

## Materials for the practical part final modular control for 6th year students

### Practical skills

1. Puncture of the pericardium
2. Technique of applying an occlusive dressing on the chest
3. Palpation of the thyroid gland
4. Pleural puncture
5. Drainage of the pleural cavity
6. Tri-ampoule active drainage
7. Ruvellois-Gregoire test
8. Passive drainage of the pleural cavity
9. Methodical bimanual sliding deep abdominal palpation
10. Auscultation of the heart
11. Chest percussion
12. Palpation of peripheral arteries
13. Palpation of peripheral lymph nodes
14. Technique of elastic bandaging of the lower limb
15. Determination of the boundaries of the liver (according to Kurlov)
16. Applying a tourniquet for bleeding from the femoral artery near the inguinal fold
17. Application of tourniquet for bleeding from the brachial artery near the inguinal fold
18. Transport immobilization in case of hip fracture
19. Transport immobilization in case of hip fracture
20. Determination of the boundaries of the Petit triangle
21. Test of Neimark
22. Determination of the Shoffard zone
23. Petrov's test

### clinical symptoms of an acute pancreatitis

1. The Shoffard zone is a triangular-shaped zone formed vertically by the white line (alba abdomeni) of the abdomen and the horizontal line through the navel and the costal arch.
2. Cullen's symptom - yellow-purple spots near the navel.
3. Symptom Cuneo - palpation is determined by the infiltration in the projection of the pancreas.
4. Chukhrienk's symptom - with the fingers above the navel we push the anterior abdominal wall from front to back and from below up, the patient has increased a pain in the pancreas area.
5. Mayo-Robson's symptom - pressing in the left costal-vertebral place there is local pain and a pain intensifies in the projection of the pancreas.
6. Voskresensky's symptom - weakening or absence of pulsation of the abdominal aorta, above the navel (due to edema of the pancreas and parapancreatic tissue).
7. Osipova's symptom - the patient lies on his back; the doctor puts both hands in the lumbar region and makes an attempt to lift the patient - while the pain in the pancreas area increases.
8. Symptom Herbrich - abdominal percussion is determined by tympanitis in the projection of the pancreas as a result of paretic distention of the transverse colon.
9. Kerte's symptom - in the projection of the pancreas, the resistance of the anterior abdominal wall, a pain and hyperesthesia are determined.
10. Gray-Turner's symptom - yellow-purple spots on the side walls of the abdomen.

## clinical symptoms of hollow organs perforation

1. Symptom Dielafoy - dagger pain in the abdomen.
2. Symptom Krasnobaev-Kruvelier - a pronounced tension of the muscles of the anterior abdominal wall (board-like abdomen).
3. Elecker's symptom - phrenicus symptom - irradiation of pain in the supraclavicular region on the right or left as a result of irritation of the phrenic nerve gas.
4. Gusten's symptom - determined by auscultation: heart sounds spread up to the navel, friction noise of the peritoneum as a result of the passage of gas from the perforation through the liquid.
5. Clark's symptom - absence of hepatic dullness as a result of the accumulation of gas between the liver and the abdominal wall.
6. Symptom Spizhechny - with percussion tympanitis in the projection of the liver. Hepatic dullness is not determined by the accumulation of free gas in the upper abdomen.
7. Bernstein's symptom - the skin of the scrotum is corrugated, the testicles are pulled up to the external openings of the inguinal canals and the penis is turned up, or up and to the right.
8. Bruner's symptom - friction noise of the diaphragm as a result of the accumulation of gastric contents between the diaphragm and the stomach.
9. Neimark's test - add 4-5 drops of 10% iodine solution to 2-3 ml of exudate from the abdominal cavity. In the presence of impurities of gastric contents, the exudate acquires a dark, dirty blue color.
10. Symptom Podlag - a sign of atypical perforation of the ulcer with the spread of gas along the retroperitoneal tissue into the posterior mediastinum through the esophageal opening of the diaphragm, and further along the esophagus into the left supraclavicular region with the formation of subcutaneous emphysema.
11. Symptom Vigiatso - (a sign of atypical perforation of an ulcer of the posterior wall of the duodenum with the spread of gas by tissue lig. hepatoduodenale i lig. teres hepatis) - signs of subcutaneous emphysema in the umbilical region.
12. Chugaev's symptom - the rectus abdominis muscles are tense with the expression of their relief.
13. Symptom Dzbanovsky-Chugaev - with a sharp tension of the anterior abdominal wall above the navel, transverse folds of the skin are visible, respectively, to the bridges of the rectus abdominis muscles.
14. Symptom of the Mondor «triad» - dagger pain; board-shaped stomach; and ulcerative anamneses.
15. Rush's symptom is an elastic moderately painful tumor-like formation in the abdomen with palpation of tenesmus.
16. Sklyarov's symptom - with a slight push of the anterior abdominal wall, auscultation sound of the splash of fluid that has accumulated in the lumen of the stretched intestinal loops is determined.

17 Grekov's symptom (Obukhov hospital symptom) - during rectal examination, a balloon-shaped empty ampoule of the rectum and dehiscence of the anal sphincter are determined.

18. Kivul's symptom - with percussion over the overstretched gas and liquid intestinal loops, tympanitis with a metallic shade is determined.

19. Symptom Tiliax - Vicker - cramping pain in the abdomen.

20. Valya's symptom - a swollen bowel loop in the form of an elastic bulge is palpable, and sometimes an area of abdominal asymmetry is visible.

21. Shlange's symptom - in case of intestinal obstruction after palpation of the abdomen, one can see increased peristaltic bowel movements.

### **clinical symptoms of a gastrointestinal bleeding**

1. Taylor's symptom - intense peristalsis as a result of overfilling and irritation of the intestines with blood and toxins.

2. Bergman's symptom - a decrease in intensity, or the disappearance of pain in the epigastric region with the onset of gastrointestinal bleeding.

### **clinical symptoms of peritoneal adhesions**

1. Symptom - the occurrence or intensification of pain in the abdomen when the trunk is extended.

2. Leott's symptom - pain when the abdominal wall is displaced by the skin of the abdomen taken in a fold.

3. Symptom Knoch - pain in the area of the p / o scar when positioned on the roller.

4. Hunafin's symptom - pain in the abdomen when distended.

### **clinical symptoms of an acute peritonitis**

5. Symptom Madelunga - the difference in body temperature in the axillary fossa and rectum reaches more than 2 degrees.

6. Symptom "Scream of Douglas" - severe pain on digital examination of the rectum or bimanual gynecological examination.

7. Symptom "face of Hippocrates" - a pale face with a green tint, covered with cold sweat, a suffering expression, sharpened features, sunken eyes and cheeks and chin.

8. Drachter's symptom - with one hand they hold the foot of a straightened leg of a sick child, and with the other, shocks are applied with a fist on the heel (percussion). In this case, the patient protects himself from abdominal pain by holding his hand in the area of inflammation.

9. Symptom Mortola - when gradually pressing the abdominal wall with the fingers, the patient feels an increase in pain

10. Blumberg's symptom - with gradual pressing of the fingers on the abdominal wall, the patient feels pain, and if the hand is immediately taken away from the abdomen, the pain increases sharply.

11. Mendel's symptom - when lightly tapping with your fingertips on the anterior abdominal wall, pain occurs precisely over the place of accumulation of fluid or the source of inflammation.
12. De Quervain's symptom - in sloping places of the abdomen, mainly above the right iliac fossa or above the lateral canals, where blood or pathological fluid accumulates, dullness of the percussion sound is determined.
13. Winter's symptom - the abdominal wall does not take part in the act of breathing due to the sharp tension.
14. Voskresensky's symptom - with a rapid movement of the hand over the patient's skin or shirt, pressing the abdominal wall, from the epigastric region (from the xiphoid process) to the left, and then the right iliac region, pain appears in the area of inflammation.
15. Symptom Krasnobaev-Cruvelier - a pronounced tension of the muscles of the anterior abdominal wall, especially over the source of inflammation ("board-like belly").
16. Rozdolsky's symptom - with hammer percussion of the anterior abdominal wall above the source of inflammation, pain arises or increases.
17. Cope's rule - if a sudden severe pain in the patient's abdomen lasts 6 hours (a sign of "acute abdomen"), an emergency operation is necessary.

#### **clinical symptoms of a mesenteric thrombosis**

18. Stenberg's symptom - on palpation against the background of severe pain, a "soft stomach" is determined.
19. Symptom of Kadyan-Mondor - on palpation, a doughy consistency is determined by a moderately painful and freely displaceable loop of the small intestine.
20. Mikkelsen's test - within one hour the patient is offered to drink 1 liter of milk. The appearance of pain after this indicates chronic abdominal ischemia. It is used for differential diagnosis of gastric ulcer and duodenal ulcer.

#### **clinical symptoms of a hernia**

1. Symptom of "cough jolt" (in case of infringement) - when coughing and straining the abdomen, and then relaxing it, the restrained hernial contents are not adjusted or increased.

Liver cirrhosis, portal hypertension syndrome

1. Symptom of "jellyfish head" - enlarged veins of the anterior abdominal wall as a result of recanalization of the umbilical vein and increased blood flow through the port-caval anastomoses.
2. Symptom - "symptom of emptiness" in the right hypochondrium with late cirrhosis of the liver and as a result of a decrease in the size ("wrinkling") of the liver.

#### **clinical symptoms of an acute appendicitis**

1. Cope's symptom 1 - the patient lies on his left side, pain appears (intensifies) in the right iliac region when the right lower limb is bent at the knee joint, back and laterally.
2. Symptom Gubergrits - pain and hyperesthesia in the area of the Scarp's triangle, (a sign of inflammation of the retrocecal appendix as a result of involvement of nervus genitofemoralis in the process).
3. Obratsov's symptom - the patient lies on his back, press on the anterior abdominal wall in the right iliac region and ask the patient to raise his right leg, straightened - while the pain increases due to tension m. iliopsoas and the approach of the appendix to the anterior abdominal wall. The symptom is pathognomonic with a retrocecal arrangement of the appendix.
4. Gabay's symptom - increased pain with a quick withdrawal of the finger (as in determining the Shchetkin-Blumberg symptom) in the Petit triangle (the symptom is caused by inflammation of the retrocecal appendix).
5. Mikhelson's symptom - increased pain in the right iliac region in the position of the pregnant woman on the right side (2-3 trimester).
6. Symptom Bartomier - Michelson - in the position of the patient on the left side, palpation in the right iliac region increases pain in comparison with palpation on the back.
7. Cope's symptom 2 - the patient lies on his back: when the right lower limb is rotated outward, bent at the knee and hip joint, pain appears (increases) in the right iliac region.
8. Symptom Zhendrinsky - (for differential diagnosis of acute appendicitis and salpingitis or adnexitis) - the patient lies on his back, a finger is pressed on the abdominal wall at the Kummel point (2 cm below and to the right of the navel) and, without removing the finger, ask the patient to sit down without help of hands - increased pain indicates acute appendicitis, decrease - about salpingitis.
9. Symptom Yaure - Rozanov - press with a finger in the area of the Petit lumbar triangle - with acute inflammation of the retrocecal placed appendix, there is an increase in pain.
10. Symptom Cheremsky - Kushnirenka - when coughing, pain occurs or intensifies at the site of the source of inflammation, which is associated with a sudden increase in intra-abdominal pressure and tension of the abdominal wall.
11. Ivanov's symptom (a sign of acute peritonitis in acute appendicitis) - the navel and the abdominal line are displaced towards the localization of the source of inflammation (down and to the right), as a result of contraction and rigidity of the muscles of the anterior abdominal wall.
12. Petit's triangle - medial - m. latissimus dorsi, laterally - m. oblig. abd. externus, below - the crest of the wing of the ilium.
13. Gubergrits' symptom - pain and hyperesthesia in the area of the Scarp triangle, with a retrocecal inflamed appendix as a result of involvement of nervus genitofemoralis in the process.
14. Symptom Krimov - pain on palpation (pressure) with the little finger inserted through the outer inguinal ring of the posterior wall of the inguinal canal.
15. Dumbadze's symptom - increased pain with the introduction of the fingertip into the umbilical ring and pushing towards the right iliac region.
16. Rovzing's symptom - in the left iliac region, the sigmoid colon is pressed against the posterior abdominal wall with the right hand, and jerky movements are applied with the left hand proximally in the projection of the descending intestine - with acute appendicitis in the right iliac region, there is an

increase in pain (this is associated with retrograde movement along the colon intestinal gases, as well as the displacement of the appendix and internal organs around it).

17. Symptom of Kocher-Volkovich - in acute appendicitis, pain occurs primarily in the epigastrium, which is associated with irritation of pain receptors and irradiation of pain to the upper brijec and solar plexus. Subsequently, after 2-5 hours, the pain gradually moves to the right iliac region.

### **clinical symptoms of an acute cholecystitis**

1. Symptom Grekov-Ortner - when tapping the edge of the palm perpendicularly along the right costal arch, pain appears or increases in the projection of the gallbladder.
2. Boas-Skvirsky's symptom - pain when pressing the finger on the right of the VIII - X thoracic vertebrae.
3. Lyakhovitsky's symptom - when pressing on the xiphoid process, or putting fingers under it, pain appears or increases in the gallbladder zone.
4. Kera's symptom - with moderate finger pressure at the Kera point (the intersection of the outer edge of the rectus abdominis muscle with the costal arch) during inhalation, pain appears or increases.
5. Symptom Mussey-Georgievsky - when pressing between the legs of the sternocleidomastoid muscle on the right, the pain in the projection of the gallbladder increases.
6. Murphy's symptom - the patient lies on his back, the doctor puts his left palm on the right costal arch so that the thumb is pressed into the depth of the abdominal wall in the projection of the gallbladder; the patient is asked to take a deep breath, which is interrupted due to increased pain (the gallbladder moves downward with the liver).
7. Botkin's symptom - irradiation of pain to the region of the heart along n. phrenicus in the anterior mediastinum.
8. Symptom Bereznyagovsky - Elecker - irradiation of pain in the supraclavicular region along the n. phrenicus, in the right scapula and in the upper third of the outer surface of the right shoulder.
9. Symptom Caravan - Spector (a sign of acute cholecystitis and local peritonitis) - the navel and abdominal line displaced towards the localization of the source of inflammation (up and to the right) as a result of contraction.  
9.Sm Karavannaya - Spektor (Sm Ko-Tui - Meyer-Schlesinger) - (a sign of acute cholecystitis and local peritonitis) - the navel and abdomen line displaced towards the localization of the source of inflammation (up and to the right) as a result of muscle contraction and stiffness the anterior abdominal wall.
10. S-m Sale - auscultatory weakening of breathing in the lower part of the right lung.
11. Mackenzie's symptom - hyperesthesia in the right hypochondrium with cholecystitis.
12. Courvoisier's symptom - on palpation, an enlarged painless gallbladder is determined against the background of obstructive jaundice caused by obstruction of the common bile duct in the distal part.

### **functional tests for a vascular pathology**

Panchenko's test. The patient sits, puts the injured leg on the healthy knee, and within 1-3 minutes begins to feel numbness in the foot, pain in the calf muscles of the injured leg.

Goldflamm test. The patient lies on his back, raises his legs above the bed and does flexion-extension with the feet - if blood circulation is disturbed, the calf muscles get tired, numbness and pain appear after 10-20 movements. If after 20 sec. - widespread vascular occlusion, after 40 seconds. - medium degree of damage, after 60 sec. - mild degree (incomplete obstruction of the vessels).

Samuels-Rothshov test. The patient does, as in the previous test, flexion-extension movements for 2 minutes (1 time / sec) - if arterial circulation is impaired, pale skin of the sole and toes of the foot appears after 5-10 seconds.

Oppel's test (a symptom of plantar ischemia) is a blanching of the sole of the foot of the affected limb, raised upward by 45°. Depending on the rate of appearance of pallor, it is possible to draw a conclusion about the degree of circulatory disorders in the extremities. In severe ischemia, it occurs within the next 4-6 seconds.

Troyanov-Trendelenburg test. The patient lies on his back, raises his leg at an angle of 45°. After the varicose veins collapse, a tourniquet is applied to the upper third of the thigh or the saphenous vein in the oval fossa is squeezed with a finger. The patient gets up. Normally, the veins of the lower leg do not fill up to 15 seconds. Rapid filling of veins from bottom to top - indicates insufficiency of the valves of the perforating veins. Then the tourniquet is quickly removed (they stop squeezing the vein with a finger): filling of the veins of the thigh and lower leg from top to bottom indicates insufficiency of the osteal valve and the valves of the great saphenous vein.

Hackenbruch-Sikar test. The doctor presses the saphenous vein in the area of the oval fossa and asks the patient to cough - if the osteal valve is inconsistent, a positive cough symptom is noted, that is, a sensation of a push on the surgeon's finger.

Pratt's test - 2. After bandaging the legs on the thigh up to the groin fold, a tourniquet is applied. The patient gets up. An elastic bandage is applied to the limb from the bottom up for 5 minutes. As the first bandage is removed, the second is applied from top to bottom at intervals of 5-6 cm. The filling of varicose veins in the areas between the bandages indicates the presence of perforating veins with incompetent valves.

Talman's test - the patient lies on a couch, raises his leg by 45° to release superficial veins. One long rubber tourniquet (2-3 m) is applied to the leg in a spiral from bottom to top with a distance between the turns of the tourniquet of 5-6 cm. The rapid filling of the veins between the first segment limited by the turns of the tourniquet indicates that in this segment the valves of the communicating veins are incompetent.

Sheinis's test (three-cord test) - the patient lies on a couch, raises his leg at an angle of 45° to release superficial veins. Three tourniquets are applied so that they squeeze only the superficial veins: in the upper third of the thigh (near the inguinal fold), in the middle of the thigh and on the lower leg of the knee joint. The patient gets to his feet, rapid filling of the veins in any of the areas between the tourniquets indicates the failure of the valves of the communicating veins. By moving the tourniquet down the leg (repeating the test), it is possible to more clearly determine the localization of this pathology.

Pratt's test - 1. Measure the circumference of the lower leg. The patient lies on his back and raises his leg, on which an elastic bandage is closely applied. The patient walks for 10 minutes - the appearance of pain in the calf muscles and an increase in circumference indicate obstruction of deep veins.

Marching test of Delbe-Perthes. A tourniquet is applied to the patient in a standing position (when the saphenous veins are maximally filled) below the knee joint (only the superficial veins are pinched) and offered to walk for 5-10 minutes: if the superficial veins collapse, the deep veins are passable, if they do not collapse, then they are impassable or incorrectly performed test (deep veins are clamped, and therefore the test should be repeated). Homans symptom. The appearance of pain in the calf muscles with a sharp passive dorsiflexion of the foot.

Moses's symptom is pain in the calf muscles when they are squeezed by the fingers and a sharp passive dorsiflexion of the foot.

### **symptoms of traumatic injury to parenchymal organs**

Joyce's symptom - percussion dullness is determined at the site of injury and does not move when the patient moves to the other side, which indicates the presence of a large number of blood clots around the damaged organ, or retroperitoneal hematoma.

Rozanov's symptom (a symptom of "Vanka-vstanka") - when the patient is in a horizontal position, pain occurs in the right shoulder girdle and difficulty in breathing, which requires a transition to an upright position, while there is an urge to defecate, dizziness until loss of consciousness, then the patient again takes horizontal position.

S. Hedri's symptom - during pressure on the lower part of the sternum, pain occurs in the left costal arch with trauma to the spleen, and in the right - to the liver.

S. Galans's symptom - (the phenomenon of fluid movement) - when the victim turns from one side to the other, for example, from right to left, the dullness of the percussion sound shifts to the left, according to the movement of the fluid.

Lejart's rule - if a patient or injured person has three signs during the next hour: a) pain in the abdomen appears and increases; b) there is irritation of the peritoneum; c) the pulse becomes more frequent - an urgent laparotomy is necessary.

Ruvillois-Gregoire test. A puncture of the pleural cavity is performed - if the blood in the syringe coagulates, the bleeding continues, if it does not coagulate, the bleeding has stopped or continues insignificantly.

### **symptoms of the thyrotoxicosis**

Grefe's symptom - the lag of the upper eyelid from the iris when the eyes fix the object, which slowly moves down, as a result of which a white strip of sclera remains between the iris and the upper eyelid. It is caused by the increased tone of the muscles that lift the upper eyelid.

Shtelvag's symptom - rare incomplete blinking of the eyes is explained by the fact that there is a reduced sensitivity of the cornea.

Möbius's symptom - weakness of the convergence of the eyeballs, that is, the ability to fix the gaze at a close distance is lost, since the tone of the oblique muscles prevails over the tone of the converging rectus muscles of the eye.

Geoffroy's symptom - no wrinkling of the forehead when looking up.