity of the foot is dramatically reduced. What is your diagnosis? How can there be treatment?

Task N 7

1. The etiology and pathogenesis of diabetic foot syndrome.
2. What is the medication of neuropathic forms of diabetic foot syndrome?
3. What are the stages of surgical treatment of purulent-inflammatory diseases of soft tissues in diabetes?
4. What are the reasons for the development of complications in the postoperative wound in diabetes?
5. In a patient with diabetes mellitus has a chronic ulcer of the plantar surface of the foot. Pulse on the arteries of the foot is determined; the sensitivity of the foot is dramatically reduced. What is your diagnosis? What can be the treatment?

Task N 8

1. What are the types of surgery for purulent-necrotic process in the foot?
2. What is the pathogenesis of “pseudoperiodic” with decompensated diabetes?
3. What are the approaches to treatment of wound complications in diabetes mellitus?
4. The mechanism of action of insulin.
5. Patient with diabetes on the 3rd day after appendectomy discovered a persistent increase in the level of glucose. Hyperglycemia is poorly corrected additional introduction of insulin the skin in the region of the postoperative wound regular color, palpation slightly painful wounds. What are your further actions?

Task N 9

1. Complications of diabetes, experienced by the surgeon in his work.
2. Which includes examination of the patient with neuroischemic form of diabetic foot syndrome?
3. What are the causes of complications in the postoperative wounds in patients with diabetes and ways of prevention?
4. That includes a differential diagnosis of «peritonitis» and «pseudoperiodic» with decompensated diabetes.
5. The patient with decompensated diabetes marked gastroduodenal bleeding. Gastroscopy revealed diffuse mucosal bleeding of the stomach. How can there be further treatment?

Task N 10

1. What is the treatment of patients depending on the form of diabetic foot syndrome.
2. What are the clinical and laboratory data characteristic of patients with «pseudoperiodic» on the background of diabetes.

3. The concept of necrectomy. What are the signs of tissue viability?
4. What is the relevance of the diabetic foot for health care?
5. The patient 60 years old, suffering from diabetes, within 3 days he developed dry gangrene 1th toe of the foot. Pulse on the arteries of the foot is not defined, on the popliteal and femoral arteries is satisfactory. What is your diagnosis? What can be treatment?

TOPIC «DISEASES OF THYROID GLAND»

Task N 1

1. Anatomy of the thyroid gland.
2. Description of the severity of thyrotoxicosis.
3. Indications for surgical treatment in patients with euthyroid goiter.
4. Principles of surgical interventions on the thyroid gland.
5. A 63-year-old patient with moderate severity Graves' disease. The volume of the gland is 21 cm³, there are no nodules in the gland, concomitant chronic diseases in the stage of decompensation are also not revealed. What is the preferred treatment strategy?

Task N 2

1. Physiology of the thyroid gland.
2. Hypothyroidism. Classification, clinical manifestations.
3. Ridel's thyroiditis: clinical presentation, diagnosis and treatment.
4. Complications of thyroid surgery.
5. The patient has a retrosternal goiter with compression syndrome (compression of the trachea). What is your management?

Task N 3

1. Severity classification of thyrotoxicosis, characteristics of the grades.
2. Etiology of endemic and sporadic goiter.
3. Hashimoto thyroiditis: clinical presentation, diagnosis and treatment.
4. Indications for surgical treatment of nodular / multinodular goiter.
5. The patient has a cytologically verified colloid euthyroid goiter with a 5 cm nodule in the left lobe. What is the best treatment option?

Task N 4

1. Types of thyrotoxicosis syndrome depending on the origin. Clinical presentation of thyrotoxicosis.
2. Classification of diseases of the thyroid gland.
3. Diagnostics of the retrosternal goiter.
4. Preoperative preparation of patients with thyrotoxicosis.

5. The next day after thyroidectomy for Graves' disease, psychomotor agitation of the patient, tachycardia and hyperthermia were noted. What is your diagnosis and treatment?

Task N 5

1. Thyrotoxic crisis: pathogenesis, clinical presentation, diagnosis, treatment.
2. Methods of treatment of Graves disease, their advantages and disadvantages.
3. Endocrine (autoimmune) ophthalmopathy: etiology, classification, clinical manifestations.
4. Clinical manifestations of postoperative hypoparathyroidism.
5. A patient of 35 years of age was diagnosed to have a focal mass in the right lobe of the thyroid gland 2.0 cm in diameter. Nodule is invisible; thyroid hormones are within normal range, according to the puncture biopsy — a colloid goiter. What is your further management?

Task N 6

1. Endemic goiter: etiology, clinical manifestations, diagnosis, treatment.
2. De Querven thyroiditis: etiology, clinical manifestations, diagnosis, treatment.
3. Instrumental methods of examination of patients with thyroid disease.
4. Particular features of differential diagnosis of adenomas of the thyroid gland.
5. A few hours after the operation, the patient's neck rapidly has become enlarged and a heavy breathing appeared. What is the possible reason? What is your further management?

Task N 7

1. Acute thyroiditis: clinical manifestations, diagnosis, treatment.
2. Eye symptoms of thyrotoxicosis.
3. Indications for thyroid scintigraphy.
4. Syndromes of thyrotoxicosis.
5. Resection of the thyroid gland with the nodule was performed. A histological examination revealed a papillary cancer. What is your further management?

Task N 8

1. Thyrotoxic crisis: causes, pathogenesis, clinical manifestations, treatment, prevention.
2. Differential diagnosis of thyroid cancer and chronic thyroiditis.
3. Blood supply of the thyroid gland, peculiarities of venous and lymphatic outflow.

4. Particular features of surgery for Graves disease.

5. The patient, operated on for Graves' disease, the next day after the operation noted paresthesia in the area of the fingertips, a formication. Later there were painful cramps, a symptom of the «obstetrician hand», pain in the muscles of the forearms. What is the nature of complication?

Task N 9

1. Hypothyroidism (myxedema): causes, clinical manifestations, treatment.

2. Thyroid cancer: clinical manifestations, diagnosis and treatment.

3. Classification of the extent of thyroid enlargement by WHO (2001).

4. Recurrence of goiter: causes, clinical manifestations, treatment.

5. A patient of 65 years old complains of shortness of temper, intolerance to heat, excessive sweating. Arrhythmias are noted. There are no symptoms of ophthalmopathy. Palpation of a thyroid gland revealed a focal mass, with precise borders, displaced at swallowing. Laboratory: TSH is low, FT4 — increased. During FNA, a colloid was obtained; scintigraphy — nodule has an increased uptake of radioactive iodine. What is your diagnosis?

Task N 10

1. Malignant and benign thyroid tumors: classification.

2. Primary hyperparathyroidism: clinical manifestations, diagnosis and treatment.

3. Clinical and laboratory examination of patients with thyroid diseases.

4. Aberrant localization of thyroid: classification and clinical significance.

5. The patient 31 years old after the acute respiratory viral infection and follicular tonsillitis appeared to have short temper, fatigue, she began to progressively lose weight. When examined, a diffuse increase in both thyroid glands was found, positive eye symptoms of Kocher and Moebius, instability in the Romberg position. The pulse is 110 beats per minute, arrhythmic. What is your diagnosis?

TOPIC «BREAST DISEASES»

Task N 1

1. Anatomy of the breast.

2. What is the «self-examination» of the breast: purpose, methods, deadlines.

3. What is a nonspecific inflammatory disease of the breast(mastitis): clinical features, diagnostics, treatment.

4. What is gynecomastia: classification, etiology, pathogenesis, clinical features, diagnostics, treatment.

5. Prophylactic medical examination of young healthy nulliparous women discovered in the right breast tumor formation rounded shape, elastic consistency, 3 cm in diameter, painless to palpation. Your preliminary diagnosis? Make a plan examination of the patient.

Task N 2

1. Embryology of the breast.
2. General clinical methods of examination of mammary gland.
3. Specific inflammatory disease of the mammary gland: etiology, clinical features, diagnostics, treatment.
4. Cracked nipples breast cancer: etiology, clinical features, complications, treatment.
5. A 58-year-old women in menopause, there was serous, yellowish discharge from the nipple of the left breast. Assign the necessary examination.

Task N 3

1. Physiology of the breast.
2. What are instrumental methods of examination of the breast.
3. What is mastitis: definition, etiology, classification.
4. What are the indications for surgical treatment of gynecomastia
5. Female patient, 26 years of age, has stopped breastfeeding the child about 3 months ago. In her right breast revealed a liquid formulation with a diameter of about 3 cm. What is your preliminary diagnosis? Assign the necessary examination and treatment.

Task N 4

1. The blood supply of the breast.
2. Mammography: indications, methods of implementation, evaluation of results.
3. Mastitis: clinic, diagnostics, treatment, indications for surgery.
4. Retromammary mastitis: features of clinic, diagnostics, treatment.
5. The patient 25 years old, a week ago gave birth to a premature baby. She complains to pains in the left breast, low-grade fever, induration and tenderness in upper-right quadrant of the breast. What additional examination do you need to perform? What could be the treatment?

Task N 5

1. Topographic anatomy of the breast.
2. Inspection and palpation of the breast: purpose, method of execution.
3. Breast fibroadenoma: etiology, clinical features, diagnostics, treatment.
4. What is the prevention of the occurrence of lactational mastitis.
5. Patient 29 years of age, breast-feeding newborn child within 4 days notes pain in the right breast and a hectic temperature. The right breast is

enlarged in size, in the upper outer quadrant of the right breast is determined by redness of the skin. What is your diagnosis? What could be the treatment?

Task N 6

1. Innervation of the breast.
2. Risk factors for development of breast cancer.
3. Mastodynia (Cooper disease): etiology, clinic, diagnostics, treatment.
4. What are the indications for surgical treatment in mastitis. What are the types of operations.
5. Unmarried women 35 years of age in the last two years periodically began to appear painful swelling of the breast, worse in the premenstrual period. A few days ago, the patient in the left breast detected lesion. The mammary glands are not visually changed. In the upper outer quadrant of the left breast is palpated dense, rounded, without distinct outlines education with a size of 3×2 cm, slightly painful on palpation, not welded to the skin and surrounding tissues. Regional lymph nodes were not palpable. What is your presumptive diagnosis? Make a plan of examination and treatment.

Task N 7

1. Lymph flow from the breast.
2. Classification of congenital and acquired anomalies of the breast.
3. Chronic infiltrative mastitis: clinic, diagnostics, differential diagnostics, treatment.
4. Prevention of diseases of the breast.
5. The 28-year-old patient diagnosed with acute retromammary mastitis. What access should be used for treatment the abscess? What should be the treatment in the postoperative period?

Task N 8

1. Classification of breast diseases.
2. Methods of radial (X-ray) diagnostics of the breast diseases.
3. Nonspecific inflammatory diseases of the breast (mastitis): classification, etiology, pathogenesis, complications.
4. Intraductal papilloma of the breast: clinic, diagnostics, differential diagnostics, treatment.
5. Patient 38 years old complains of swelling in the right nipple. In the right breast gland is palpated tumor formation with a diameter of 3 cm, thick consistency that is not associated with the skin. What is your presumptive diagnosis? Make a plan of examination and treatment.

Task N 9

1. What are the features of the morphology and physiology of the mammary gland during pregnancy and lactation?

2. Classification of inflammatory diseases of the breast.
3. Galactocele: etiology, pathogenesis, clinic, diagnostics, treatment.
4. Risk factors for development of breast cancer.
5. The patient 28 years complains of pain in the left breast that appears before menstruation and disappearing with the onset of menstruation. She has history of 5 pregnancies and 5 abortions. In the left breast palpable different in size and length painful compaction with a granular surface can be found. Propose a plan of investigation, diagnosis and treatment of the patient.

Task N 10

1. Topography and structure of the breast.
2. Acute mastitis: etiology, classification, clinic, diagnostics, treatment.
3. Nodal (focal) mastopathy: clinic, diagnostics, differential diagnosis, complications, treatment.
4. What is the prevention of diseases of the breast.
5. Patient 23 years old one week after cesarean section concerned expressed pain in the nipple, preventing the normal feeding of the milk gland. What has caused this condition? What treatment will you prescribe?

TOPIC «DISEASES OF MEDIASTINUM»

Task N 1

1. Surgical anatomy of the mediastinum.
2. Neurinoma of the posterior mediastinum: etiology, pathological anatomy, diagnosis, treatment.
3. Methods of research in diseases of the mediastinum.
4. Mediastinal syndrome.
5. A patient with a mediastinum cyst appeared with a strong cough, hemoptysis, in large quantities, pulpy masses and hair appear in the bronchi. Make a diagnosis.

Task N 2

1. Classification of syndromes in diseases of the mediastinum.
2. Vascular tumors of the posterior mediastinum: etiology, pathological anatomy, diagnosis, treatment.
3. Access to mediastinum during surgery.
4. Classification, etiology, clinical picture of mediastinitis.
5. The patient suffers from occasional suffocation and dysphagia. She has swelling of the face and neck, swelling of the veins of the neck and chest. Make a diagnosis.

Task N 3

1. Surgical anatomy of the mediastinum.
2. Bronchogenic cysts: etiology, pathological anatomy, diagnosis, treatment.
3. Diagnosis, differential diagnosis of mediastinitis.
4. Methods of diagnosis of tumors and cysts of the mediastinum.
5. In a 26-year-old patient, a prophylactic examination on the radiograph on the right above the dome of the diaphragm revealed an intense darkening of 9×10 cm, merging with the shadow of the diaphragm. What kind of research does the patient need to do?

Task N 4

1. Methods of mediastinum examination.
2. Pericardial cysts: etiology, pathological anatomy, diagnosis, treatment.
3. Complex detoxication with mediastinitis.
4. Classification of mediastinal tumors.
5. Puncture thin-walled cyst mediastinum obtained pus. What should be your tactic?

Task N 5

1. Microbiological aspects of mediastinitis.
2. Dermoid cysts of anterior mediastinum: etiology, pathological anatomy, diagnostics, surgical treatment.
3. Rules and methods of drainage of the mediastinum with mediastinitis.
4. Surgical anatomy of the mediastinum.
5. A 47-year-old patient complains of shortness of breath, chills, fever up to 38 degrees. The pains that arise when the head is bent backward and the neck is unbent. 3 days ago he was beaten by unknown persons, primary surgical treatment of a wound of a forward surface of a thorax in an out-patient department was made. What additional studies are needed to establish a diagnosis and treatment tactics?

Task N 6

1. Diagnostic program with mediastinitis.
2. Thymoma: etiology, pathological anatomy, diagnosis, surgical treatment.
3. Surgical anatomy of the mediastinum.
4. Classification of syndromes in diseases of the mediastinum.
5. A 53-year-old patient undergoing X-ray examination of the chest revealed a tumor-like formation in the anterior mediastinum. Your plan for further examination and treatment.

Task N 7

1. Classification of syndromes in diseases of the mediastinum.
2. Connective tissue tumors of the anterior mediastinum: etiology, pathological anatomy, diagnostics, surgical treatment.
3. Methods of mediastinum examination.
4. Surgical treatment of mediastinitis.
5. Radiologic examination in the posterior mediastinum revealed a globular tumor closely adhering to the posterior ribs. Make a diagnosis.

Task N 8

1. Additional methods of investigation in diseases of the mediastinum.
2. Classification, etiology, clinical picture, diagnosis, differential diagnosis of mediastinitis.
3. Surgical access to the mediastinum.
4. Pericardial cysts: localization, clinic, diagnosis, treatment.
5. The patient 44 years old entered the clinic with a diagnosis of the cyst of the pericardium, which was detected during the passage of a medical examination in a polyclinic. Radiologic examination determines a rounded shadow with clear contours in the right cardio diaphragmatic corner. What is your treatment?

Task N 9

1. Classification of mediastinal tumors.
2. Rules and methods of drainage of the mediastinum.
3. Methods of mediastinum examination.
4. Localization and clinical manifestations of coelomic cysts.
5. A 43-year-old patient complains of periodic paroxysmal pains in the region of the heart, a feeling of heaviness behind the sternum, dyspnoea with physical exertion. Sick for two years. At inspection of this patient the myocardial infarction is excluded. On the roentgenogram of the chest in the right anterior cardio-diaphragmatic angle, a semi-oval shadow is defined that adjoins the mediastinum, the dome of the diaphragm. What is the preliminary diagnosis? What diagnostic measures need to be performed?

Task N 10

1. Diagnostic program for tumors of the mediastinum.
2. Principles of treatment of mediastinitis of different etiology.
3. Pericardial cysts: etiology, pathological anatomy, diagnosis, treatment.
4. Clinical picture of thymoma and myasthenia gravis.
5. The patient 42 years complains of pain behind the breastbone, in the interscapular space, numbness of the hands, a decrease in sensitivity in the hands. The radiograph of the lungs determines the rounded shadow in

the upper-posterior mediastinum and the symptom of the «hourglass». What is your preliminary diagnosis? What is the treatment tactic?

TOPIC «DISEASES AND TRAUMAS OF ESOPHAGUS»

Task N 1

1. Surgical anatomy of the esophagus.
2. Classification of diseases of the esophagus.
3. Causes of burns of the esophagus.
4. Traumatic injuries of the esophagus: causes, clinical presentation, diagnosis.
5. 37 y.o. patient complaints of weakness, dysphagia, which are progressing during last two years. Propose your survey plan.

Task N 2

1. Blood supply and innervation of the esophagus.
2. Spontaneous rupture of the esophagus.
3. Foreign bodies of the esophagus: causes, clinical presentation, diagnosis and treatment.
4. Treatment of caustic injury of esophagus.
5. In a patient with esophageal achalasia dysphagia has acquired a persistency character, weakness is increasing, and weight loss is observed. What additional examination is necessary?

Task N 3

1. Methods of examination of the esophagus.
2. Esophagitis: etiology, clinical presentation, diagnosis, treatment.
3. First aid for caustic injury of the esophagus.
4. Esophageal diverticula: indications for surgical treatment, options for surgery.
5. Tactics of the surgeon in Boerhaave's Syndrome.

Task N 4

1. Spontaneous rupture of the esophagus.
2. The pathogenesis of the caustic injury of the esophagus.
3. Esophageal diverticula: mechanism of formation, localization.
4. Cardiospasm (esophageal achalasia): classification, etiology, pathogenesis, clinical presentation.
5. The patient has a significant salivation, not associated with food intake. What examination should be done?

Task N 5

1. Methods of examination of the esophagus.
2. Reflux-esophagitis: etiology, clinical presentation, morphology, diagnosis, treatment.
3. Spontaneous rupture of the esophagus: etiology, pathogenesis, clinical presentation.
4. Diverticulum of the esophagus: classification, clinical presentation, diagnosis.
5. What are the particular features of gastric and esophageal flushing in a patient with a caustic injury?

Task N 6

1. Esophageal achalasia: etiology, pathogenesis, clinical presentation, diagnostics.
2. Clinical manifestations of esophageal caustic injury, depending on the severity.
3. Esophageal diverticula: diagnosis, clinical presentation, complications, treatment.
4. General symptoms of esophageal diseases.
5. A patient 40 years old came to hospital with complaints of pain and difficulty in the passage of food for 3 months. From past history: 2 years ago accidentally took a sip of acetic acid. What can the reason of such clinical presentation?

Task N 7

1. Particular features of morphological alterations in esophagus depending on the type of caustic agent.
2. Esophageal achalasia: stages, complications, methods of treatment.
3. Foreign bodies of the esophagus as the cause of iatrogenic complications.
4. Complications of caustic injury (early and late): clinical presentation, diagnosis, treatment.
5. The patient of 27 years has arrived with complaints of chest pain, dysphagia, regurgitation of undigested food. From the past history: after a stressful situation above listed complaints have appeared. What methods of research should be recommended to a patient?

Task N 8

1. Anatomy and physiology of esophagus.
2. Chalkasia (cardioesophageal relaxation): classification, etiology, pathogenesis, clinical presentation, diagnosis.
3. Spontaneous rupture of the esophagus: etiology, localization, clinical manifestations, treatment.

4. Foreign bodies of the esophagus: clinical manifestations, diagnosis, treatment.

5. In a patient with persistent dysphagia, an x-ray examination did not reveal anything. What additional examination is necessary?

Task N 9

1. Early complications of caustic injury: clinical presentation, diagnosis, treatment.

2. Differential diagnosis of esophageal achalasia, esophageal cancer, and gastric cancer.

3. Colliquative necrosis of esophagus: etiology, pathogenesis and treatment.

4. Benign tumors of the esophagus: clinical presentation, diagnosis, indications for surgical treatment.

5. List the indications and technique of retrograde bougienage of the esophagus.

Task N 10

1. Late complications of caustic injury: pathogenesis, clinical presentation, diagnostics, therapeutic tactics.

2. Zenker's diverticulum: localization, clinical presentation, diagnostics, treatment.

3. Coagulation necrosis of the esophagus: etiology, pathogenesis, clinical signs and morphology.

4. Chalasias (cardioesophageal relaxation): indications for surgical treatment, types of surgery.

5. The patient after endoscopic examination revealed emphysema on the neck. Make a plan for examination and treatment.

TOPIC «VEIN THROMBOSIS, POST-THROMBOTIC DISEASE, PULMONARY THROMBOEMBOLISM»

Task N 1

1. Clinical anatomy and physiology of leg veins.

2. Deep veins thrombosis: classification.

3. Examination of patient with deep vein thrombosis.

4. Treatment of thrombosis of the main veins.

5. A large subcutaneous vein is thrombosed. Determine the tactics of treatment.

Task N 2

1. Perforating veins and their localization.
2. Deep veins thrombosis: etiopathogenesis, clinical picture.
3. Clinical picture of thrombosis of the subclavian vein.
4. Variants of surgical interventions in post-thrombotic disease.
5. The patient has ileofemoral thrombosis. What is your treatment strategy?

Task N 3

1. Post-thrombotic disease: classification, etiopathogenesis.
2. Indications for surgical treatment, types of operations for deep vein thrombosis.
3. Clinical appearance of ileofemoral thrombosis.
4. Deep vein thrombosis of the lower leg: clinical picture, diagnosis.
5. After childbirth, the women had leg pain, swelling, cyanosis. What kind of examination should be done? What should be the treatment?

Task N 4

1. Valvular venous structure and its role in the pathogenesis of post-thrombotic disease.
2. Clinical appearance of thrombosis of the inferior vena cava.
3. Diagnosis of postthrombotic disease, its risk factors.
4. Complications of deep veins of thrombosis.
5. A patient has a trophic ulcer on the inner ankle of the shin. Varicose is secondary, developed as a result of post-thrombotic disease. What should be the examination and treatment?

Task N 5

1. Complications of deep vein thrombosis.
2. Clinical forms of post-thrombotic disease.
3. Medication of deep vein thrombosis.
4. What is endovascular approach for deep-vein surgery.
5. The patient has thrombosis of the common iliac vein with episodes of pulmonary thromboembolism (PTE). The patient had allergic reaction to anticoagulant drugs. What should be the treatment?

Task N 6

1. Deep veins thrombosis: medication and compression treatment.
2. Clinical manifestations of deep veins thrombosis
3. Treatment of thrombosis of the subcutaneous veins.
4. Diagnosis of post-thrombotic disease.
5. The patient 2 years ago suffered an acute thrombosis of the deep veins of the right lower limb. He complains of varicose veins, small swelling of the lower leg. What is the diagnosis? What can be a medical tactic?

Task N 7

1. Clinical manifestations, the causes of the onset, diagnosis of the Pégette–Shreter syndrome.
2. Anatomical and topographic features of the location of the upper and lower cava veins, visceral veins and veins of the lower limbs.
3. Compression therapy of post-thrombotic disease
4. Surgical and interventional treatment of deep vein thrombosis.
5. In a pregnant patient, iliofemoral phlebothrombosis detected. What should be the treatment?

Task N 8

1. Physiology of venous outflow.
2. Prevention of pulmonary thromboembolism (PTE).
3. Information obtained by duplex examination of veins.
4. Surgical treatment of post-thrombotic disease.
5. A patient with ileofemoral thrombosis developed a clinic of embolism of cerebral arteries. How can this embolism be explained?

Task N 9

1. Pathomorphological features of veins and valves in postthrombotic disease.
2. Factors predisposing to thrombosis.
3. Blue phlegmasia. Causes, clinical picture, tactics of treatment.
4. Drug treatment of post-thrombotic disease.
5. The patient has recanalized a thrombus in the femoral vein. What is the tactic of treatment?

Task N 10

1. White phlegmasia (pain, pseudoembolic): definition, clinical picture, treatment.
2. Clinical manifestations, diagnosis and treatment of upper vena cava thrombosis.
3. Describe the methods for determining the patency of deep veins of the lower extremities.
4. Prophylaxis of deep veins thrombosis.
5. A patient with ileofemoral thrombosis had difficulty breathing, cyanosis, hemoptysis. What caused this complication? What treatment is needed?

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ПО ХИРУРГИЧЕСКИМ БОЛЕЗНЯМ**

**EXAMINATIONAL QUESTIONS
ON SURGICAL DISEASES**

Методические рекомендации

На английском языке

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