

Application to the work program

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS

HOSPITAL SURGERY

Speciality: **31.05.01 GENERAL MEDICINE**

Department: **FACULTY OF SURGERY AND TRANSPLANTOLOGY**

Form of study: **FULL-TIME**

Nizhny Novgorod
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1. Fund of assessment tools for current monitoring of progress, intermediate certification of students in the discipline

This Fund of Evaluation Funds (FOS) for the discipline "Hospital surgery" is an integral part of the work program of the discipline "Hospital surgery". This FOS is subject to all the details of the approval presented in the RPD for this discipline.

2. List of evaluation tools

To determine the quality of mastering the educational material by students in the discipline "Hospital surgery", the following assessment tools are used:

№	Estimator	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
1	Test	A system of standardized tasks that allows you to automate the procedure measuring the level of knowledge and skills of the student	Test fund assignments
2	Essay	The product of the student's independent work, which is a summary in writing of the results of the theoretical analysis of a certain scientific (educational and research) topic, where the author reveals the essence of the problem under study, gives different points of view, as well as his own views on it.	List of essay topics
3	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of assimilation of the material, the ability to apply theoretical knowledge in practice.	Task List
4	Case report	Clinical examination of a surgical patient and registration of the results of the examination in the form of a medical educational history of the disease	List of the main surgical nosologies for writing a medical history
5	Interview	A means of control, organized as a special conversation between a teacher and a student on topics related to the discipline being studied, and designed to clarify the amount of knowledge of the student in a particular section, topic, problem, etc.	Questions on topics / sections of the discipline

3. List of competencies indicating the stages of their formation in the process of mastering the educational program and types of assessment tools

Code and wording of competence	Stage formation of competence	Controlled sections of the discipline	Evaluation tools
UC-1,3,4,5 GPC-1,4,5,6,7,8,11 PC-	Current	Section 1. Surgical diseases of the digestive system	Case report Essay Test Situational tasks

1,2,4,5,6,7, 8,9,10,11, 17,22			
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22		Section 2. Surgical diseases of the bronchopulmonary system	Case report Essay Test Situational tasks
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22		Section 3. Surgical diseases of the cardiovascular system	Case report Essay Test Situational tasks
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22		Section 4. Surgical diseases of the endocrine organs	Test Situational tasks
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22		Section 5. Purulent diseases of soft tissues. Osteomyelitis.	Test Situational tasks
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22		Section 6. Injuries of the chest and abdominal cavities. Bleeding. Complications.	Test Situational tasks
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11		Section 7. Final lesson. Exam.	Interview

PC- 1,2,4,5,6,7, 8,9,10,11, 17,22			
UC- 1,3,4,5 GPC- 1,4,5,6,7, 8,11 PC- 1,2,4,5,6,7, 8,9,10,11, 17,22	Intermediate	Section 1. Surgical diseases of the digestive system Section 2. Surgical diseases of the bronchopulmonary system Section 3. Surgical diseases of the cardiovascular system Section 4. Surgical diseases of the endocrine organs Section 5. Purulent diseases of soft tissues. Osteomyelitis. Section 6. Injuries of the chest and abdominal cavities. Bleeding. Complications. Section 7. Final lesson. Exam.	Test

4. The content of the evaluation means of current control

Current control is carried out by the teacher of the discipline when conducting classes in the form of: test, essay, situational tasks, case report, interview.

4.1. Test questions for assessing competencies: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

1. After which operation on the stomach can develop "diseases of the operated stomach":

1. stomach resection
2. gastrotomy
3. suturing of a perforated ulcer
4. gastrostomy

2. Radical treatment of pulmonary echinococcosis:

1. surgical
2. conservative
3. chemotherapeutic
4. radiological
5. physiotherapy

3. Continue the sentence: choledocholithiasis is ...:

1. stone in the common bile duct
2. gallstone
3. stone in the gallbladder duct
4. bladder stone
5. kidney stone

4. Specify the most informative method for the diagnosis of choledocholithiasis:

1. laparoscopy
2. ERCP
3. plain radiography of the abdominal cavity
4. duodenoscopy

5. Specify the causes of obstructive jaundice:

1. choledocholithiasis, stenosis of the papilla of Vater, tumor of the head of the pancreas
2. choledocholithiasis, stomach tumor
3. OBD stenosis, duodenal ulcer.

4. small bowel obstruction
 5. carcinomatosis of the abdominal cavity.
6. What do you understand by the term portal hypertension:
1. high pressure in the inferior vena cava.
 2. high pressure in the portal vein system
 3. high pressure in the superior vena cava.
 4. high pressure in the splenic artery
 5. high blood pressure
7. Specify the radical operation for portal hypertension:
1. sclerotherapy
 2. Abdominal drainage
 3. splenectomy
 4. portosystemic shunting
 5. embolization of the splenic vein.
8. The main method of conservative control of bleeding from the veins of the esophagus:
1. use of the Blackmore probe
 2. hemostatic therapy
 3. only operational
 4. blood transfusion
 5. infusion therapy
9. How many periods are distinguished during an acute lung abscess:
1. 2- before and after opening in the bronchus
 2. 2- after opening in the bronchus and recovery
 3. 2- before opening in the bronchus and recovery
 4. 3- before and after opening in the bronchus, recovery
 5. 2- clinical manifestations and recovery
10. In what part of the lung is bronchiectasis more common:
1. in the upper lobe of the right lung
 2. in the lower lobes of the lungs
 3. in the upper lobe of the left lung
 4. in the upper lobes of both lungs
11. When can there be "pleural friction noise" in acute abscess:
1. peripheral abscess with pleural reaction
 2. Peripheral acute abscess without pleural reaction
 3. chronic lung abscess
 4. acute abscess after a breakthrough in the bronchus
 5. central acute lung abscess
12. The decisive diagnostic method for pleural empyema is:
1. chest x-ray
 2. percussion
 3. puncture of the pleural cavity
 4. auscultation
 5. chest x-ray
13. Bulau method is:

1. passive drainage of the pleural cavity
 2. active drainage of the pleural cavity with a Janet syringe
 3. active drainage with electric suction
 4. puncture method of evacuation of pus
 5. surgical treatment
14. Thymoma develops from elements of the thymus and is located in:
1. anterior mediastinum
 2. posterior mediastinum
 3. middle mediastinum
 4. behind the esophagus
 5. behind the trachea
15. The most characteristic complaints of patients with Leriche's syndrome:
1. swelling on the lower extremities
 2. pain in the calf muscles, impotence
 3. pain in the heart
 4. shortness of breath on exertion
 5. loss of hair on the legs
16. The most common causes of occlusive diseases of the abdominal aorta are:
1. past aortic injury
 2. atherosclerosis
 3. dysplasia of the aortic walls
 4. bacterial endocarditis
 5. thromboembolism
17. In case of coarctation of the aorta, the narrowing is usually located:
1. at the junction of the aortic arch to the descending aorta
 2. in the region of the ascending aorta
 3. between the left carotid and left subclavian arteries
 4. at the bifurcation of the aorta
 5. in the abdominal aorta
18. Which of the following vices belong to the "blue" group:
1. Fallot's tetrad
 2. atrial septal defect (ASD)
 3. ventricular septal defect (VSD)
 4. pulmonary artery stenosis
 5. open ductus arteriosus
19. What complication of the course of the disease is a contraindication to surgery for mitral stenosis:
1. valve calcification
 2. bacterial endocarditis
 3. heart failure IV FC
 4. heart failure stage I
 5. heart failure stage II
20. Specify the main complaints of patients with paraesophageal hernias:
1. retrosternal pain after eating, dysphagia
 2. nausea, vomiting, heartburn

3. regurgitation
 4. poor appetite, weight loss
21. Early bougienage of the esophagus begins:
1. for 2-3 days
 2. for 4-6 days
 3. for 8-10 days
 4. for 9-12 days
 5. on the 13th-16th day
22. Acute lung abscess is understood as:
1. purulent-putrefactive necrosis of a significant area or the entire lung, without signs of demarcation
 2. purulent-putrefactive decay of a lung tissue area, limited by a pyogenic capsule
 3. purulent-putrefactive necrosis of a lung tissue area with a tendency to sequestration and limitation
 4. expansion of segmental and subsegmental bronchi with inflammation
 5. purulent decay of lung tissue without a pyogenic capsule
23. What are the main radiographic symptoms of lung gangrene:
1. intensive darkening with multiple small cavities without clear contours
 2. intense homogeneous shadow of a triangular shape
 3. rounded shadow, intense, homogeneous with a clear contour
 4. round cavity with fluid level and perifocal infiltration
 5. limited darkening round shape with clear edges
24. If bleeding from a stomach ulcer is suspected, the following should be performed:
1. emergency gastroduodenoscopy
 2. survey fluoroscopy of the abdominal cavity
 3. laparoscopy
 4. fluoroscopy of the stomach
 5. angiography
25. The most common complication of acute ulcers of the upper gastrointestinal tract is:
1. perforation
 2. malignancy
 3. penetration
 4. bleeding
 5. transition to a chronic ulcer
26. Which organ, along with the lungs, is most often affected by echinococcus:
1. spleen
 2. kidneys
 3. liver
 4. heart
 5. brain
27. What is the treatment tactics for lung echinococcus:
1. conservative treatment - chemotherapy
 2. puncture of an echinococcal cyst with the introduction of sclerosing drugs
 3. surgery - echinococectomy
 4. drainage of echinococcal cyst

5. treatment with vermoz
28. What are the main radiological symptoms of acute lung abscess:
1. rounded shadow, intense, homogeneous with a clear outline
 2. round cavity with fluid level and perifocal infiltration
 3. limited darkening of the lung tissue with a fuzzy contour
 4. rounded shadow with clear, even edges
 5. darkening of the lung tissue without signs of limitation
29. What do we understand by the aspiration mechanism of the development of a purulent process in the lungs:
1. infection in the lung tissue with a septic embolus
 2. development of suppuration as an outcome of croupous pneumonia
 3. development of infection due to its bronchopulmonary entry
 4. closure of the lumen of the bronchus with a foreign body
 5. development of infection in the lung after injury
30. Gastrocolic fistula was diagnosed in a patient with post-resection peptic ulcer. Specify which operation is indicated for this patient:
1. resection of the stomach with suturing of the colon defect
 2. stem vagotomy
 3. resection of the colon
 4. suturing of the gastrocolic fistula
 5. gastrectomy
31. A patient who underwent resection of the stomach according to Billroth-2 has dull pains in the right hypochondrium and vomiting with bile. What complication is characterized by such complaints:
1. adductor syndrome
 2. dumping syndrome
 3. hypoglycemic syndrome
 4. peptic ulcer
 5. gastral asthenia
32. Specify the main clinical signs of choledocholithiasis:
1. yellowing of the skin and sclera, dark urine, acholic stool
 2. redness of the skin and sclera and hepatomegaly
 3. splenomegaly
 4. hepatomegaly, pruritus
 5. hepatic coma
33. What technical reasons can lead to the long stump syndrome of the cystic duct:
1. suturing of choledha
 2. Brown anastomosis
 3. Fuzzy identification of the hepatoduodenal ligament
 4. suproduodenal choledochotomy
34. Specify a radical operation for cirrhosis of the liver:
1. liver transplant
 2. sclerotherapy
 3. portosystemic shunting
 4. splenectomy

5. operation of peritoneovenous shunting with Levin's valve
35. How long does it take for an acute abscess to become chronic?
1. 1 month
 2. 2 months
 3. 3 months
 4. 4 months
 5. 6 months
36. What is the main method of treatment of acute lung abscess:
1. conservative
 2. abscessotomy
 3. lung resection
 4. chemotherapy
 5. radiotherapy
37. The decisive diagnostic method for bronchiectasis:
1. plain chest x-ray
 2. X-ray tomography of the lung
 3. bronchography
 4. computed tomography of the lung
 5. chest x-ray
38. Until what time is pleural empyema considered acute:
1. up to three months
 2. up to two months
 3. up to one month
 4. up to six months
39. Typical puncture site for free pleural empyema:
1. 7th intercostal space along the posterior axillary line
 2. 9th intercostal space along the posterior axillary line
 3. 8th intercostal space along the mid-clavicular line
 4. all places are typical
40. Mediastinal neurinomas develop from nerve elements and are located more often in:
1. top-back
 2. lower-anterior
 3. lower-middle
 4. behind the sternum
 5. top-front
41. Diagnostic method that allows the most accurate diagnosis of Leriche's syndrome:
1. volumetric sphygmography
 2. rheovasography
 3. translumbar aortography
 4. radioisotope angiography
 5. plethysmography
42. To restore normal patency of the abdominal aorta, the following is performed:
1. amputation
 2. bypass surgery
 3. endarterectomy

4. laser tunneling
 5. intra-aortic catheter therapy
43. The main causes of death in patients with nonspecific aorto-arteritis are:
1. ischemic stroke
 2. myocardial infarction
 3. kidney failure
 4. cardiovascular failure
 5. gastrointestinal complications
44. Damage to the abdominal aorta distal to the renal arteries by atherosclerosis is most typical:
1. for Leriche syndrome
 2. for Marfan syndrome
 3. for Takayasu syndrome
 4. for Eisenmenger syndrome
 5. for abdominal ischemia syndrome
45. Paradoxical dysphagia can be observed in:
1. cicatricial narrowing of the esophagus
 2. cardiospasm
 3. esophageal diverticulum
 4. cancer of the esophagus
46. The movement of the abdominal organs into the chest cavity through a gap in the sternocostal part of the diaphragm is called:
1. Morgagni's hernia
 2. Bochdalek hernia
 3. Grosse hernia
 4. Harington's hernia
 5. Schmorl's hernia
47. The causes of obstructive jaundice are not:
1. choledocholithiasis
 2. OBD stenosis
 3. Tumor of Vater's nipple
 4. liver tumor
48. What radiological signs are typical for spontaneous pneumothorax:
1. total homogeneous blackout
 2. total homogeneous blackout, shift of the mediastinum to the healthy side
 3. collapsed lung, presence of air in the pleural cavity, shift of the mediastinum to the healthy side
 4. shift of the mediastinum to the side of the lesion
 5. darkening along the line of Damoiseau
49. Convulsions, symptoms of Chvostek and Trousseau after stumectomy speak for:
1. hypothyroidism
 2. thyrotoxic crisis
 3. laryngeal nerve injury
 4. hypoparathyroidism
 5. residual effects of thyrotoxicosis

50. In the treatment of pancreatic cysts, anastomoses with the gastrointestinal tract are often practiced. The best one is:

1. cysto-gastrostomy
2. cystojejunostomy with interintestinal anastomosis
3. cystojejunostomy with Roux-enabled jejunal loop
4. cystocolostomy
5. cystoduodenostomy

№ test task	№ response standard	№ test task	№ response standard	№ test task	№ response standard
1	1	21	4	41	3
2	1	22	2	42	2
3	1	23	1	43	1
4	2	24	1	44	1
5	1	25	4	45	2
6	2	26	3	46	1
7	4	27	3	47	3
8	1	28	2	48	3
9	1	29	3	49	4
10	2	30	1	50	3
11	1	31	1		
12	3	32	1		
13	1	33	3		
14	1	34	1		
15	2	35	3		
16	2	36	1		
17	1	37	3		
18	1	38	1		
19	3	39	1		
20	1	40	1		

4.2. Topics of essays for assessing competencies: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

1. Acute appendicitis. Clinic, diagnostics, surgical treatment.
2. Peritonitis. Classification, clinic.
3. Clinic and pathogenesis dumping syndrome
4. Cysts of the pancreas. Principles of surgical treatment.
5. Acute pleural empyema, pathogenesis, clinic, treatment
6. Intestinal fistulas. Classification, clinic, treatment
7. Acute disorders of the mesenteric circulation. Classification, diagnostics, treatment
8. Diseases, injuries of the spleen. Clinic, diagnosis, treatment.
9. Non-closure of the Botalov duct. Clinic, diagnosis, treatment.
10. Diseases of the operated stomach. Classification.
11. Thrombophlebitis of the veins of the pelvis and inferior vena cava. Etiology, course, complications, treatment.
12. Diverticula of the esophagus. Clinic, diagnostics, surgical treatment.
13. Peptic ulcer anastomosis after resection of the stomach. Pathogenesis, clinic, treatment.

14. Endemic goiter. Etiology, clinic, prevention, treatment.
15. Dishormonal diseases of the mammary gland. Clinic. Diagnostics. Treatment.
16. Inflammation of Meckel's diverticulum. Clinic, complications, treatment.
17. Obliterating atherosclerosis of the lower extremities. Clinic, diagnostics, treatment.
18. Surgical diseases of the heart.
19. Tumors and cysts of the mediastinum. Benign lung tumors.
20. Chronic lung abscess. Causes and criteria for the transition of an acute abscess to chronic. Clinic. Medical and surgical treatment.

4.3. Situational tasks for assessing competencies: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

Situational task number 1.

Patient U., 63 years old, was admitted to the surgical department with complaints of moderate pain in the lower abdomen of a cramping nature, radiating to the sacrum, bloating, non-excretion of flatus, absence of stool for 3 days. The disease developed gradually, the patient suffers from constipation for many years, similar states in the last year were several times, but were resolved after cleansing enema.

The general condition of the patient is satisfactory, the temperature is normal, the pulse is 68 per minute, tongue coated white, moist. Abdomen swollen, palpation slightly painful. A "splashing noise" is heard, with percussion - high tympanitis. At rectal examination - the rectal ampulla is empty, the sphincter is relaxed. At an attempt to deliver a siphon enema - a liquid, after its introduction in an amount of 350 ml, pours back.

Questions

1. What is your preliminary diagnosis?
2. Examination plan, methods for verifying the diagnosis?
3. What local and general criteria for the disease should be determined?
4. What are the possible radical operations?
5. Method of palliative care?
6. Tasks of dispensary observation?

Situational task number 2.

Patient M., 52 years old, was taken to the clinic by an ambulance 12 hours after the onset of illness. Complaints at admission to severe weakness, dizziness, loose stools with black feces colors. He considers himself ill at about 12 o'clock, when weakness appeared, there was vomiting coffee grounds followed by 2-fold, profuse stools with liquid black stools colors. There is no ulcer history.

Objectively: the patient is lethargic, drowsy. Skin and visible mucous membranes pale color. BP 90/40 mmHg, pulse 120/min. weak filling. The abdomen is soft on palpation, painless, auscultatory – enhanced peristaltic noises. Symptoms of peritoneal irritation are negative.

Questions

1. Diagnosis and additional research methods.
2. Determination of the degree of acute blood loss.
3. Methods for determining blood grouping.
4. Tactics, treatment.
5. Volume of infusion-transfusion therapy.
6. Methods for determining compatibility with donor blood transfusion.
7. Possible complications of blood transfusion.
8. The concept of a universal donor and exclusion from it

Situational task number 3.

Patient P., 62 years old, is in the surgical department for acute gangrenous appendicitis. Operation 5 days ago. Today there was pain in the area postoperative wound, chills, body temperature rose to 38.5C. Objectively: the postoperative wound is edematous, the skin around the wound is hyperemic, with palpation is determined by infiltration and soreness. Laboratory data: Leukocytosis - $32 \times 10^9 / l$, p / i - 18%, s / i - 43%, ESR - 32 mm / h, aniso - and - poikilocytosis is determined.

Questions

1. Clinical diagnosis.
2. The reason for the deterioration of the patient's condition.
3. What clinical and laboratory data suggest a complication?
4. Tactics of managing the patient.
5. What chemotherapeutic and antiseptic agents are applicable in this situation?
6. Does the patient need to be transferred to another department? If so, which one?
7. Types of wound drainage.
8. Asepsis methods.

Situational task number 4.

A 40-year-old man was admitted to the surgical department with complaints of girdle pain in the upper abdomen, nausea, repeated vomiting that does not bring relief. In blood tests, total bilirubin $30 \mu\text{mol/l}$, direct bilirubin $17 \mu\text{mol/l}$, indirect - $13 \mu\text{mol} / l$, leukocytes $12 \times 10^9 / l$, blood amylase 56 mg starch / tsp. After the infusion therapy, the patient's condition improved, the pain syndrome significantly improved. decreased, but there were dull pains in the epigastrium and left hypochondrium, laboratory indicators returned to normal.

On the 14th day, the patient had a subfebrile temperature of 37.4°C . On the next day the patient's condition deteriorated sharply: the patient was in stupor, skin earthy integument with an icteric tint, there is a petechial rash, body temperature 39.8°C , tremendous chills, blood pressure 60/40 mm Hg, heart rate 128 beats per minute, leukocytes $30 \times 10^9/l$, bladder empty, creatinine $343 \mu\text{mol/l}$, urea 10 mmol/l, residual nitrogen 30 mmol/l.

1. Clinical diagnosis.
2. The reason for the sudden deterioration of the condition.
3. What clinical and laboratory data allow us to suspect the development of this complications?
4. What instrumental and laboratory studies should be carried out to confirmation of the diagnosis?
5. Tactics of conducting this patient.
6. If it is necessary to prescribe antibacterial agents, which ones?
7. Are the methods of efferent therapy shown to the patient? If shown, at what conditions and what?
8. The most likely cause of petechial rash in a patient.
9. What complex of therapeutic measures will be aimed at eliminating these complications?
10. Prognosis for this patient.

Situational task number 5.

Patient E., aged 47, was admitted to the clinic with complaints of intense pain in the upper half of the abdomen, which suddenly appeared 2 hours ago. From the anamnesis it is known that the patient suffers from gastric ulcer for a long time, has lost a lot of weight in recent months. At

examination: the condition is relatively satisfactory. The pulse rate is 84 beats per minute. BP - 110/70 mm Hg The abdomen is not swollen, sharply tense on palpation, painful in all

departments. Shchetkin's symptom is positive. Plain radiography revealed the presence of free gas in the abdominal cavity. Urgent laparotomy revealed an ulcer prepyloric part of the stomach, along the lesser curvature, with whitish edges cartilaginous density, in the center - a perforation with a diameter of 2 mm. In small omentum increased to 1.5 cm dense lymph nodes.

1. What is your preliminary diagnosis?
2. What methods of additional examination are needed to confirm diagnosis?
3. What operation should be performed?

Situational task number 6.

Patient K., aged 47, was admitted with complaints of epigastric pain, icterus skin, weakness, weight loss of 7 kg. Sick for 4 months, jaundice appeared 1 month ago, gradually increased. On examination: a state of moderate severity. Sclera and skin olive. Reduced nutrition In the lungs without pathology. Heart rate 100 beats per minute, BP 110/70 mm Hg. The abdomen is soft. The liver is enlarged by 2 cm elastic. The chair is aholic. On examination: complete blood count – erythrocytes $4.6 \cdot 10^{12} / l$, Hb - 124 g / l, ESR - 35 mm / h. Leukocytes $8.4 \cdot 10^9 / l$, the formula has not been changed. Biochemical blood test - total bilirubin - 289 $\mu\text{mol/l}$, direct 201 $\mu\text{mol/l}$, indirect - 88 $\mu\text{mol/l}$; FLG without pathology; FGDS - superficial gastritis, duodenum without pathology, does not contain bile; Abdominal ultrasound - expansion of the intrahepatic bile ducts up to 0.8 cm, choledochus 6 mm, bile bubble 90x30x24 mm. Laparotomy revealed hepaticocholedochal infiltration, leaving the gate of the liver, about 10 metastatic nodes in the right lobe of the liver.

1. What is your diagnosis?
2. How can I confirm it?
3. How can the patient be helped?

Situational task number 7.

Patient A., 31 years old, 2 months ago found a node in the thyroid gland, turned to an oncologist. On examination: the area of the thyroid gland is not visually changed, palpation in the right lobe reveals a nodular formation of a rounded shape, elastic consistency, movable, 2.5 cm in diameter. Regional lymph nodes are increased. In the punctate - groups of cells of the follicular epithelium.

1. What is your diagnosis?
2. What means of additional diagnostics should be used in this case?
3. Tactics of treating the patient?

Situational task number 8.

Patient Sh., aged 24, was admitted to the clinic with complaints of shortness of breath, pain in the right half of the chest, cough with purulent sputum, the amount of which reached 1 liters per day.

I fell ill 6 months ago, when there was a general malaise, headache, pain in on the right side of the chest, the temperature increased to 39.20C. In 5 days a cough appeared with purulent sputum, in which there was an admixture of blood. Before admission received antibiotic therapy with varying success. On admission: general condition is severe, skin with a yellowish tint, face puffy, lips and visible mucous membranes cyanotic, nail phalanges by type "drumsticks".

On examination: the right half of the chest lags behind when breathing, palpation the right half of the chest is painful, percussion sound over the entire surface the right half of the chest is shortened; breathing is weakened, hard, with a large the number of different-sized dry and wet rales, the number of respiratory movements - 40 per minute. X-ray of the lungs: in the upper lobe on the right, intense inhomogeneous darkening of the lung tissue with a clear lower border. On the background darkening, a cavity with a horizontal liquid level is visible.

1. Make a preliminary diagnosis.

2. Differential diagnosis.
3. Make a plan for examining the patient.
4. Final clinical diagnosis.
5. Basic methods of conservative treatment.
6. Indications and methods of surgical treatment

Situational task number 9.

Patient G., aged 59, came to the clinic with complaints of pain in the right leg, increase in body temperature up to 38.5C. Fell ill a week ago. Treated independently by applying alcohol compresses to the lower leg. The pain didn't go away persistently high body temperature. On examination: the general condition is satisfactory, the pulse is 96 beats per minute, rhythmic, satisfactory filling.

Locally: the skin of the lower leg is hyperemic along the varicose vein in the lower third of the lower leg, there is a thickening of the skin. Moderate swelling of the lower leg, movement in limb joints are passive. In the middle third of the lower leg, an ulcer measuring 2x3 cm with undermined edges, moderate purulent discharge. In the focus of vein compaction there is fluctuation.

1. Formulate the clinical diagnosis: main, complications of the main.
2. Differential diagnosis.
3. Further surgical tactics.
4. Reasons for the appearance of trophic ulcers on the lower extremities.
5. Modern methods of conservative treatment of trophic ulcers on the soil chronic venous insufficiency.
6. Features of trophic ulcers of other etiologies: diabetic, neurotrophic, hypertonic.
7. Indications and methods of surgical treatment.
8. Prevention of trophic ulcers of venous etiology.

Situational task number 10.

The patient is 26 years old. Has been in hospital for 2.5 weeks for duodenal ulcers up to 1.8 cm in size. During the treatment, the pain disappeared completely, however, in recent days, heaviness in the epigastric region by the end of the day began to disturb. During the control endoscopic and radiological examination, it was found that the ulcer healed, but the barium suspension lingers in the stomach for 14 hours.

1. Formulate a detailed diagnosis?
2. Is surgical treatment indicated for the patient?
3. If indicated, which operation would you choose, if not, what treatment Will you appoint?

4.4. Writing a case history for competency assessment: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

Work at the bedside of the patient: collection of complaints, anamnesis, examination of the objective status. Work with medical records. Registration of the results of the examination of a surgical patient in the form of a medical educational history of the disease.

4.5. Interview questions for assessing competencies: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

1. Anatomy of thyroid gland. Thyroid dysfunction requiring surgery. Grave's disease (pathology, clinical presentation, diagnosis, conservative treatment, surgical treatment, complications of surgery).
2. Enlargement of the thyroid (goiters). Overview. Diffuse thyroid enlargement.

- Acute and chronic thyroiditis. Nodular thyroid enlargements (clinical presentation, pathogenesis, diagnosis). Treatment.
3. Thyroid neoplasm. Overview. (Assessment of thyroid nodules). Characteristics of the nodules. Diagnostic studies. Types of thyroid malignancy. Treatment.
 4. Dysphagia. Classifying dysphagia by phases of swallowing. Diagnostic process, surgical tactics.
 5. Hiatal hernia and gastro esophageal reflux. Classification. Clinical features. Investigation. Surgical treatment.
 6. Esophageal neoplasm's. Classification, clinical features. Diagnostic and surgical tactics.
 7. Acute purulent mastitis. Etiology. Clinic, diagnosis, treatment.
 8. Dishormonal diseases of the mammary gland. Clinic, diagnosis, treatment.
 9. Carcinoma of the female breast. Epidemiology. Incidence. Risk factors. Symptoms. Diagnosis. Staging. TNM-classification, determination of distant metastasis. Pregnancy. Treatment. Prognosis.
 10. Bronchiectasis. Pathogenesis. Tests. Classification, clinical features. Indications for surgical treatment. Types of surgeries and their complications.
 11. Surgical thoracic infection. Lung abscesses and gangrene. Pathogenesis, classification, clinical features. Diagnostic process, surgical tactics.
 12. Chronic lung abscess. Etiology, clinic, diagnosis, treatment.
 13. Acute lung abscess. Clinic, diagnostics, methods of treatment.
 14. Acute and chronic pleural empyema. Classification, clinic, diagnosis and treatment.
 15. Staphylococcal destruction and gangrene of the lungs. Etiology, clinic, diagnosis and treatment.
 16. Pulmonary bleeding. Causes. Diagnosis and treatment tactics.
 17. Mediastinitis. Etiology, clinic, diagnosis, treatment.
 18. Sepsis. Modern principles of diagnosis and treatment.
 19. Tumor of the lungs. Classification, clinical features. Diagnostic process. Treatment (surgical, adjuvant).
 20. Acute appendicitis. Features of the clinical picture depending on location of the caecum and appendix.
 21. Interintestinal abscess as a complication of acute appendicitis. Clinic, diagnostics, surgical tactics.
 22. Appendicitis. Pathogenesis, classification, clinical features. Treatment.
 23. Appendiceal infiltrate. Clinic, diagnostics, surgical treatment methods. Conservative and surgical treatment of appendiceal infiltrate, reading, types.
 24. Cholecystitis. Acute and chronic. Pathophysiology. Symptoms. Diagnosis. Differential diagnosis. Treatment.
 25. Complications of acute cholecystitis. Clinic, diagnosis, treatment.
 26. Cholangitis. Clinic, diagnosis, treatment.
 27. Differential diagnosis of jaundice.
 28. Syndrome of obstructive jaundice. Clinic, diagnosis, treatment.
 29. Biliary stone disease. General characteristics. Pathogenesis, classification, clinical features. Diagnosing and managing surgical treatment.
 30. Choledocholithiasis. Clinical presentation. Surgical treatment.
 31. Postcholecystectomy syndrome. Causes, clinic, diagnostic methods, choice of treatment method
 32. Liver and bile duct neoplasm. General characteristics. Diagnosis and surgical treatment.
 33. Portal hypertension. Etiology. Pathogenesis. Clinical presentation. Complications. Treatment.

34. Ruptured spleen. Clinical features. Investigations. Treatment.
35. Pancreatitis. Pathogenesis, classification, clinical features. Treatment. Indications to surgery. Complications.
36. Pseudocysts of the pancreas. Clinic, diagnosis, treatment.
37. Pancreatic neoplasm. Diagnosis, complication, surgical treatment.
38. Hernias. Classification. Etiology. Descriptive terms. Clinical features. Inguinal hernia (anatomy of the inguinal region). Indirect hernias. Direct inguinal hernia. Repair of inguinal hernia. Complications.
39. Hernias. External and internal hernias. Pathogenesis, classification, clinical features. Surgical treatment.
40. Differential diagnosis of direct and oblique inguinal hernias.
41. Groin hernias. Choice of method of surgical treatment.
42. Postoperative ventral hernias. Causes, clinic, diagnosis, methods hernia gate plasty.
43. Femoral hernias. Anatomy. Diagnosis. Physical examination. The differential diagnosis of Grain Masses. Repair of femoral hernia. Complications.
44. Strangulated abdominal hernia. Pathogenesis, clinic, diagnostics, differential diagnosis with irreducible hernia.
45. Sliding hernias. Clinic, diagnostics, errors and dangers during operations.
46. Richter and retrograde infringement in hernias. Clinic, diagnostics, operation features.
47. Phlegmon of the hernial sac. Clinic, diagnostics, alternative methods surgical treatment.
48. Duodenal and stomach ulcer disease. Pathogenesis. Classification, clinical features. Indications for surgical treatment. Types of surgeries and their complications.
49. Peptic ulcer of the stomach and duodenum. Classification, stages of the disease.
50. Penetrating ulcer of the stomach and duodenum. Features clinic, diagnosis, treatment.
51. Perforated stomach ulcer and duodenum. Clinic, diagnostics, medical and surgical tactics.
52. Atypical perforations of gastric and duodenal ulcers (covered perforations, perforation in omental bag, perforations of "mirror" ulcers). Features of the clinic diagnosis, treatment.
53. Diseases of the operated stomach. Classification, clinic, diagnosis and indications for surgical treatment.
54. Classification of bleeding from the upper gastrointestinal tract. Diagnostics, medical Events.
55. Bleeding stomach ulcer. Clinic, diagnosis, treatment.
56. Bleeding from varicose veins of the esophagus and stomach. Etiology, clinic, diagnostics, conservative and surgical treatment.
57. Ulcerative pyloroduodenal stenosis. Classification, clinic, diagnostics, treatment. The concept of gastrogenic tetany.
58. Classification of diseases of the operated stomach.
59. Afferent loop syndrome. Causes, clinic, diagnosis, treatment.
60. Gastric neoplasm's. Classification, clinical features. Treatment.
61. Peritonitis. General characteristics. Pathogenesis. Diagnosis and Surgical treatment.
62. Intestinal hemorrhages. General characteristics. Pathogenesis. Diagnosis and Surgical treatment.
63. Intestinal obstruction. General characteristics. Diagnosis and surgical treatment.
64. High obstructive intestinal obstruction. Etiology, clinic, diagnosis and treatment.

65. Acute dynamic intestinal obstruction. Etiopathogenesis, clinic, diagnosis, treatment.
66. Obstructive intestinal obstruction. Etiopathogenesis, clinic, diagnostics, treatment.
67. Adhesive intestinal obstruction. Clinic, diagnostics, conservative and surgery.
68. Ulcerative colitis (etiology, classification, symptoms, complications, treatment, surgical treatment). Indications for surgical treatment.
69. Diverticular disease. Terminology. Epidemiology and etiology. Pathogenesis.
70. Diverticulitis (clinical presentation, initial evolution, subsequent evolution). Treatment. Indications for surgical treatment.
71. Hemorrhoids. Anal fissure. Etiology, classification, symptoms, complications, treatment. Indications for surgical treatment
72. Prolapse of the rectum. Causes, clinic, diagnosis, treatment.
73. Intestinal fistulas. Classification, clinic, diagnostics, conservative and surgery.
74. Pararectal fistulas. Etiology, clinic, diagnosis, treatment.
75. Acute paraproctitis. Etiology, clinic, diagnosis, treatment.
76. Acute mesenteric thrombosis. Etiopathogenesis, clinic, treatment.
77. Colonic neoplasm. General characteristics. Classification. Diagnosis and surgical treatment.
78. Carcinoma of the colon and rectum. Incidence. Classification. Site. Etiology. Clinical presentation. Patient evolution. Treatment (surgery, adjuvant therapy).
79. Adrenal gland. Introduction. Anatomy. Adrenal hormones and catecholamine. Hyperadrenocorticalism (Cushing's syndrome). Types. Diagnosis. Treatment. Primary hyperaldosteronism (Coun's syndrome). Overview. Types. Signs and symptoms. Diagnosis. Localization of adenomas. Treatment.
80. Pheochromocytoma. Overview. Signs and symptoms. Diagnosis. Localization. Treatment.
81. Adrenal neoplasm. Types, adenoma and cancer. Diagnosis. Differential diagnosis. Treatment.
82. Venous disease of the lower extremities. Anatomy. Etiology. Superficial and deep thrombophlebitis. Clinical presentation. Diagnostic. Treatment.
83. Thrombosis of deep veins of extremities. Classification, methods of treatment.
84. Arterial thrombosis of the main vessels of the lower extremities. Clinic, diagnostics.
85. Classification of acute arterial ischemia of the extremities.
86. Chronic arterial diseases. Atherosclerosis. Reyno, Burger diseases. Etiology. Clinical presentation. Diagnosis. Treatment. Complications.
87. Pericarditis. Classification. Etiology. Clinic, differential diagnosis, treatment.
88. Mitral valve stenosis. Causes, clinic, diagnosis, methods surgical treatment.
89. Pulmonary embolism. Etiology, pathogenesis, clinic, prevention.
90. Surgical aspects of diabetes mellitus. Pathophysiology. Diagnosis. Classification. Complications of diabetes mellitus. Diabetic foot. Clinical presentation. Treatment.

5. The content of the evaluation means of intermediate certification: test, interview

Intermediate certification in the 10th semester of the 5th is carried out in the form of a test

Intermediate certification in the 11th semester of the 6th is carried out in the form of an exam

5.1 The list of control tasks and other materials necessary for assessing knowledge, skills and experience: tests in sections test tasks and interview questions.

5.1.1. Test questions with answer options for the test in the discipline "Hospital Surgery" are presented in paragraph 4.1

5.1.2. The list of questions for the interview at the intermediate certification in the discipline "Hospital Surgery" are presented in paragraph 4.5

5.1.3. The list of questions for the interview at the exam in the discipline "Hospital Surgery":

1. Anatomy of thyroid gland. Thyroid dysfunction requiring surgery. Grave's disease (pathology, clinical presentation, diagnosis, conservative treatment, surgical treatment, complications of surgery).
2. Enlargement of the thyroid (goiters). Overview. Diffuse thyroid enlargement. Acute and chronic thyroiditis. Nodular thyroid enlargements (clinical presentation, pathogenesis, diagnosis). Treatment.
3. Thyroid neoplasm. Overview. (Assessment of thyroid nodules). Characteristics of the nodules. Diagnostic studies. Types of thyroid malignancy. Treatment.
4. Dysphagia. Classifying dysphagia by phases of swallowing. Diagnostic process, surgical tactics.
5. Hiatal hernia and gastro esophageal reflux. Classification. Clinical features. Investigation. Surgical treatment.
6. Esophageal neoplasm's. Classification, clinical features. Diagnostic and surgical tactics.
7. Carcinoma of the female breast. Epidemiology. Incidence. Risk factors. Symptoms. Diagnosis. Staging. TNM-classification, determination of distant metastasis. Pregnancy. Treatment. Prognosis.
8. Bronchiectasis. Pathogenesis. Tests. Classification, clinical features. Indications for surgical treatment. Types of surgeries and their complications.
9. Surgical thoracic infection. Lung abscesses and gangrene. Pathogenesis, classification, clinical features. Diagnostic process, surgical tactics.
10. Tumor of the lungs. Classification, clinical features. Diagnostic process. Treatment (surgical, adjuvant).
11. Appendicitis. Pathogenesis, classification, clinical features. Treatment.
12. Appendiceal infiltrate. Clinic, diagnostics, surgical treatment methods. Conservative and surgical treatment of appendiceal infiltrate, reading, types.
13. Cholecystitis. Acute and chronic. Pathophysiology. Symptoms. Diagnosis. Differential diagnosis. Treatment.
14. Biliary stone disease. General characteristics. Pathogenesis, classification, clinical features. Diagnosing and managing surgical treatment.
15. Choledocholithiasis. Clinical presentation. Surgical treatment.
16. Liver and bile duct neoplasm. General characteristics. Diagnosis and surgical treatment.
17. Portal hypertension. Etiology. Pathogenesis. Clinical presentation. Complications. Treatment.
18. Ruptured spleen. Clinical features. Investigations. Treatment.
19. Pancreatitis. Pathogenesis, classification, clinical features. Treatment. Indications to surgery. Complications.
20. Pancreatic neoplasm. Diagnosis, complication, surgical treatment.
21. Hernias. Classification. Etiology. Descriptive terms. Clinical features. Inguinal hernia (anatomy of the inguinal region). Indirections hernias. Direct inguinal hernia. Repair of inguinal hernia. Complications.
22. Hernias. External and internal hernias. Pathogenesis, classification, clinical features. Surgical treatment.
23. Femoral hernias. Anatomy. Diagnosis. Physical examination. The differential diagnosis of Grain Masses. Repair of femoral hernia. Complications.

24. Duodenal and stomach ulcer disease. Pathogenesis. Classification, clinical features. Indications for surgical treatment. Types of surgeries and their complications.
25. Penetrating ulcer of the stomach and duodenum. Features clinic, diagnosis, treatment.
26. Gastric neoplasm's. Classification, clinical features. Treatment.
27. Peritonitis. General characteristics. Pathogenesis. Diagnosis and Surgical treatment.
28. Intestinal hemorrhages. General characteristics. Pathogenesis. Diagnosis and Surgical treatment.
29. Intestinal obstruction. General characteristics. Diagnosis and surgical treatment.
30. Ulcerative colitis (etiology, classification, symptoms, complications, treatment, surgical treatment). Indications for surgical treatment.
31. Diverticular disease. Terminology. Epidemiology and etiology. Pathogenesis.
32. Diverticulitis (clinical presentation, initial evolution, subsequent evolution). Treatment. Indications for surgical treatment.
33. Hemorrhoids. Anal fissure. Etiology, classification, symptoms, complications, treatment. Indications for surgical treatment
34. Colonic neoplasm. General characteristics. Classification. Diagnosis and surgical treatment.
35. Carcinoma of the colon and rectum. Incidence. Classification. Site. Etiology. Clinical presentation. Patient evolution. Treatment (surgery, adjuvant therapy).
36. Adrenal gland. Introduction. Anatomy. Adrenal hormones and catecholamine. Hyperadrenocorticalism (Cushing's syndrome). Types. Diagnosis. Treatment. Primary hyperaldosteronism (Coun's syndrome). Overview. Types. Signs and symptoms. Diagnosis. Localization of adenomas. Treatment.
37. Pheochromocytoma. Overview. Signs and symptoms. Diagnosis. Localization. Treatment.
38. Adrenal neoplasm. Types, adenoma and cancer. Diagnosis. Differential diagnosis. Treatment.
39. Venous disease of the lower extremities. Anatomy. Etiology. Superficial and deep thrombophlebitis. Clinical presentation. Diagnostic. Treatment.
40. Chronic arterial diseases. Atherosclerosis. Reyno, Burger diseases. Etiology. Clinical presentation. Diagnosis. Treatment. Complications
41. Surgical aspects of diabetes mellitus. Pathophysiology. Diagnosis. Classification. Complications of diabetes mellitus. Diabetic foot. Clinical presentation. Treatment.

6. Criteria for evaluating learning outcomes

For credit:

Learning Outcomes	Evaluation criteria	
	Not credited	Passed
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were gross errors.	The level of knowledge in the amount corresponding to the training program. Minor errors may be made
Availability of skills	When solving standard problems, the basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills. Typical tasks are solved, all tasks are completed. Minor errors may be made.
Availability of skills (possession of experience)	When solving standard problems, basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills in solving standard problems. Minor errors may be made.

Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no qualitative readiness to solve the assigned tasks	Learning activity and motivation are manifested, readiness to perform the assigned tasks is demonstrated.
Characteristics of the formation of competence	Competence is not fully formed. The available knowledge, skills and abilities are not enough to solve practical (professional) problems. Re-learning required	The formation of competence meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) problems.
Competence level	Low	Medium/High

Criteria for evaluating learning outcomes

For testing:

Rating "5" (Excellent) - points (100-90%)

Rating "4" (Good) - points (89-80%)

Grade "3" (Satisfactory) - points (79-70%)

Less than 70% - (Unsatisfactory) - Grade "2"

For exam:

Learning Outcomes	Evaluation criteria	
	Not credited	Passed
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were gross errors.	The level of knowledge in the amount corresponding to the training program. Minor errors may be made
Availability of skills	When solving standard problems, the basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills. Typical tasks are solved, all tasks are completed. Minor errors may be made.
Availability of skills (possession of experience)	When solving standard problems, basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills in solving standard problems. Minor errors may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no qualitative readiness to solve the assigned tasks	Learning activity and motivation are manifested, readiness to perform the assigned tasks is demonstrated.
Characteristics of the formation of competence	Competence is not fully formed. The available knowledge, skills and abilities are not enough to solve practical (professional) problems. Re-learning required	The formation of competence meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) problems.
Competence level	Low	Medium/High

A complete set of assessment tools for the discipline "Hospital Surgery" is presented on the portal of the LMS of the Volga Research Medical University <https://sdo.pimunn.net/course/view.php?id=3614>

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