

**Ministry of Health of Ukraine**  
**The National Pirogov Memorial Medical University, Vinnytsia**

Specialization  
Subject

General Medicine (M.D.)  
Surgery, pediatric surgery

**Tasks for scenarios at objective structured clinical exam  
on surgery, pediatric surgery**

**Case 1**

Lately in the evening on the bench near the admission department, under the lantern was found a young man without any signs of life. Ampty ampoules with morphine and syringe were found near. The consciousness level according Glasgow coma scale is 4 (deep coma). On the monitor – breathing is absent, bradycardia 40 bpm, hypotension 50/0 mmHg. Clinically – pointed pupils, facial cyanosis, recent injection points on the forearm.

**Control questions:**

1. Why patient is not talking, orient in the space and time?
2. What substance caused intoxication?
3. What is the coma depth?
4. The main syndrome of tanatogenesis (emergency condition) during the examination of the patient?
5. How to provide the support of the vital functions of the patient ?
6. What antidote and in what dose should be used ?

**Case 2**

Patient 64 years was delivered to the admission department with the following clinical signs: obtunded, distant rales, skin is pale with cyanotic coloration, covered with sweat. HR 100 bpm, BP 180/90 mmHg, RR 35 per minute. Crepitus, diminished respiration, fine crackles in the lower part of the lungs.

Control questions:

1. Which circumstances of the deterioration of patients condition are important?
2. What are typical symptoms of respiratory failure in pulmonary edema?
3. What state has such typical auscultation pattern?
4. Assess patient's hemodynamics as the etiological factor?
5. How to decrease venous return and what foam suppressants do you use?
6. What hypotensive drugs and nitroglycerine are administered for?
7. What dexamethazone, diuretics are used for in pulmonary edema?

**Case 3**

Patient A., 22 y.o. was delivered to the hospital by the ambulance. General condition is severe, patient is obtunded, adynamic. Upper lids are dropped, patient can not open her eyes without help. Complaints of the general fatigue, multiple vomiting, oral dryness, blurred vision, difficulties with swallowing even of the liquid food. Skin is pale, tonus of the skeletal muscles is decreased, attenuated heart sounds, HR 130 bpm, BP 90/35 mmHg, BR – 32 per minute. Meningeal signs are absent, subfebrile body temperature. Patient have eaten meat conserves prepared at home.

**Control questions:**

1. Which disease is linked to the consumption of meat conserves?
2. What are typical complaints in patients with botulism?
3. What are typical physical signs during examination in patient with botulism?
4. How to prevent further adsorption of the toxins from GIT?
5. What is specific therapy?
5. What other treatment are used?

**Case 4**

Mother with the 9 months old boy referred to the admission department of the hospital. Child became ill abruptly with the temperature elevation to 39.0 C. Difficulties with breathing at rest, increased BR with periods of apnea. Objectively: child is severely obtunded, react to the significant irritation, heavy breathing, hypertension, tachycardia, skin cyanosis. Breathing – tachypnea with periods of apnea, auscultative pattern – crackles.

Control questions:

1. What are the circumstances of the disease progression?
2. Determine symptoms of the RF?
3. Which disease is this typical for and what is the stenosis degree?
4. Which method should be used to provide the airway passage?
5. What is the purpose of oxygen therapy and sedation?
6. What drugs are used in stenotic laryngotracheitis?

### Case 5

Mother with a 6 y.o. boy referred to the admission department. The child fell from the skateboard, complaints of the pain in the left hip, significant increase of the left hip in size, **Objectively.** Consciousness – Glasgow coma scale score is 9-10; skin – pale with cyanotic palor, mucous membranes are dry, skin turgor is severely decreased in the form of the tent, whit spot symptom is over 5 sec, blood pressure 70/10 mmHg, tachycardia. Swelling of the soft tissues, hematoma of the significant size in the area of the left hip.

**Control questions:**

1. How is the patient condition linked to the trauma episode?
2. Determine cardiovascular symptoms during the examination?
3. Determine the emergency condition and the shock degree?
4. What are ways of the infusion therapy provision, purpose of oxygen therapy?
5. Methods of the blood volume correction.
6. What adrenomimetic drugs are used and when?
7. What hemostatic therapy is used?
8. What is a replacement therapy with blood components?

### Case 6

Patient 44 years, who had hip joint replacement 6 days ago, is in the traumatologic department. Suddenly lost consciousness in the toilet after the strain, where he was found by medical staff. Objectively: pronounced dyspnea 35 / min, evident cyanosis of the upper half of the chest, swelling of the cervical veins. During examination, patient is in consciousness, pulse 120/ minute, BP 100/65 mm Hg. Determine the nature and scope of the pathological state of emergency aid.

Questions for control:

1. What circumstances of the deterioration of the patient's condition are important for the diagnosis?
2. What are the main symptoms of respiratory failure?
3. What disease is characterized by this type of cyanosis and swelling of the cervical vein? Why?
4. What are the reason for oxygen therapy?
5. For what purpose and what dosage of anticoagulants should be prescribed?

### Case 7

Patient 42 years old treated in intensive care with crush syndrome. Laboratory examination: urea - 28.4 mmol/L; creatinine - 820 mmol/l; K+- 7.2 mmol/l; Hb - 76 g/l; Er. - 2.4 \* 10<sup>12</sup>/l. Diuresis 50 ml/day. Which complication appeared? Assign the treatment.

Questions for control:

1. What complications arose and what stage of acute renal patient has?
2. What are the main criteria of oligoanuric stage of ARF (normal urea, creatinine)?
3. What is the rate of potassium in the blood serum.
4. Basic principles of first aid at oligoanuric stage of acute renal failure.
5. What methods are used for extracorporeal detoxification?

6. Other ways to eliminate hyperkalemia?
7. How to reduce the catabolism of the patient?
8. Other ways of correction of homeostasis?

### **Case 8**

Lady explained that her 14 y old girl was complaining on nausea, vomiting, five hours after she had meal of fresh cooked honey mushrooms. During examination – depressed consciousness, body T 37,5°C. The skin is pale, rare hemorrhagic rash, covered with cold sweat. Pulse 80 per minute, rhythmic. BP 100/60 mm Hg. Cardiac tone are clear, rhythmic. Above the lungs vesicular breathing. The abdomen is soft, painful on palpation near the belly button and right in the hypochondrium, the liver protrudes 1.5-2 cm from the edge arc. Stool is liquid. PTI 51%. ALT 2.1 mmol/l, bilirubin 88 mmol/l.

Questions for control:

1. Under what circumstances these complaints and clinic have arised?
2. What features were found on palpation of the abdomen?
3. What changes were found in laboratory studies?
4. What additional laboratory tests should be performed to verify the diagnosis?
5. What is the initial therapy (to prevent further absorption etc.)?
6. What extracorporeal methods of detoxification should be applied, when?
7. What antidote should be introduced?
8. What pathogenetic therapy of poisoning by Amanita phalloides?

### **Case 9**

The patient is in the intensive care unit with acute renal failure, unspecified (N 17.9). The last few days marked increase in urine output to 4 liters, which does not depend on volume of injected fluid. Complaints of nausea, vomiting, dizziness. Pulse - 134 per min., Blood pressure - 100/65 mmHg, body temperature - 37.20C. Blood electrolytes Na + - 132 mmol/l, K+ - 2.3 mmol/l, Cl- - 91 mmol/l. Which complication appeared in the patient? Assign treatment.

Questions for control:

1. What stage of acute renal failure patient has?
2. What are the main criteria of polyuric stage in ARF (normal creatinine, urea serum level)?
3. What is normal serum potassium?
4. Basic principles of emergency care in the polyuric stage of acute renal failure?
5. What solutions should be used for correction of hypokalemia?
6. Which solution should be used for energy needs?
7. What diet should be used?

### **Case 10**

The woman 32-years old was delivered at the admission department accompanied by her husband. The consciousness is broken, 7-8 points by Glasgow scale. BP 90/60 mmHg, pulse – 98 per minute, Kussmaul breath, acetone smell. Glycemia – 18,5mmol/l, pH of the blood 7,05; BE – 6mmol/l; capacity of bicarbonate buffer 10 mmol/l; urine acetone +++++. According to her husband has diabetes the first type. For the last 7 days she received ceftriaxone because of left-side lower lobular pneumonia.

Control questions:

1. Which circumstance defines the severity of patient's condition?
2. What is the leading syndrome in the patient's examination?
3. Determination of the depth of breach of consciousness.
4. What manipulations are necessary?
5. Identify the directions of intensive therapy.

### **Case 11**

The woman 82-years old was delivered in the ICU with the breach of consciousness 10-11 points by Glasgow scale and with complaints of thirst, weakness and nausea. Objective condition: reduction of skin turgor , the eyeballs are soft. BP 85/60 mmHg, pulse is arrhythmic – 106 per minute.

Laboratory values: glucose of blood – 40 mmol/l; sodium – 150 mmol/l; chlorine – 115 mmol/l potassium – 4,8 mmol/l. Osmolarity of the plasma – 345mmol/l. Ketouria is absent. Anamnesis data: coronary heart disease, hypertonic disease and diabetes type 2. For the last two weeks she received diuretics.

Control questions:

1. What circumstance more likely provokes deterioration of the patient's condition?
2. What is the leading syndrome in examination of the patient?
3. What kind of the breach of consciousness accords to 10-11 points by Glasgow scale?
4. Determination of a kind of water and electrolyte balance breach.
5. The directions of intensive therapy?

### Case 12

The patient, which is treated because of acute appendicitis, has dizziness, severe general weakness, difficult breathing and rashes which appeared during the intravenous injection of ceftriaxone. Pulse – 100 per minute, BP – 40/0 mmHg. There is wheezing in the lungs, exhale sharply increased. From the anamnesis it is known that the patient didn't suffered from bronchial asthma. Determine the pathological condition and the amount of urgent aid.

Control question:

1. What are the reasons of deterioration of the patient's condition?
2. Should we stop the infusion of ceftriaxone?
3. Determine the leading syndromes in examination of the patient.
4. What are the ways of the correction of blood pressure.

### Case 13

In the hospital dining room, during eating cherries, the patient has suffered the asthma attack (asphyxia), difficult inhale - the patient became blue and lost consciousness. There is ineffective inhaling movements of the chest, auxiliary muscles take part in the process of breathing. During the examination of the patient we can see pronounced diffuse cyanosis, muscles hypotonia, pulse – 40 beats / min, blood pressure - 50/30 mmHg.

Control questions:

1. What caused the deterioration of the patient?
2. What is the type and severity of respiratory failure?
3. What emergency care should be provided?
4. Symptomatic therapy in the absence of respiration after the restoration of the patency of the upper respiratory tract.

### Case 14

The patient, 45 years old, was delivered by the "ambulance" to the admission department. During 14 years sufferers for bronchial asthma. Without any control used salbutamol and berotek (one and a half bottle during 2 days). At the admission department: can't sit without help, "moan" breathing, does not have any reaction on the appeals, when touched the patient - a sluggish mimic reaction. General cyanosis. Independent breathing with significant prolonged exhalation, SpO<sub>2</sub> 39%. Heart tones are deaf, arrhythmic. Arterial pressure 40/20 mm Hg.

Control questions:

1. What is the reason of patient's severe condition?
2. What is the type and degree of respiratory failure?
3. Diagnosis?
4. Methods of hypoxia correction?
5. Methods of bronchospasm correction.

### Case 15

A 23 years old patient came to the emergency department of the hospital with complaints of abdominal pain, nausea, vomiting, diarrhea, which occurred during 1 hour after eating mushrooms with red hats. Objectively: the skin is pale, covered with sweat, cardiac bradyarrhythmia, increased intestinal peristalsis, hypersalivation, pupils are constricted, myoclonic muscle twitching. Arterial pressure 80/50 mm Hg, Pulse 46 min.

Control questions:

1. What is the reason of patient's severe condition?
2. The leading syndrome during examining the patient?
3. What is the emergency care in such situation?
4. What antidote and in what dose should be used?
5. What are the primary measures for the correction of hemodynamics?

#### **Case 16**

The general practitioner doctor conducted revaccination of patient A., 26 years old. After 5 minutes, the woman complained of dizziness, weakness, and an urticaria rash appeared all over her body. During examining AP-50/20 mm.Hg, pulse - on the peripheral vessels 140/min, weak filling, breathing rate - 26/min.

Control questions:

1. The leading symptoms of a possible pathology?
2. To make a preliminary diagnosis.
3. To determine the clinical form of shock.
4. To provide emergency care.

#### **Case 17**

An emergency medical aid team was called to the patient P. 15 years old. The sister said that the brother was repairing the table electric lamp, a short circuit took place and the brother fell down to the floor. Objectively: There are signs of an electric current's entrance on the front surface of the body. Consciousness and reflexes are absent, pulse is absent on the carotid artery. Ventricular fibrillation was diagnosed on the ECG after arrival of an ambulance.

Control questions:

1. What is the cause of difficult condition of the patient?
2. What is the diagnose?
3. What is the emergency aid?
4. What is the intensive care?

#### **Case 18**

In the patient P. 20 y.o., on the 2nd day after removal of puffy caudal cyst in the surgical department appeared anxiety, diarrhea, general weakness, shortness of breath. Objectively: Extremities are cold, there is acrocyanosis, cold sticky sweat.

BP - 60/20 mm Hg, heart rate - 135 beats / min., respiratory rate - 29 / min, body T - 39.5 ° C. Peristalsis is enhanced. Laboratory examination - leukocytes -  $22 \times 10^9 / l$ , stab / l - 32%, seg / l - 43%, lymph. - 25%.

Control questions:

- 1 Identify the main symptoms of possible pathology.
2. Provide a preliminary diagnosis.
3. What additional examination methods are needed to clarify the diagnosis?
4. Determine the way of stabilizing of hemodynamics .
5. Define the nature of antibiotic therapy.

#### **Case 19**

A family doctor was called to a patient 20 y.o. due to loss of consciousness. From anamnesis: the condition deteriorated after meeting with school friends. At the beginning there was a violation of stability, speech impairment, disorientation in space and personality, nausea, vomiting. Objectively: skin and visible mucous membranes are pale, BP-100 / 70mm Hg, heart rate-110 beats / min, heart sounds are sonorous. Respiratory rate - 20 / min, SaO<sub>2</sub>-92%, snoring is noted. There is vesicular breathing with conductive wet wheezes above the lungs. Peristalsis is present. Tone of the muscles is decreased. Cortical and vomiting reflex is absent. The pupils are narrowed, react to light. Symptoms of irritation of meningeal membranes are negative.

Control questions:

1. Why does the patient not speak, is not oriented in space and time?
2. What is the leading syndrome in the patient's examination?

3. Define the coma's depth
4. How to provide the vital functions?
5. What stages of forced diuresis do you know?

### **Case 20**

An attractive woman 23 y.o., who had been treating outpatient long time due to having an ulcer on her leg that could not be healed, was delivered to a surgical department. The neighbors of the ward noticed that the patient made an injection to herself, after that she suddenly become hungry but she did not have enough food to eat. In 10-15 minutes, the patient became anxious, muscles became hypertonic, facial hyperemia appeared, later these symptoms changed to loss of consciousness.

Objectively: Patient is unconscious, the pupils are enlarged, the reaction to pain stimulation is preserved. The skin is wet, cold and pale, skin turgor is preserved. There are signs of a large number of injections on the skin, there is a venous catheter in the cubital vein. Convulsive readiness is increased. On the monitor connected to the patient: respiratory rate 12 per minute, tachycardia 110 beats / min., blood pressure 90/50 mmHg, blood saturation 92%. Laboratory examinations are not available.

Control questions:

1. Why does the patient not speak, is not oriented in space and time?
2. Ways of defining of the depth of the coma, the presence of convulsive readiness?
3. How to find the signs of subcutaneous injections?
4. What is the cause of cold sticky sweat, high appetite?
5. What antidote was given? Dose?

### **Case 21**

Patient U, 29 years old, at the factory received a blow with a metal armature in the area of the right shoulder.

When examined, swelling of the right supraclavicular fossa, pain in palpation of the right collarbone, crepitation of the chips, shortening of the right half of the shoulder girdle is determined. In the back of the right shoulder girdle the wound is 3 × 5 cm in size, and bone fragments are visible in the wound. X-ray: a fragmented fracture with displacement is determined.

1. Justify the clinical diagnosis.
2. Which method of treatment should you recommend?
3. Specify the terms of recovery of disability.

### **Case 22**

Patient N, 18 years old, fell down from a bicycle. The patient complains about pain in the left shoulder region, limitation of movement in the shoulder joint.

At inspection: the patient's left arm presses to the chest and supports the elbow to the right. The left shoulder is shortened. Swelling and deformity are determined in the projection of the collarbone. After palpation of edema is pain and crepitation of bone fragments. Active movements in the shoulder joint are limited and painful.

1. Make a preliminary diagnosis.
2. Specify a typical offset of the bone fragments.
3. Which method of treatment is advisable to apply?

### **Case 23**

A worker, 28 years old, had been injured by the metal beam on the right shin. Within 1 hour from the moment of the injury, he was hospitalized to the traumatological department of the hospital in a state of moderate severity.

There is a wound measuring 10 x 3 cm on the anterior-internal surface of the upper third of the right shin, significant deformation and shortening of the leg. When you try to move the damaged leg, the shin bends in place of injury (pathological movements).

1. Which your diagnosis?
2. What is the treatment tactic?

### **Case 24**

A 80-year-old male patient sustained his injuries by falling down. The patient in a horizontal position, Clinical examination revealed the presence of deformities in the area of the proximal parts of femur with pathological mobility of bone fragments. Clinical examination also revealed the right leg rotation. The patient can not raise a leg straightened in the knee joint, instead he bends it, and the leg slips heel in bed (the symptom of the "heel"). Tapping on the heel and the big swivel is painful.

1. Your diagnosis?
2. What additional research is required to complete?
3. What is the tacti?

#### **Case 25**

The builder, 44 years old, during his work fell from the 3rd floor of the building waste. Patient had been delivered to traumatic department hospitals. Clinical examination: the right femor is shortened and deformed in the middle third. Palpation is painful, pathological mobility at the site of injury is determined.

The patient can not raise his own straightened leg independently. There is a wound (12x4 cm ) on the front surface of the right femor in the middle third, in which bone fragments are visible.

1. Diagnosis?
2. What is the method of treatment shown

#### **Case 26**

Patient, 28 years old, complains about of pain in the left elbow joint, disruption of movements in it. Patient had injured due to falling on curved elbow.

Examination: the left arm, bent in the elbow, maintains the opposite to the forearm. The elbow is enlarged in volume, pronounced swelling along the back of the joint. Palpation of the olecranon is painful, broken Hyuter triangle, retraction between fragments. Active extension of the forearm is impossible, passive - painful.

1. Make a preliminary diagnosis.
2. What method of treatment is expedient to apply and what is it about?

#### **Case 27**

Patient L., 57 years old, turned to the emergency room with complaints of pain in the area of the radial-wrist joint, dysfunction of the wrist. Trauma results due to falling into the arm with an emphasis on the bent wrist.

Examination: Left forearm swelling in the bottom third, there is a "bayonet" deformation. The wrist is in the bending position. Fingers of the wrist are in a semi-bent position. Palpation- severe pain. Movement in the joint is sharply limited, sensitivity in the fingers is not impaired.

1. Formulate the diagnosis?
2. Specify the types of displacement of peripheral bone fragments.
3. What method of treatment is advisable to apply?

#### **Case 28**

The Patient of 60 years slipped on the sidewalk, when falling banged by palm. She complains of pain when movements in the right wrist. Examination: right forearm swelling in the bottom third, there is a "bayonet" deformation. The pressure on the distal part of the radial bone is sharply painful.

1. Specify the diagnosis of damage. Specify the types of displacement of peripheral bone fragments. Method of anesthesia in the practice of flare.
2. What method of treatment is advisable to apply and what is it?

#### **Case 29**

Patient K, 52 years old, complains of pain in the right shoulder, violation of the function of the limb. Trauma due to falling on the shoulder.

Examination: The shoulder is enlarged in the volume due to swelling, there is an angular deformation of it in the lower third. Palpation: cutting tenderness, crepitation, pathological mobility in the lower third of the shoulder. Wrist in position of palmar bending, unbending of it and removing of 1st finger impossible. It is also absent the skin sensitivity in the field of "anatomical snuff", the

pulsation on the radiation artery is preserved. X-ray: there is a fracture line on the border of middle and lower thirds with displacement of bone fragments.

1. Formulate clinical diagnosis, which complications occurred in the patient?
2. Identify the tactics of treatment.
3. Specify the terms for restoration of the function of the limb.

### **Case 30**

A young girl fell down on the stairs. Patient had been hospitalized to the traumatological department.

Examination: Left knee joint is increased in volume (hemarthrosis). The local pain in palpation of the knee joint is determined. Bending of the knee causes pain. Patient cannot raise the unbending of the knee-joint leg. Palpation: diastasis is determined between the fragments of the patella.

1. Diagnosis?
2. Specify the method of treatment and timing immobilization.

### **Case 31**

The woman, 38 years, fell down on the detached arm, felt a sharp pain in the right shoulder joint.

Clinical examination data: swelling, deformity of the upper third of the shoulder, hematoma in the inner surface of the humerus. The limb axis is deformed. The patient keep her hand in a forced position. Active movements in the shoulder joint are impossible due to pain, passive - sharply painful and restricted. Palpation: local pain below the tubercle greater of the humerus.

1. Establish a preliminary diagnosis.
2. Which method of examination is needed to clarify the diagnosis?
3. Specify the treatment method and duration of immobilization.

### **Case 32**

The patient, 36 years old, was delivered by ambulance to the traumatological centre with complaints of pain in the right forearm, disturbance of the function of the arm, the presence of a wound in the right forearm. Trauma was a result of an accident.

Clinical examination data: the right arm is immobilized by splint. Pronounced edema of the forearm and its deformation, shortening of the forearm. Palpation: in the middle third of forearm there is sharp pain, crepitation and pathological mobility. On the outer surface of the shoulder in the middle third of the forearm - wound of 3 × 8 cm, moderate bleeding, characterized by significant damage to soft tissues and contaminated, bone fragments are visible in the wound.

1. Establish the diagnosis.
2. Specify method of treatment

### **Case 33**

The patient, 24 years old, fell on his feet from the balcony of the 4th floor. Felt a sharp back pain. Was not able to stand by himself. Examination: decreased lumbar lordosis, visible tension of the muscles like "patterns". Movements in the lumbar spine are sharply limited due to increased pain. The axial load on the spine causes severe pain. During palpation of the spinous processes - pain in the area of Th12 – L1 vertebrae with the simultaneous attempt to raise the protruded legs. Neurological symptoms are negative.

1. Establish a preliminary diagnosis.
2. Specify the treatment method and duration of immobilization?

### **Case 34**

The patient complains of pain in the pelvis area, a disturbance of the function of the lower extremities. Fell down on the buttocks at a height of 2 m. Examination: the position is forced (positive symptom of Volkovich), asymmetry of the pelvis – anterior superior iliac spine dextra is situated higher than sinistra. In the area of the pubis on the right side - edema, pain during palpation. Shortening of the right leg for 3 cm and positive symptom of "adherent heel" is present. Symptoms of Vernevy and Larrey are also positive.



1. Establish a preliminary diagnosis.
2. Specify the treatment method and duration of treatment?

### **Case 35**

The woman walked quickly to the bus stop and turned her left foot to the inner side. As a result of this injury there were severe pain in the ankle joint. Examination: the area of the lateral ankle is swollen, painful during palpation, crepitation in this place is present. The movements in the ankle joint are painful and limited.

1. Establish a preliminary diagnosis.
2. Which method of examination is needed to clarify the diagnosis?
3. Specify the treatment method and duration of immobilization.

### **Case 36**

The patient, 22 years old, was delivered to admission department of hospital with complaints of pain in the area of the right shoulder joint, which increases during movements. The day before fell to the lateral surface of the shoulder.

Examination: in the area of the clavicular-acromial joint swelling and deformity are present. During palpation we see pain and positive symptom of the "piano key".

1. Make a preliminary diagnosis.
2. Which method of examination is needed to clarify the diagnosis?
3. Further treatment tactics.
4. Specify the terms of immobilization.

### **Case 37**

Patient, 35 y.o., fell into elongated and detached arm 12 hours ago. He complains of pain in the left shoulder joint, the impossibility of movements. The left arm is in the position of abduction, the patient supports the left forearm with his right hand. Depression of deltoid muscle is determined. The acromial process is clearly contoured under the skin. Active motions are impossible. Increasing pain and resistance is determined in case of try to bring the shoulder to the chest.

1. Specify the previous diagnosis.
2. Diagnostic method.
3. Method of treatment.
4. Terms of fixation.

### **Case 38**

The patient, 41 years old, delivered by ambulance in 1 hour after the road accident, complains of intense pain in the right hip joint, the impossibility of movements in the joint. Examination: the right leg is rotated to the middle, half flexed in the hip and knee joints. Visually significant shortening compared of the left foot is present. The trochanter greater is located above the Rose-Nelathon line. Active movements in the hip joint are absent, passive - resistente and elastic fixed.

1. Make a preliminary diagnosis.
2. Method of treatment, therapeutic immobilization, terms of immobilization

### **Case 39**

Patient, 34 years old, fell down from a height of 3 m on his bended legs. Complaints of the pain in the left hip joint, impossibility of movement. Examination: lies on the back, the left leg is semi-bent in the knee and hip joint, laid out and rotated outwards. The trochanter grater is not palpable. Active motions are impossible, passive painful, elastic.

1. Make a preliminary diagnosis.
2. Method of treatment, therapeutic immobilization, terms of immobilization

### **Case 40**

Patient, 18 years old, fell on the extended arm. Felt a sharp pain in the elbow joint, active movements became impossible. Examination: the elbow is deformed. Forearm is shortened, bent at an

angle of 130 degrees. The elbow protrudes outwards and backwards. Huter's triangle is broken. Active movements are impossible. Elastic resistance and increased pain of forearm is determined.

1. Make a preliminary diagnosis.
2. The volume of the first medical aid.
3. Method of treatment.
4. The method of therapeutic immobilization, the term

#### **Case 41**

A boy of 16 years old boy turned to polyclinic with complaints about discomfort and pain in the inguinal area (along the spermatic cord) and a testicle on the left, which are amplifying during physical activity, turned to the clinic.

Objectively: the skin of the scrotum is subtle, is sagging in the left part, "worm-shaped" expanded veins of spermatic cord and testicles are contouring and detecting in palpation. Valsalva's test is positive.

Questions:

1. Put the previous diagnosis.
2. What diseases should be put differential diagnosis with?
3. Describe the methodic of conducting a Valsalva's test?
4. What additional examinations should be used to clarify the diagnosis?
5. Identify treatment tactics?

#### **Case 42**

Parents of a four-age-old girl complain that the child's head is constantly tilted to the left, which caused them considerable anxiety.

In examination, the child's head is tilted in the left side, the chin is turned in the right. An attempt to passively move the head in to the straight position is not successful because of the significant tension and shortening of the left sternocleidomastoid muscle. At the level of the middle third of the muscle is indentifying the spindle-like thickening, which does not intersect with adjacent tissues and is located in the body of muscle, there are no signs of inflammation.

Questions:

1. Put the previous diagnosis.
2. What diseases should be put differential diagnosis with?
3. What additional examinations should be used to clarify the diagnosis?
4. What consequences are the not treated congenital torticollis from?
5. When is desirable to start conservative therapy?
6. What age surgical correction of pathology is indicated in?

#### **Case 43**

Parents of the 2 months old boy during his swaddling drew attention to the asymmetry of the skin folds of the hips. With these complaints, they turned to their family doctor.

According to the obstetric history, the baby was born in the pelvic previa, no disease of patient mother was during the pregnancy. In an objective survey, the asymmetry of the skin folds on the hips (which is expressed in their different quantity and different positioning on both sides), there is the limitation of the left thigh in the hip joint, which is confirmed by the positive symptom of "clicking" to the left (the Marx-Ortholani symptom). Left lower limb is shortened relatively the right.

Questions:

1. Put the right diagnosis.
2. What method of examination allows to carry out an early diagnosis of hip joints dysplasia?
3. To explain the mechanism of occurrence of the Marx-Ortolani symptom.
4. Identify treatment tactics.
5. What is the optimal age to start the treatment?

#### **Case 44**

Parents of 3 weeks age child of applied for medical help to a family doctor with complaints about the presence in the child of a vomit by "fountain" without impurities of bile, parents also drew

attention to the fact that the child does not gain weight, there is rare urination, predisposition to constipation.

Objectively: the child has a body weight deficit of 6%, during the examination, vomiting is noted by a "fountain" without bile (the volume of which exceeded the volume of eaten food during the last feeding), in the epigastric region is hyperperistaltics by the type sand watch.

Questions:

1. Put previous diagnosis.
2. What diseases should be put a differential diagnosis with?
3. What therapy is efficient at the prehospital stage?
4. Identify tactic of the treatment.
5. What additional diagnostic methods should be used to clarify the diagnosis?

#### Case 45

In the reception department turned mother with a child - a boy 14 years old. During the last 3 days, the child complains of pain in the area of the left thigh in resting state, the inability to lean on the left lower limb in walking due to severe pain, body temperature up to 38°C.

Objectively. In examination in the area of the lower third of the left femur is determined hyperemia of the skin, swelling of soft tissues. In palpation and percussion in the indicated area is determined by significant pain and increasment of local temperature. On the x-ray of the left thigh there are no pathological changes in bone tissue. In the general blood test, leukocytosis is  $12.5 \times 10^9/l$ , the number of neutrophilic forms of leukocytes is 90%.

Questions:

1. Put previous diagnosis.
2. What diseases should be put differential diagnosis with?
3. Why is there no pathological changes of bone tissue on the X-ray?
4. Identify treatment tactics.
5. Is it necessary to immobilize the affected limb?

#### Case 46

To the reception department turned mother with a child - a girl of 2 years old. During the last 2 days, the child has lost an appetite, has come multiple vomiting and diarrhea, fever up to 39° C, abdominal pain.

Objectively. The child is lying on the couch in a forced position on the right side with placed to the abdomen lower limbs. Surface palpation is painful in all areas of the abdomen, especially in the right mesogastric and iliac areas. Deep palpation is not informative due to the expressed anxiety of the child. In the right iliac area is determining positive Voskresensky` symptom. In the general blood analysis leukocytosis is  $10,5 \times 10^9/l$ , the amount of neutrophilic forms of leukocytes is 83%.

Questions:

1. Put previous diagnosis.
2. Determine the necessary additional methods of objective examination.
3. How to determine Voskresensky` symptom?
4. What diseases should be put differential diagnosis with?
5. Identify treatment tactic.

#### Case 47

In the reception department turned mother with her child - a girl of 6 months of age. The child is breastfed. Mother of the child fed the baby by milk semolina porridge 12 hours earlier. After that, the child had a 2-time vomiting, anxiety and crying with resumption in 20 minutes, in defecation fecal masses contained a mucus of pink color.

Objectively. In examination the baby looks pale, the weak. Abdomen is symmetrical, does not take part in the act of breathing, not blown, accessible to deep palpation and painless in all departments, except the right mesogastric area, in which palpable an infiltrative, moving, moderately painful formation. Symptom of absence of bowel in the right iliac area is positive. Peritoneal symptoms are negative. In auscultation in the right mesogastric and iliac areas the peristalsis is not heard. At the end of the finger rectal examination is determined "raspberry jelly" on the glove. Results

of ultrasound examination. In the right mesogastric area is determining a symptom of the "target", the intestinal peristalsis is significantly weakened, in the right mesogastric area is a pendulum peristalsis.

Questions:

1. Put diagnosis.
2. To define the symptoms of "absence of bowel in the right iliac area" and "raspberry jelly".
3. To determine the department for observation and treatment.
4. To make an examination plan.
5. Identify treatment tactics.

#### **Case 48**

Parents of a child aged 4 weeks turned to the family doctor with complaints on the presence of a red spot that is localized in the area of the child's left shoulder.

In an objective examination: the family doctor found a formation 0.5 cm diameter, on the outer surface of the middle third of the left shoulder in the form of a spot of brightly raspberry color, with a smooth surface, with clear contours, that slightly rises above the surface of the skin. No signs of inflammation. In pushing the formation becomes pale.

Questions:

1. Put previous diagnosis.
2. Name treatment methods of hemangiomas.
3. Identify treatment tactics.
4. Determine the critical (problematic) localization of hemangiomas.

#### **Case 49**

In the reception department turned mother with a child - a girl of 2 - months of age. According to the mother explanation, 5 days ago, in the area of the right breast the child appeared infiltrative formation and redness of the skin, from the mammary gland duct is periodically secretion of purulent content, body temperature periodically rises to 38° C.

Objectively. The right mammary gland is enlarged, in palpation are determined infiltration and swelling of the tissues, the skin of the affected area is hyperemic. In the general blood test, leukocytosis is  $11.5 \times 10^9/l$ , the quantity of neutrophilic forms of leukocytes is 91%.

Questions:

1. Put diagnosis.
2. Identify the necessary general clinical methods of examination.
3. Identify the necessary additional survey methods.
4. Identify the tactics of conservative treatment.
5. Identify the tactics of surgical treatment.

#### **Case 50**

In the reception department turned mother with a child - a boy of 3 months of age. According to the mother explanation, 3 days ago in the perianal area of the child appeared infiltrative formation and redness of the skin, is periodic increase of temperature of the baby body up to 39° C.

Objectively. In the perianal region is a dense, infiltrative formation up to 2 cm in diameter with a fluctuation in the center, which is sharply painful in palpation, skin above the formation is hyperemic. In the general blood test leukocytosis is  $13 \times 10^9/l$ , the quantity of neutrophilic forms of leukocytes is 87%.

Questions:

1. Put diagnosis.
2. Identify the necessary general clinical methods of examination.
3. Identify the necessary additional survey methods.
4. Identify the tactics of conservative treatment.
5. Identify the tactics of surgical treatment.

#### **Case 51**

Parents of 4-years old boy turned to a family doctor with complaints on being of tumor-like formation in the inguinal area, which is increases in the vertical position of body and with physical activity, and also decreases in horizontal position.

In examination in the right inguinal area determines formation of elastic consistency in palpation, painless, which easy comes back in the abdominal cavity, external inguinal orifices are expanded, the skin is not changed. A symptom of tussive push is positive.

Questions:

1. Put previous diagnosis.
2. What diseases should be put differential diagnosis with?
3. Explain the technique of the detection of a symptom of tussive push.
4. Identify treatment tactics.
5. Identify the optimal age for the surgical treatment.

### Case 52

In the reception department turned mother with her child - a girl of 2 weeks of age. Mother complains on increasement of the baby body temperature up to 39°C during the last 2 days, refusal of feeding, flaccidity, which preceded to expressed anxiety, the presence of redness of the skin in the area of the right buttock.

Objectively. The child is flaccid, the skin is gray colour with marble shade, breathing superficial, are tachypnoe, tachycardia, tones of the heart muffled. In the area of the right buttocks is the area of the skinal hyperemia 5 cm in diameter. In palpation of the affected area is determined significant pain, fluctuation in the center, infiltration and swelling of soft tissues. In the general blood test leukocytosis is  $19,0 \times 10^9 / l$ , the number of neutrophilic forms of leukocytes is 97%, there is a toxic granularity of neutrophils.

Questions:

1. Put diagnosis.
2. What the most often etiological factor is a cause of the disease?
3. What diseases should be put differential diagnosis with?
4. What are the features of surgical treatment?
5. What is the local complication of the disease can occur in the patient?

### Case 53

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 till morning became more acute 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, SpO<sub>2</sub> 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.

Question for control

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)

### Case 54

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, SpO<sub>2</sub> 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.

Question for control

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)

### Case 55

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.; SpO<sub>2</sub> 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.

Question for control

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)

### Case 56

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 chondral arc. Fairly rebound tenderness presents.

Applications:

- Radiogram of the abdomen
- Result of blood test.

Question for control

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)

### Case 57

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.; SpO<sub>2</sub> 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.

Question for control

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)

### Case 58

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, SpO<sub>2</sub> 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 examination 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.

Question for control

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)

### Case 59

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.

Question for control

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)

### Case 60

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.

Question for control

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)

### Case 61

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, SpO<sub>2</sub> 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.

Question for control

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)

### Case 62

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, SpO<sub>2</sub> 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.

Question for control

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).

### Case 63

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, SpO<sub>2</sub> 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.

Question for control

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)

### Case 64

A patient 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 suddenly in the evening 2 days ago. 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.; SpO<sub>2</sub>: 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.

Question for control

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.

### Case 65

A 52-years-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.; SpO<sub>2</sub>: 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.

Question for control

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

### Case 66

A man of 52-years-old 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.; SpO<sub>2</sub>: 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.

Question for control

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.

### Case 67

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.; SpO<sub>2</sub>: 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.

Question for control

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

### Case 68

A 36-years-old patient 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.; SpO<sub>2</sub>: 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.

Question for control

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.

### Case 69

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.

Question for control

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)

### Case 70

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.

Question for control

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.

### Case 71

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.

Question for control

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)

### Case 72

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.

Question for control

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)