Ministry of Health of Ukraine
National Pirogov Memorial Medical University, Vinnytsya

«Agreed»
at Methodical Council
of surgical disciplines

Protocol № 4
from 22/03 2023
Head of Methodical Council

Professor of HEI ____________
Oleh KANIKOVSKYI

«Approved»
by Academic Council
National Pirogov Memorial Medical University, Vinnytsia
Protocol № 7
from 27/04 2023
Head of Academic Council

Professor of HEI ____________
Victoriia PETRUSHENKO

Objective structured practical (clinical) exam on Discipline "Surgery, pediatric surgery"
Specialty – 222 "Medicine", 2022/2023 academic year
Instruction for the station N3
"Standardized patient in a surgical clinic"

Objectives:
1. To show proficient clinical communication skills.
2. To diagnose pediatric surgical diseases according to available data.
3. To give the differential diagnosis of pediatric surgical diseases.
4. To plan the work-up (laboratory and/or imaging studies) of the patient based on the prominent clinical syndrome or preliminary diagnosis.
5. To define the management and patient pathway.

Matherials and equipment of the station:
1. Clinical task (case).
2. Standardized patient.
3. Results of laboratory and imaging studies (radiographic, sonographic, endoscopic)
4. Computer soft- and hardware.
5. Table
6. Chairs
7. A camera for the online video- and audio-session from the student working place.
8. A pen or a pensil.
9. A4 size white paper.
10. Check lists.

In context of **distance learning** (for security reasons in wartime conditions or in order to prevent the spread of the respiratory disease COVID-19 caused by coronavirus SARS-CoV-2), the **procedure for the conduct of objective structured clinical examination (OSCE)** is determined by Regulation for the introduction of distance learning components in National Pirogov Memorial University, Vinnytsya, and it will take place **on the online platform Microsoft Teams**.

Equipment for distance mode OSCE: clinical tasks (cases), sets of data, virtual patients.

At the day of the examination, the secretary of the State Examination Board connects the student, whose group completes the exam according to the schedule, to the examiner meeting. Student should introduce himself and **show the ID card (passport).**

Then student receives the clinical task (case). The student need to evaluate the complaints of the standardized patient, history of the present illness, past history and physical examination data; interpret the results of the laboratory and imaging studies of this patient, provide the

diagnosis and management of the patient, consider therapeutic (medical prescription format of the medicines) and surgical treatment; to give the short answers for the additional questions, if they are specified in the clinical task.

Duration of the examination at the station is up to 5 min. If the time is expired, the examiner will no longer accept the answers. Draw your attention that the examiner is only an observer, he does not comment on your answers or give any instructions, does not ask you any questions.

Requirements for the completion of the station:

- Use the personal computer, laptop or tablet computer during your answers.
- The answer will be accepted only when your camera and microphone are switched on, the sound is clear, and your face is fully seen at the screen;
- During the examination your answer is recorded.

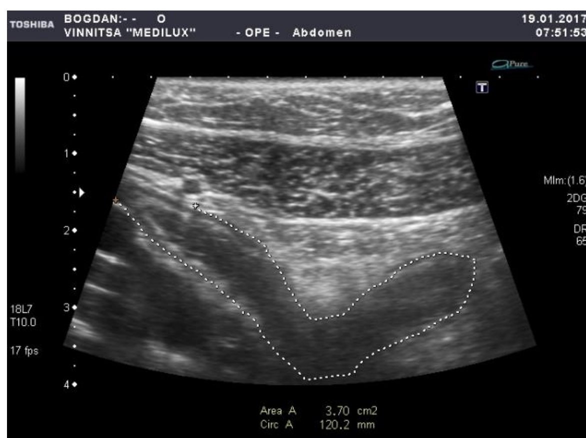
It is forbidden to use mobile phones; share any information related to the exam.

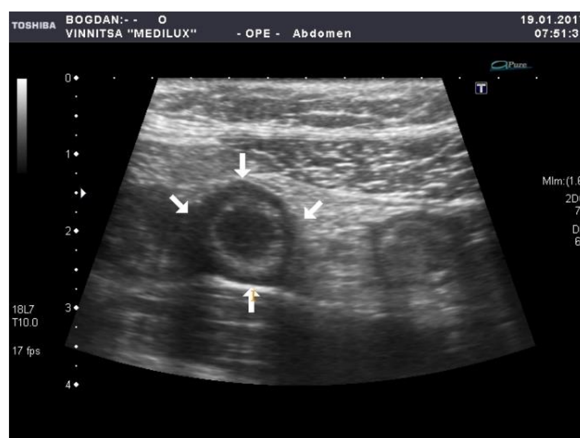
OSP(C)E from the discipline "Surgery, Pediatric Surgery" consists of two stations: Station № 3 "Standardized patient in a surgical clinic"Station № 4 "Standardized patient in the pediatric surgery clinic"

Sample of evaluation of the student's answer for the clinical task (case)

Case

A man of 45 years complains of continuous pain in his right iliac region, the intensity of which decreases in the position of lying on the right side with bent legs, dry mouth, general weakness, fever up to 37.9°C, lack of appetite. The pain appeared in the epigastrium last evening. Two hours later the nausea and single vomit occurred. Pain increased until morning and moved to a right iliac area. The body temperature increased to 37.6°C, a pulse rate became 90 per min.
T: 38.1°C; BP: 122/80 mm Hg; RR: 15/min.; P: 98/min, SpO2 98%.The patient is athletic appearing. Auscultation of the chest gives clear breath and cardiac sounds. Percussion of the chest is unremarkable. On palpation, the abdomen is markedly tender in the right lower region; there is involuntary guarding with a fairly rigidity and rebound tenderness. The liver and spleen are not palpable. Bowel sounds are decreased.
Applications:
• Sonogram of the abdomen in the pain area
• Results of CBC.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the ultrasound examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)





Complete Blood Count	
Hemoglobin	148 g/l
Erythrocytes	3.7×10^{12} / l
Leucocytes	11.7×10^{9} / l
basophils	0%
eosinophils	1%
Neutrophils premature	11%
neutrophils segmental	71%
lymphocytes	10%
monocytes	7%
Platelet count	180×10^{9} / l
ESR	20 mm / h
General urine test	
Color	yellow
Specific gravity	1016
pH	5.4
The protein content	0.033 g / l
Glucose content	absent
Erythrocytes	0-1 PF
Leucocytes	5-7 PF
Epithelial cells	1-2 PF
Biochemical tests	
Total serum protein	62 g / l
Glucose	4.8 Mmol / L
Total bilirubin	19.6 Mkmol / l
Direct bilirubin	4.3 Mkmol / l
Indirect bilirubin	15.3 Mkmol / L
Urea	6.5 Mmol / L
Creatinine	98 Mkmol / L
Sodium	142 Mmol / l
Potassium	5.2 Mmol / L
Calcium	2.1 mmol / l
ALT	0.7 mmol / h x l
AST	0.6 mmol / h x l

Example answer

1. Acute appendicitis.
2. The thickening of the appendix walls; increased echogenicity of the surrounding fatty tissue.
3. Neutrophil leukocytosis, shifting the formulas to immature forms (left).
4. Hospitalization to a surgical hospital. Urgent surgery (appendectomy), optimally - laparoscopic.
5. After surgery: analgetics (e.g.: Ketorolac 3% 1 ml three times a day i/m); antibiotic therapy (Ceftriaxone 1.0 twice daily i/m).

Note: All preparations of these groups may be prescribed, provided that they are used correctly

Example scoring

Evaluation item	Student's answer	Point/mark
Communication skills and	greetings, introductions, beginning and completion of communication	**0 / 0,25**

proficiency		
Give the clinical diagnosis		**0 / 0,25 / 1,0**
	Acute surgical pathology of the abdomen	0,25
	Acute appendicitis	1,0
Assessment of the ultrasound examination		**0/0,25/0,75/1,0**
	Acute surgical pathology of the abdomen	0,25
	Appendicitis	0,75
	Thickening of the appendix wall, increased echogenicity of the surrounding fat (appendicitis)	1,0
Assessment of the laboratory parameters		**0/0,25/0,5/0,75**
	leukocytosis	0,25
	neutrophilic leukocytosis	0,5
	neutrophilic leukocytosis, shift to the left	0,75
Define surgical treatment		**0 / 0,25 / 1,0 / 1,25**
	Hospitalization in a surgical department	0,25
	Hospitalization in a surgical department. Urgent surgery (appendectomy)	1,0
	Hospitalization in a surgical department. Urgent operation (appendectomy), optimally - laparoscopic	1,25
Define medication		**0 / 0,25 /0,5/ 0,75**
	Only groups of medicines or some drugs without dosages are named	0,25
	The drug of one group in the form of prescriptions or appointments is specified	0,5
	Required medicines in the form of prescriptions or appointments are specified	0,75
Minimum / maximum score for the task		**0 / 5,0**

List of clinical cases: acute appendicitis, acute calculous cholecystitis, acute pancreatitis, perforation of the hollow organ of the abdominal cavity, gastrointestinal bleeding of ulcerative origin, mechanical jaundice due to choledocholithiasis, acute diffuse peritonitis, acute intestinal obstruction, obliterating atherosclerosis, acute ileofemoral phlebothrombosis, femoral artery thromboembolism, traumatic pneumothorax, acute lung abscess, pleural empyema, pyopneumothorax, acute purulent mediastinitis, thoracic wound with hemopericardium , achalasia of the esophagus, traumatic rupture of the diaphragm, axial hiatal hernia, esophageal cancer, urolithiasis with an attack of renal colic, traumatic rupture of the spleen, liver abscess, breast cancer, strangulated postoperative ventral hernia, nonspecific ulcerative colitis, central lung cancer, colon diverticulosis, colon cancer

List of tasks to Station 3 (numbering changed)

1. A 65-year-old man complains of difficulty swallowing of solid food, weakness, weight loss. Occasionally mentions a pain in the epigastrium with irradiation to the back. The first manifestations of dysphagia appeared 4 months ago, after which it did not disappear and gradually increased. The pain has been noticeable for the last two weeks. He has been smoking for 40 years, about a pack of cigarettes daily. He drinks strong alcohol two or three times a week and prefers spicy food. A pensioner, he worked as a worker at an asphalt plant.

Objective: appears exhausted. Skin and mucous membranes are normal. Body temperature: 36.8 ° C; RR: 16 / min; Pulse 72 beats / min, regular; BP 130/80 mm Hg. Auscultation of the chest gives clear breath and cardiac sounds. Percussion of the chest is unremarkable. On

palpation, the abdomen is soft, with moderate tenderness in the epigastrium. Bowel sounds are as usual.
Applications:
• Barium esophagram
• Laboratory tests results
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. What additional diagnostics are required?
5. Suggest curative tactics.

2. A 27-year-old woman complains of acute attack of severe pain in the right lumbar region, frequent urination, nausea, periodic vomiting. The pain radiates to the right inguinal, labia majora and right thigh, almost independent of changes in body position. The urge to urinate repeats every 10-15 minutes. Urine is excreted in small portions. The above attacks recurred 2-3 times a year, but were less intense and short-lived.
Objective: the patient is restless, constantly changes a body position, and gets out of bed. Body temperature: 36.8°C; RR: 20/min; Pulse 72 per min, regular; BP 130/80 mm Hg. Auscultation of the chest shows clear breath and cardiac sounds. Palpation reveals a protective muscle tension in the right lumbar region; the area of the right kidney is painful.
Applications:
• Abdominal CT scan
• Laboratory tests results.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the X-ray examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

3. A 51-year-old man complains of pain in the left hypochondrium that radiates to the left arm and neck when trying to lie down in his supine position, general weakness, and thirst. Three hours ago, he was returning from a friend's birthday party and fell on the rails with his left side while crossing the railway track.
On examination, patient is in serious condition. The skin and conjunctivae are pale. The smell of alcohol from the mouth is detectable. The jugular veins are not dilate. A pulse is regular, of weak filling, 108 beats / min. BP 105/75 mm Hg. Breath and cardiac sounds are clear to auscultation. There is a linear abrasion in the left costal arch area. The abdomen is moderately enlarged, its respiratory movements are limited. Palpation reveals pain and slight muscle tension in the left hypochondrium, pain in the left costal arch, a moderate rebound sign. Bowel sounds are decreased.
Applications:
• Abdominal CT scan
• Laboratory tests results.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the X-ray examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

4. A 57-year-old woman complains of feeling of heaviness in her right side and intermittent pain in the right hypochondrium, night fever up to 38.5°C with chills, weakness, loss of appetite. She underwent a laparoscopic cholecystectomy due to prolonged severe attack of cholecystitis, accompanied by fever, three weeks ago. Within the postoperative period, there are daily episodes of fever.

Objectively: the patient looks exhausted. Her skin is dry, wrinkled; the skin fold straightens with a delay. Body temperature 37.8°C. Pulse 92 beats/min; BP 138/80 mm Hg. Breath sounds are moderately decreased in the chest right lower part. Heart sounds are clear. There are postoperative scars on the places of laparoports on the abdominal wall. Palpation in the right hypochondrium and tapping on the right costal arch course a pain. The lower edge of the liver is 3 cm below the edge of the costal arch. Bowel sounds are clear.

Applications:

• Abdominal Ultrasound

• Laboratory tests results.

Questions

1. Determine a clinical diagnosis.
2. Formulate the conclusion of the abdominal ultrasound.
3. Assess the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

5. A 56-year-old woman complains of changes in the skin of her right breast. She says the skin around her right nipple has become red and "crusty" over the past few months. The left nipple and areola are normal. The patient have not visited a doctor for 4 years. Patient's history includes episodes of recurrent heartburn, about which she takes omeprazole irregularly. She has an adult son; does not smoke, does not drink alcohol. She is in menopause since the beginning of this year.

Objective examination. Body temperature: 36.8°C; DP: 156/90; RR: 14/min; Pulse: 72/min. Breath and cardiac sounds are clear to auscultation. Palpation of the right breast reveals a solid 2-centimeter lump in the upper, outer quadrant of the right breast that is not fixed to the chest wall. The skin over the mass is poorly folded. The right nipple and the areola have an eczematoid, scaly appearance. Examination of the left breast is unremarkable. Axillary lymph nodes are not enlarged. Abdomen is unremarkable.

Applications:

• Mammogram

• Laboratory tests results

Questions

1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. What additional diagnostics are required?
5. Suggest curative tactics.

6. A 76-year-old woman developed and gradually increased a diffuse cramp-like abdominal pain, nausea. She vomited several times without any relief, first with altered food and then with bile. A bloating, flatulence presents. Patient fell ill the day before, in her opinion, after the birthday party of the daughter-in-law. The last defecation occurred the day before yesterday. Patient underwent an open operation due to destructive cholecystitis, local peritonitis. History includes hypertension, she takes lisinopril, atorvastatin, clopidogrel as prescribed by her family doctor.

Objective examination: obese patient in a serious condition. Body temperature: 36.7°C; BP: 158/94 mm Hg; RR: 26/min. Pulse 108 beats/min, regular. The skin is dry and the conjunctiva is pink. The tongue is dry, covered with a yellowish plaque. Breath sounds are clear to auscultation.

Heart sounds are clear with accent of the second tone on the aorta. The abdomen is enlarged. Along the midline of abdominal wall, there is a deformed postoperative scar, in the middle part of which an asymmetric protrusion of 15 × 12 cm presents. An attempt of a palpation the protrusion is sharply painful, intense. Bowel sounds are uneven, with periodic amplification; the noise of "splash" is defined. Abdominal percussion reveals high tympanic sound.
Applications:
• Abdominal Radiogram
• Laboratory tests results.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the abdominal radiogram.
3. Assess the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

7. A 32-year-old woman complains of abdominal pain, fatigue, dizziness, frequent (up to 18 times a day) bowel movements with blood and mucus, low-grade fever, weight loss up to 20 kg during the year. She works as an accountant; does not smoke; takes a dry wine occasionally. She mentions episodes of joint pain.
The patient is exhausted and appears ill, has a pale skin and conjunctiva. Body temperature: 37.3°C. Blood pressure 106/60 mm Hg. Pulse 98 per 1 min. Breath and heart sounds are clear to auscultation. The abdomen is symmetric, participates in respiratory movements. Palpation of the abdominal wall reveals a pain in the projection of the colon, which presents as a spasmodic cord in the right half. Bowel sounds are decreased.
Applications:
• Colonoscopy picture
• Laboratory tests results.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the Colonoscopy.
3. Assess the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

8. A 62-year-old man complains of a cough with sputum, weakness, loss of appetite, weight loss, and shortness of breath when walking up the stairs. The sputum is dominantly mucus-purulent, sometimes contains a blood. Patient mentions episodes of joint pain as well. He has been smoking for 44 years, about a pack of cigarettes a day, so he considers cough as a common. He used to work as a mechanic and is now retired. He drinks strong alcohol two or three times a week.
Objectively: asthenic man with normal skin and mucous membranes. Body temperature: 36.8°C; RR: 22 / min; Pulse 78 beats/min; BP 138/82 mm Hg. The veins of the neck are not dilated. Cervical and axillary lymph nodes are not enlarged. There is deformation of the end phalanges of the fingers due to their thickening. A lung auscultation reveals decreased sounds in the lower left. On percussion a dull sound presents above a place of respiratory weakening. Heart sounds are clear. The anterior abdominal wall is soft and painless on palpation.
Applications:
• Chest CT scan
• Laboratory tests results
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.

3. Give an assessment of the laboratory parameters.
4. What additional diagnostics are required?
5. Suggest curative tactics.

9. A 59-year-old man complains of abdominal pain, weakness, nausea, and fever. He has been smoking for 42 years, about a pack of cigarettes a day. He works as a driver, prefers meaty, fatty foods; consumes a dry wine occasionally. Patient notices similar, but much lighter episodes in the past; the complaints disappeared usually in 1-2 days on their own.
The patient is of hypersthenic body type. Skin and mucous membranes are normal. Body temperature: 38.1°C. Blood pressure 146/90 mm Hg. Pulse 104 per 1 min. Breath and heart sounds are clear to auscultation. The abdomen is symmetric, participates in respiratory movements. Palpation of the abdominal wall reveals tenderness and moderate defense in the left lower quadrant. The rebound sign is negative. Bowel sounds are decreased. Rectal examination does not find any abnormalities.
Applications:
• Irigogram
• Laboratory tests results
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Assess the laboratory parameters.
4. Suggest surgical tactics.
5. Prescribe medication

10. A 62-year-old woman mentions an appearance and progression of weakness and weight loss (approximately 8 kg within last 3 months). Upon detailed questioning, it was found that the patient is prone to constipation, recently notices the appearance of black stools. She takes nebivolol, aspirin, simvastatin as prescribed by her family doctor. She has never smoked and does not drink alcohol. Her mother died at the age of 58 after surgery that was performed due to intestinal obstruction.
On examination: the patient appears ill. The skin is dry and the conjunctiva is pale. Body temperature: 36.8°C; RR: 16 / min; Pulse 62 beats/min. BP 142/80 mm Hg. Breath and heart sounds are clear to auscultation. The abdomen is symmetric, participates in respiratory movements. Palpation of the abdominal wall is painless, without defense. Bowel sounds are detectable. Rectal examination does not find any abnormalities in rectal ampoule; there is a black feces on a glove.
Applications:
• Irigogram
• Laboratory tests results
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. What additional diagnostics are required?
5. Suggest curative tactics.

11. A patient of 25 years complains of continuous pain in his right iliac region, the intensity of which decreases in the position of lying on the right side with bent legs, dry mouth, general weakness, fever up to 37.9°C, lack of appetite. The pain appeared in the epigastrium last evening. Two hours later the nausea and single vomit occurred. Pain increased till morning and moved to a right iliac area. The body temperature increased to 37.6°C, a pulse rate became 90 per min.

He has no significant past medical history and takes no medications. He smokes for about 4 years 7-8 cigarettes daily. Does not use strong alcohol, occasionally - beer and energy drinks.
T: 38.1°C; BP: 122/80 mm Hg; RR: 15/min.; P: 98/min, SpO2 98%.The patient is athletic appearing. Auscultation of the chest gives clear breath and cardiac sounds. Percussion of the chest is unremarkable. On palpation, the abdomen is markedly tender in the right lower region; there is involuntary guarding with a fairly rigidity and rebound tenderness. The liver and spleen are not palpable. Bowel sounds are slightly decreased.
Applications:
• Sonogram of the abdomen in the pain area
• Results of CBC.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the ultrasound examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

12. A 56-year-old man presents to the emergency room with a 3-days history of bouts of worsening abdominal pain, with nausea and vomiting. The pain is located mostly in right hypochondriac; radiates through to the right shoulder, right side of patients back. The fever, dry mouth, general weakness, lack of appetite, bloating are mentioned as well. The disease has begun, it is believed, after using of fried meat. Patient took pancreatin, drotaverin, amoxicillin, ibuprofen with a temporary effect. On further questioning, he admits to previous bouts of similar abdominal pain over the past 6 months but never so intensive. The history is marked with hypertension, which requires taking of perindopril/indapamide 1 tablet once a day. Patient works as a private entrepreneur; he does not smoke; consumes alcohol episodically.
Objective examination reveals rather heavy condition. T: 38.6°C; BP: 152/94 mm Hg; RR: 25/min.; P: 112/min, SpO2 96%. The patient is fatty appearing. The body mass index is 30.85. Scleras are subicteric. Auscultation of the chest gives clear breath and cardiac sounds. Percussion of the chest is unremarkable. The tongue is covered with yellowish bloom. There is abdominal tenderness in the right upper quadrant with guarding, especially during inspiration. Rebound sign is positive here. Tapping on the right edge arc is sharply painful. Bowel sounds are slightly decreased.
Applications:
• Sonogram of the abdomen in the pain area
• Results of blood tests.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the ultrasound examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

13. A 49-years-old fatty man presented with the attack of severe abdominal girdle pain that has appeared after the enormous eating of meat and fat meal. The pain is located in epigastria and left hypochondriac area, irradiates to the back. Severe nausea, multiple vomiting, which does not bring facilitation, takes place. Patient notes difficulty of breathing, weakness, delay of intestinal emptying. The condition is progressively worsened.
The patient is extremely heavy, the skin is pale, with cyanotic areas, and breathing is superficial. PR is 128 per min.; BP is 90/50 Hg mm, RR 28 per min.; SpO2 92%. Breath and cardiac sounds are rather clear. A tongue is dry, covered a white raid. An abdomen is moderately enlarged, with

gaseous distention, soft. Palpation reveals pain in epigastria and left hypochondric area, where the infiltration is noted. Peritoneal signs are negative. The Meyo-Robson`s sign is positive.
Applications:
• Sonogram of the abdomen
• Results of blood and urine tests.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

14. A 30-year-old man presents to the emergency department with sudden onset of severe epigastric pain and vomiting 3 hours ago. He reports a 6-month history of chronic epigastric pain occurring nearly every day and relieved by antacids. He takes two packs of cigarettes and several cups of coffee daily.
On examination, he appears sweaty and avoids movement. Vital signs reveal a temperature of 37.8°C, BP of 100/60 mmHg, pulse rate of 110/min, and respiratory rate of 14/min. His lungs are clear. The remainder of his examination reveals diminished bowel sounds and a markedly tender and rigid abdomen. Percussion of abdomen gives box sound above right chondric arc. Fairly rebound tenderness presents.
Applications:
• Radiogram of the abdomen
• Result of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

15. A 40-years-old thin man has been suffering from gastric ulcer for a long time. During last 2 days the pain became less intensive. At the same time, an increasing weakness, dizziness appeared. This morning, rising from a bed, he lost conscious on a few seconds. Patient is smoker, coffee drinker; avoids strong alcohol.
PR is 108 per min.; BP is 90/50 Hg mm, RR 26 per min.; SpO2 96%. The patient is moderately heavy, with pale skin. Breath and cardiac sounds are rather clear. There is none intensive pain in the epigastric area. Peritoneal symptoms are absent.
Rectal exam reveals black stool.
Gastro-duodenal endoscopy was performed, photo is added
Applications:
• Endophoto
• Results of blood test.
Questions
1. Determine a clinical diagnosis.
2. Describe the endoscopic picture.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

16. A 68-year-old man complains of ache in his right hypochondriac, which radiates through to the right shoulder, right side of the back, lumbar area; nausea and vomiting with the bile; low

grade fever; dry mouth, general weakness, lack of appetite, bloating. The pale stool and dark urine are mentioned as well. The disease has begun, it is believed, after using of fried fatty meat 3 days ago. Patient took pancreatin, drotaverin, amoxicillin, ibuprofen with a temporary effect. On further questioning, he admits to previous bouts of similar abdominal pain over the past 6 months but never so intensive and without any changes in the stool and urine. The history is marked with hypertension, which requires taking of perindopril/indapamide 1 tablet once a day. Patient is pensioner. He does not smoke; consumes alcohol episodically.
T: 37.6°C; BP: 144/90 mm Hg; RR: 21/min.; P: 112/min, SpO2 96%. The patient is fatty appearing. The body mass index is 31.22. Skin and sclera are icteric. Auscultation of the chest gives clear breath and cardiac sounds. Percussion of the chest is unremarkable. The tongue is covered with yellowish bloom. The exanimation of abdomen reveals the tenderness and moderate guarding in the right upper quadrant, especially during inspiration; with mild rebound pain. Tapping on the right edge arc is sharply painful. Bowel sounds are slightly decreased. Endoscopic retrograde cholangiography was performed.
Applications:
• Result of endoscopic retrograde cholangiography
• Results of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

17. A 45-year-old man presents to the emergency department in extremely poor condition. The patient is somnolent, flabby, adynamic, and in marked distress. He can not tell about the onset of the disease. According to the neighbor, who accompanies the patient, within 4 days did not leave the house. He is alone; abuse of alcohol. Not employed.
Vital signs reveal a temperature of 39.3°C, BP of 78/46 mmHg, pulse rate of 132/min, and respiratory rate of 32/min. Patient appears obviously exhausted. The skin is pale, the turgor is lowered. His lungs are clear. The remainder of his examination reveals markedly tender and rigid abdomen with absence of bowel sounds. Percussion of abdomen gives box sound with dullness downward. Fairly rebound tenderness presents.
Applications:
• Radiogram of the abdomen
• Result of blood tests.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

18. A 45-years-old man complains of a diffuse increasing pain in abdomen, mostly in right-side and in hypogastric area. The vomiting has occurred several times. The delay of gas and intestinal content evacuation is noted. History is remarkable by the appendectomy which has been performed several years ago. He is smoker; takes strong alcohol occasionally.
At the physical examination: the general condition is grave, body temperature is 37.6°C, pulse rate is 100 per min, BP is 110/70 Hg mm. Patient appears pale, diaphoretic and dyspneic. Breath and cardiac sounds are rather clear. Abdomen is asymmetric, with moderate pain at palpation, intestinal sounds are weak, and the Hippocratic (succussion) sounds are defined. Percussion gives box sound above abdomen.

Applications:
• Radiogram of the abdomen
• Result of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

19. A patient of 56 complains of the pain in muscles of the right thigh, foot and legs, which occur when walking at a distance of about 150-200 m. He mentions deterioration at the damp cold weather. Periodically, spastic abdominal pain is appearing after eating. Patient is a bricklayer; smokes more than 40 years, about a packet of cigarette a day. Alcohol consumes 1-2 times a week.
The man is of asthenic body structure. The skin looks normal. Mucous are of pale pink. BP: 140/76 mm Hg. PR: 68 per 1 minute. RR: 18 per 1 minute, SpO2 98%. Auscultation finds vesicular breath sounds. Cardiac sounds are rhythmic, clear. The abdominal wall is soft and painless on palpation. Intestinal sounds are as usual. Skin of the lower extremities is pale and dry; hyperkeratosis of nails, hypotrophy of muscles is present. Pulse on the arteries of the right leg and foot, the popliteal artery is not determined. The patient has an angiogram (attached).
Applications:
• Angiogram
• Result of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

20. The patient is 56 years old, complains of swelling and pain in the left leg, which progress. The disease began a day ago; symptoms arose in the evening after a long time sitting (the man is a driver). The patient come to physician, was examined by a surgeon, the ultrasound of lower extremities was performed. The man smokes about 40 years. History is marked with appendectomy in adolescence, allergy to penicillin in the form of urticaria.
BP: 140/76 mm Hg. PR: 68 per 1 minute. RR: 18 per 1 minute, SpO2 98%. The skin looks normal. Mucous are of pale pink. Auscultation finds vesicular breath sounds. Cardiac sounds are rhythmic, clear. The abdominal wall is soft and painless on palpation. Intestinal sounds are as usual. There is a left thigh swelling (an increase of 10 cm in comparison with the right one), a shin (an increase of 10 cm in comparison with the right one). The signs of Moses and Homans are positive
Applications:
• Sonogram
• Result of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of Sonography.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments).

21. The patient of 56 years old complains of a sharp pain in the left shin and foot, limiting of movements in the joints of the lower extremity. The pain has appeared suddenly; the patient immediately applied for help, was examined by a therapist, a surgeon, the ultrasound of the legs was performed. Patient smokes over 40 years, about a pack of cigarettes a day. The history is marked with myocardial infarction (4 years ago). Sometimes, the dyspnea on exertion comes. In case of deterioration of well-being, he asks for a doctor, however, he refuses to take the medicine regularly.
Patient appears moderately severe. BP: 118/76 mm Hg. PR: 118 per 1 minute. RR: 18 per 1 minute, SpO2 98%. The skin looks normal. Mucous are of pale pink. Auscultation finds vesicular breath sounds. Cardiac sounds are rhythmic, clear. The abdominal wall is soft and painless on palpation. Intestinal sounds are as usual. His left foot and lower third of the tibia are sharply painful and cold. The pulsation of the left femoral artery in inguinal area is clear, of other arteries of the extremity is not determined.
Applications:
• Angiogram
• Result of blood test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

22. A man of 27 complains of the pain in the right half of the chest (predominantly in the back, periodically radiates to the shoulder), which increases when trying to breathe deeper, cough; moderate dyspnea while walking. Back pain on the right appeared 2 days ago after the patient fell down on the stairs. The next day patient came to a family doctor; after a physical examination, a diagnosis was concluded: intercostal neuralgia; Ibuprofen was prescribed (200 mg daily). On the evening the dyspnea became worse, patient was admitted to emergency. Chest X-ray in frontal view was performed (attached).
T: 36.8°C; BP: 138/84; RR: 29/min.; P: 88/min.; SpO2: 92%. The patient is in moderate respiratory distress. His jugular veins are not dilated. Breath sounds are absent on the right and normal on the left. The chest is hyperresonant to percussion on the right and resonant on the left. Heart sounds are normal. The abdomen is unremarkable.
Applications:
• Chest X-radiogram
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Does the patient need any immediate aid?
3. Give the conclusion of the radiological examination.
4. Give an assessment of the laboratory parameters.
5. Suggest a surgical tactics.
6. Prescribe medications.

23. A 52-year-old man complains of fever up to 39°C, cough with purulent sputum with bad smell, moderate dyspnea, weakness. He mentions episodic hemoptysis as well. Patient fell ill three weeks ago after catching cold, did not come to the doctor. Patient has been smoking for 35 years, pack of cigarettes daily. He consumes alcohol 1-2 times a week; works as a welder.
T: 38.3°C; BP: 116/78 mm Hg; RR: 21/min.; P: 110/min.; SpO2: 94%. The body mass index is 20.62. The patient is diaphoretic, in moderate respiratory distress. The skin is pale. Breath sounds are normal on the left; but are decreased, with crepitation in the mid dorsal area on the

right. The percussion of the chest reveals resonant sound with the area of dullness on the right. Heart sounds are decreased. The abdomen is unremarkable.
Applications:
• Chest X-radiogram
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Give the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest a surgical tactics.
5. Prescribe medications

24. A 52-years-old man presents with the pain in the left half of the chest, fever up to 39°C, dry cough, dyspnea, which decreases in the position on the left side, weakness. He fell ill three weeks ago after catching cold, took paracetamol. Over time though, there was a decrease in the intensity of pain; but the dyspnea has appeared and gradually become worse. Patient has been smoking for 30 years, above pack of cigarettes a day.
T: 38.3°C; BP: 115/60 mm Hg; RR: 29/min.; P: 118/min.; SpO2: 90%. The patient is diaphoretic, in moderate respiratory distress and appears pale. Breath sounds are absent on the left lower area and normal on the right. The percussion of the chest reveals the dullness to the left downwards and resonant sound to the right. Heart sounds are decreased. The abdomen is unremarkable.
Applications:
• Chest X-radiogram
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Give the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest a surgical tactics.
5. Prescribe medications.

25. A 62-years-old man complains of the pain in the left half of the chest, fever up to 39°C, cough with expectorating a lot of grayish sputum with bad smell, severe dyspnea, which slightly decreases in the position on the left side, weakness. He fell ill three weeks ago after catching cold, did not come to the doctor. The dyspnea appeared suddenly last evening. Patient has been smoking for 45 years, above pack of cigarettes a day. He is alone; abuse of alcohol.
T: 38.3°C; BP: 115/60 mm Hg; RR: 29/min.; P: 118/min.; SpO2: 90%. The body mass index is 17.62. The patient takes orthopneic position, is diaphoretic, in severe respiratory distress and appears extremely poor. The skin is cyanotic, pale. Breath sounds are absent on the left and normal on the right. The percussion of the chest reveals the box sound above the 3rd rib with further dullness downwards on the left and resonant sound on the right. Heart sounds are decreased. The abdomen is unremarkable.
Applications:
• Chest X-radiogram
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Give the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest a surgical tactics.
5. Prescribe medications

26. A 36-years-old man complains of a fever (up to 39.9°C), pain in throat at swallowing, pain in neck and breast, chills, weakness. For two weeks, it is being treated for tonsillitis; despite the therapy, feeling worsens. The man smokes during 30 years, about half a packet of cigarettes a day, consumes alcohol episodically. There was an allergy to penicillin in the past.
Patient is grave. BP: 118/82; RR: 29/min.; P: 128/min.; SpO2: 92%. Auscultation finds vesicular breath sounds. Cardiac sounds are rhythmic, clear. The abdominal wall is soft and painless on palpation. Intestinal sounds are as usual. There is a swelling of tissues and hyperemia of the skin of the neck to the right, in supraclavicular area.
Applications:
• Chest CT
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Give the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest a surgical tactics.
5. Prescribe medications.

27. A 25-year-old man is brought to the emergency department after being stabbed in the chest during a bar fight. The patient was given 2 liters of normal saline en route to the hospital due to hypotension.
T: 35.9°C; BP: 85/40; RR: 25/min.; P: 138/min. The patient is in moderate respiratory distress and appears pale. His skin is clammy, and you notice marked jugular venous distension. The stab wound is deep, to the left of the sternum in the 5th intercostal space. Breath sounds are normal and clear bilaterally. His chest is resonant to percussion bilaterally. Heart sounds are faint and distant. Peripheral pulses are weak. He is disoriented and unable to answer questions.
Applications:
• Radiogram of the thorax
• Result of blood tests.
Questions
1. Determined a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. What is the first aid?
6. Propose the medication (in the form of prescriptions or appointments)

28. A 32-year-old man presents with a chief complaint of difficulty swallowing. His dysphagia has become gradually worse over the last 6 months and is equal for solids and liquids. He also mentions bouts of severe chest pain when drinking ice water. He denies heartburn, fever, exertional chest pain, and dyspnea, but does admit to a 5-pound weight loss during the last 6 months, primarily due to eating less because of the difficulty and chest pain he has when attempting to eat. He also mentions occasional regurgitation of undigested food when lies down to go to sleep at night.
T: 36.8°C; BP: 118/75; RR: 14/min.; P: 62/min. The physical exam is unremarkable. Specifically, lymphadenopathy, skin changes, heart murmurs, and abdominal tenderness are not present.
Applications:
• Esophagogram
• Results of laboratory tests.
Questions
1. Formulate a clinical diagnosis.
2. Give the conclusion of the ultrasound examination.

3. What diagnostic methods should be used to confirm the diagnosis
4. Give an assessment of the laboratory parameters.
5. Suggest a surgical tactics.
6. Prescribe medications.

29. A 35-year-old man is brought to the emergency department after a severe auto accident in which he was a restrained passenger. The man complains of severe abdominal pain with some radiation to the shoulder area and some mild shortness of breath. He has no significant past medical history, takes no medications, and denies using alcohol or other drugs.
T: 36.6°C; BP: 125/85; RR: 18/min.; P: 84/min.The patient is healthy appearing. He has mild tachypnea, and bowel sounds can be heard in the left lower thorax. Head and neck exam is normal. Abdominal exam is remarkable for minimal diffuse tenderness to deep palpation and normal bowel sounds. On extremity exam, there is no pain with palpation or limitation of active and passive motion of the left arm and shoulder. Stool is negative for occult blood.
Applications:
• Radiogram of the chest
• Result of blood tests.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

30. A 52-years-old man complains of periodic abdominal pain, heartburn, which is significantly enhanced in the position of lying, at bending; bouts of air, sometimes - with food or bile. He is ill for about two years. Patient takes antacids occasionally, which gives a short-term reduction of heartburn. He was examined 2 months ago with esophagoscopy, redness of the esophageal mucosa with erosions in its terminal part; reflux of the gastric content was revealed. The man is a driver; sometimes he lifts some heaviness. He smokes over 30 years, at least a pack of cigarettes a day; does not use alcohol; takes 3-4 cups of coffee daily.
The man is of high nutrition, body mass index is 34.2. Skin and mucous are common. Peripheral lymph nodes are not enlarged. T: 36.6°C; BP: 125/85; RR: 18/min.; P: 64/min. The physical exam is unremarkable.
Applications:
• Barium X-rays of esophagus and stomach.
• Result of laboratory test.
Questions
1. Determine a clinical diagnosis.
2. Formulate the conclusion of the radiological examination.
3. Give an assessment of the laboratory parameters.
4. Suggest surgical tactics.
5. Propose the medication (in the form of prescriptions or appointments)

List of medicines for use in response to the tasks of Station 3

Rp.: Sol. Ketorolac 3% -1ml
D.t.d. № 10 in amp.
S.: 3 times a day I.M.

Rp.: Sol. Diclofenaci 2,5% - 3 ml
D.t.d. №10 in amp.

S.: Once a day I.M.

Rp.: Sol. Nalbuphini 1% 1 ml
D.t.d № 5 in ampullis
S.: 2 times a day I.M.

Rp.: Sol. Morphini hydrochloridi 1% -1 ml
D.t.d. № 10 in amp.
S.: For I.V., I.M. administration every 6 hrs.

Rp: Sol..Metronidazoli 0,5% -100 ml
D.S.: 3 times a day I.V.

Rp: Meropenem 1.0 №10
D.S.: 3 times a day I.V. after dissolving in 100 ml of saline sol.

Rp: Ceftriaxoni 1,0
D. t. d. №10
S.: 2 times a day I.V. after dissolving in 100 ml of saline sol.

Rp.: Cefepimi 1,0
D.t.d №10
S. 2 times a day I.V. after dissolving in 100 ml of saline sol.

Rp.: Sol.Amikacini 25% - 2 ml
D.t.d № 10 in ampullis
S. 2 times a day I.V. after dissolving in 100 ml of saline sol.

Rp: Ciprofloxacini 0,2 №10
D. S.: 2 times a day I.V.

Rp: Laevofloxacini 5% 100 ml N10
D.S.: Once a day I.V.

Rp: Amoxycillini/Klavulanati 0.875/0.125 №10
D.S.: 3 times a day I.V. after dissolving in 100 ml of saline sol.

Rp: Sol. Hydrocortizoni 2,5% 2ml
D.t.d.№10 in amp.
S.: For I.V., I.M. administration

Rp.: Sol. Prednisoloni 3% 1ml
D.t.d. № 10 in amp.
S.: For I.V., I.M. administration

Rp.:Sol. Heparini 5 ml (1 ml-5000 MO)
D.t.d. № 1
S.: For I.V., administration every 6 hrs. under control of blood clotting time

Rp: Sol. Enoxaparini 10% 0,4 ml
D.t.d. № 6 in amp.
S.: Once a day 0,4 ml subcutaneously

Rp.: Sol. Lidocaini hydrochloridi 2% - 2ml
D.t.d. №10 in amp.
S.: For local anesthesia.

Rp.: Pantoprazoli 0,02 №5
D.S.: 2 times a day I.V. after dissolving in 100 ml of saline sol.

Rp.: Sol. Glucosae 5% - 200 ml
D.S.: For I.V. administration

Rp.: Sol. Natrii chloridi 0,9% - 200 ml
D.S.: For I.V. administration

Rp.: Sol. Adrenalini hydrochloridi 0,1% -1ml
D.t.d. № 10 in amp.
S.: For I.V. administration in saline sol.

Rp.: Sol. Noradrenalini hydrotartratis 0.2%-1 ml
D.t.d. № 10 in amp.
S: For I.V. administration in 500 ml of saline sol.

Rp.: Sol. Dobutamini 0.5% -50ml
D.t.d. № 10 in amp.
S.: For I.V. administration in 500 ml of saline sol. 2,5-10 mkg/kg

Rp.: Sol. Amiodaroni 5% 3ml
D.t.d. №.10 in amp.
S.: For I.V. administration in 500 ml of saline sol.

Rp.: Sol. Natrii oxybutiratis 20% -10 ml
D.td. № 10 in amp.
S.: For I.V. administration 50 -120 mkg/kg

Rp.: Sol. Atropini sulfatis 0.1% -1 ml
D.t.d. № 10 in amp.
S.: For I.V. administration in saline sol.

Rp.: Sol. Furosemidi 1% -2ml
D.t.d. № 10 in amp.
S.: For I.V. administration in saline sol.

Rp.: Ac. tranexamici 0.5 (5 ml) in amp. №5
S.: 2 times a day I.V.

Rp.: Fresh frozen plasma 200 ml
D.S.: For I.V. transfusion after thawing

Rp.: Red cell mass 200 ml
D.S.: For I.V. transfusion after tests on a group and Rh identity, individual and biological compatibility