CLINICAL ANATOMY AND OPRATIVE SURGERY OF THE ABDOMEN AND PELVIS

Methodical instructions

Ministry of Education and Science of Ukraine
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4899 Methodical instructions

for practical lessons
on the topic ***«Clinical Anatomy and Operative Surgery of the Abdomen and Pelvis»***
on the discipline **«Clinical Anatomy and Operative Surgery»**
for students of speciality *222 «Medicine»*
full-time form of education

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Department of Morphology

Practical training № 1

Topic. Clinical anatomy and operative surgery of the anterolateral abdominal wall and peritoneum. Intestinal sutures. Surgical treatment of hollow organs injuries.

The purpose of the lesson

1. To learn the projection of the abdominal organs on anterolateral abdominal wall.
2. To master the technique of laparotomy.
3. To study the causes of umbilical, epigastric and inguinal hernia.
4. To learn the methods of plastics of hernial orifice at umbilical and epigastric (white line) hernias.
5. To learn how to perform the plastics of anterior and posterior walls of the inguinal canal.
6. To master the operative technique at strangulated hernias.
7. To master the technique of revision of abdominal organs.
8. To master the technique of surgical treatment of the abdominal penetrating wounds with the damage of hollow organs.
9. To learn how to put the intestinal sutures.

Control questions

1. Abdominal boundaries. Quadrants and regions of the abdomen. Projection of the abdominal organs on the anterolateral abdominal wall.
2. Topographic anatomy of the unpaired regions of anterolateral abdominal wall. The structure of the rectus sheath and white line. The features of the structure of the umbilical ring.
3. Topographic anatomy of the paired regions of anterolateral abdominal wall.
4. Abdominal incisions: midline incision, paramedian incision, pararectal incision, Lanz incision, Pfannenstiel incision, transverse incision, Kocher incision.

5. Methods of plastics of hernia orifice with the umbilical and epigastric (white line) hernias.

6. Topographical anatomy of the inguinal region.

7. Surgical anatomy of the inguinal canal in the normal condition and with inguinal hernias. Inguinal gap and pathogenesis of direct inguinal hernias.

8. The contents of the inguinal canal. The testicular descent and pathogenesis of the congenital oblique inguinal hernias.

9. Abdominal hernias. Classification. Elements of hernia (hernial orifice, hernial sac and contents of the hernial sac).

10. Surgical anatomy of the oblique inguinal hernia.

11. Surgical anatomy of the direct inguinal hernia.

12. The stages of hernial dissection and methods of plastics of hernial orifice in oblique and direct inguinal hernias.

13. Surgical management of strangulated anterior abdominal wall hernias.

14. Surgical anatomy of the peritoneum. The course of the peritoneum in planes of the sagittal and cross sections.

15. Surgical anatomy of bursas, sinuses, canals and recesses of the abdominal cavity.

16. Laparotomy and methodology of revision of the abdominal organs.

17. Intestinal sutures. Requirements for intestinal sutures.

18. Surgical treatment of hollow organs injuries after penetrating abdominal trauma.

19. Surgical instruments for special purposes.

Practical skills

1. To show on the physical body:
   - quadrants and abdominal regions;
   - muscles of the anterolateral abdominal wall;
   - vessels and nerves of the anterolateral abdominal wall;
   - the arcuate (Douglas) and semilunar (Spigelian) line;
   - sheath of rectus abdominis muscle and its content;
   - superficial epigastric artery;
   - superficial circumflex iliac artery;
   - external pudendal artery;
   - inferior epigastric artery;
   - inguinal canal and its content;
   - rings (deep, superficial) and walls (anterior, posterior, superior, inferior) of the inguinal canal;
   - inguinal gap;
   - hepatic bursa, its walls, content and connections;
   - subphrenic and subhepatic spaces;
   - pregastric bursa, its walls, content and connetions;
   - omental bursa, its walls, content and connections;
   - lesser omentum, its parts and their content;
   - epiploic foramen (foramen of Winslow) and anatomical structures that bound it;
   - right and left paracolic sulci and their walls;
   - right and left mesenterial sinuses, their boundaries and connections;
   - superior and inferior duodenal recesses;
   - superior and inferior iliocecal recesses;
   - retrocecal recess;
   - intersigmoidal recess.

2. To perform and justify median, paramedian, trans- and pararectal, transverse and oblique incisions on the anterolateral abdominal wall.

3. To perform on the physical body plastics of hernial orifices in umbilical hernia (by Mayo, Sapezhko, Lexer) and hernia of the white line (by Sapezhko, Napalkov).

4. To perform the methods of plastics of the anterior wall of the inguinal canal by:

- by Girard;
- by Spasokukotskyi with the suture of Kymbarovskyi;
- by Martynov.

5. To perform the methods of strengthening the posterior wall of the inguinal canal:

- by Bassini;
- by Kukudzhanov;
- by Postempskyi.

6. To demonstrate the basic stages of surgery in strangulated inguinal hernia.

7. To draw and explain the course of peritoneum in the sagittal section.

8. To demonstrate on the dead body:

- systematic revision of the abdominal organs;
- technique of surgical treatment of penetrating wound of the abdomen with the injury of the hollow organ;
- technique of putting of intestinal sutures (Jolly suture, Lembert suture, Czerny suture, Albert suture, Schmieden suture, Mikulicz suture, purse-string suture and Z-shaped suture).

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Practical training № 2

Topic. Clinical anatomy and operative surgery of abdominal organs of upper and lower floor.

The purpose of the lesson

1. To study the surgical anatomy of the liver, gallbladder, bile ducts, pancreas, spleen, stomach, small intestine, large intestine and the vermiform process.
2. To master the technique of abdominal organs revision.
3. To ground the surgical approach to the pancreas.
4. To master the technique of bleeding control from the liver.
5. To master the technique of splenectomy.
6. To perform mobilization of duodenum by Kocher.
7. To master the technique of suturing perforated gastric ulcer.
8. To learn how to suture the small intestine wound.
9. To learn how to make an incision and drainage of subdiaphragmatic abscess by extrapleural and transthoracic approach by Melnikov.
10. To master the technique of cholecystostomy, cholecystectomy, choledochotomy, choledochoduodenostomy, papillosphincterotomy and transduodenal papillosphincteroplastics.
11. To master the technique of the small intestine resection with the imposition of enteroenteroanastomosis side to side and end to end.
12. To master the technique of appendectomy.
13. To master the technique of imposition of the preternatural anus (anus praeternaturalis).
14. To learn the technique of gastrostomy.
15. To learn to impose gastroenteroanastomosis by Wölfler, Hacker – Petersen and Roux.
16. To learn to perform the basic stages of a gastrectomy by Billroth I and Billroth II in the Hofmeister – Finsterer modification.
17. To learn to perform stem, selective and selective proximal vagotomy.

18. To master the technique of pyloroplasty by Heineke – Mikulicz and Finney.

19. To learn to impose gastroenteroanastomosis by Jaboulay.

Control questions

1. Surgical anatomy of the liver. Injuries of liver. Sutures of the liver.

2. Surgical anatomy of the portal vein. Methods of surgical treatment of portal hypertension.

3. Surgical anatomy of the gallbladder and bile ducts. The role of sphincters in distribution and regulation of bile outflow.

4. Cholecystostomy, cholecystectomy, choledochotomy, choledochoduodenostomy, papillosphincterotomy and transduodenal papillosphincteroplastics: indications, surgical technique.

5. Surgical anatomy of the duodenum. Mobilization of the duodenum by Kocher: indications, surgical technique.

6. Surgical anatomy of the pancreas. Surgical approaches to the pancreas.

7. Surgical anatomy of the spleen. Splenectomy: indications, surgical technique.

8. Surgical anatomy of the small intestine.

9. Surgical anatomy of the root of mesentery.

10. Surgical anatomy of the superior mesenteric artery.

11. Suturing of the small intestine injuries: indications, surgical technique.

12. Resection of the small intestine. Types of enteroenteroanastomoses.

13. Surgical anatomy of the large intestine.

14. Surgical anatomy of the cecum and vermiform process.

15. Surgical approaches to the vermiform process.

16. Appendectomy: indications, surgical technique.

17. Imposition of the preternatural anus: indications, surgical technique.

18. Surgical anatomy of the stomach.

19. Scheme of lymph drainage from the stomach by A. V. Melnikov.

20. Gastroenteroanastomosis: types, surgical technique.

21. Resection of the stomach by Billroth I and Billroth II in the Hofmeister – Finsterer modification: indications, surgical technique.

22. Vagotomy: types, indications, surgical technique.

23. Pyloroplasty: methods, surgical technique.

24. Methods of suturing a perforated ulcer of the stomach.

25. Surgical instruments for special purposes.

Practical skills

1. To show on the physical body:

- subhepatic and right subphrenic space;
- ligaments of the liver;
- common hepatic artery, proper hepatic artery and their branches;
- portal vein;
- gallbladder;
- cystic artery;
- Calot's triangle;
- extrahepatic bile ducts;
- parts of the common bile duct;
- parts of the duodenum and their syntopy;
- pancreas and its connection with other anatomical formations;
- ligaments of the spleen;
- organs adjacent to the visceral surface of the spleen;
- branches of the celiac trunk;
- sections of the small intestine;
- root of mesentery;
- duodenojejunal flexure;
- superior mesenteric artery, its parts and branches;
- sections of the colon;
- differences in the structure of the colon and small intestine;

- location of the colon sphincters;
- right and left paracolic sulcus;
- ileocecal junction;
- superior and inferior ileocecal recess;
- retrocecal recess (cecal fossa);
- intersigmoid fossa (recessus intersigmoideus);
- projection of the base of the vermiform process (Lanz's point, McBurney's point);
- inferior mesenteric artery and its branches;
- critical points in the blood supply of the colon (Sudeck's critical point and Griffiths' critical point);
- parts of the stomach;
- ligaments of the stomach;
- left and right vagus nerves;
- Latarge's nerve.

2. To perform on the dead body:
   - Baron's method for the temporary hemostasis from the liver;
   - surgical access to pancreas;
   - drainage of the subphrenic abscess according to extrapleural transthoracic approach by Melnikov;
   - cholecystectomy;
   - cholecystostomy;
   - choledochotomy;
   - choledochoduodenostomy;
   - transduodenal papillosphincterotomy;
   - transduodenal papillosphincteroplasty;
   - splenectomy;
   - Kocher maneuver to mobilize the duodenum;
   - search of the initial section of the small intestine using the Gubarev method;
   - revision of the small intestine;
   - resection of the small intestine with the imposition of enteroenteroanastomosis end to end and side to side;
   - stitching the wound of the small intestine;

- gastrostomy by Witzel's method;
- gastrostomy by Stamm – Senn – Kader method;
- gastrostomy by Toprover's method;
- gastrostomy by Beck – Jian method;
- gastroenterostomy by Wölfler method;
- gastroenterostomy by Hacker – Peterson method;
- gastric resection by Billroth I;
- resection of the stomach by Billroth-II in the Hofmeister – Finsterer modification;
- gastric resection with Roux gastroenteroanastomosis;
- truncal vagotomy;
- highly selective vagotomy;
- selective proximal vagotomy by Kuzin method;
- pyloroplasty by Heineke – Mikulicz method;
- pyloroplasty by Finney method;
- Jaboulay gastroduodenostomy;
- suturing the perforated gastric ulcer;
- oblique variable incision of McBurney – Volkovich – Dyakonov;
- appendectomy;
- imposition of preternatural anus.

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Practical training № 3

Topic. Appendectomy (surgery on a rabbit).

Purpose of the lesson

1. To study the tactics of preoperative preparation of an animal for an experimental surgical operation on the abdominal cavity.
2. To learn how to perform a laparotomy.
3. To perform a revision of the abdominal cavity and find the vermiform process.
4. To master the technique of performing appendectomy.

The procedure for conducting the lesson

1. Choosing among the students a surgeon, assistant of the scrub nurse and anesthesiologist.
2. Sterilization of surgical instruments.
3. Preparing hands for surgery using one of the methods: Fuerbringer method, Spasokukotskyi – Kochergin method, Alfeld method, etc.).
4. Putting sterile gowns and surgical gloves.
5. Preparing a table with sterile surgical instruments.
6. Intramuscular administration to a rabbit 35–50 mg / kg ketamine + 5–10 mg / kg xylazine. Note: if there is a need to prolong anesthesia during the surgery, then additional doses of anesthetics must be given in ½ strength.

Stages of surgery after the onset of anesthesia

7. Shaving of operation field (anterolateral abdominal wall).
8. Fixation of the rabbit to the table.
9. Skin disinfection according to Grossikh – Filonchikov.
10. Covering the surroundings of the operation field with sterile sheets, fixing them in the corners with spud linen Backhauz towel clamp.

11. The incision of the abdominal cavity with a midline laparotomy: skin incision, subcutaneous layer incision, white line incision, preperitoneal fat incision, peritoneum incision. Note: finish the laparotomy on your fingers to protect the internals.

12. Revision of the abdominal cavity and finding the cecum with the vermiform appendix.

13. Mobilization of the vermiform appendix.

14. Vermiform appendix skeletization – cutting blood vessels between the clamps (branches of the appendicular artery that pass into the adjacent intestinal loop) and their ligation.

15. The ligation of the base of the vermiform appendix using a catgut ligature.

16. Pushing away the vermiform appendix contents and closing with the clamp.

17. Resection of the vermiform appendix.

18. Treatment of the vermiform appendix stump with the 5 % iodine solution spirit.

19. Preparation of the circular suture (purse-string suture).

20. Stub inversion.

21. Performing "Z" stitch (Z-shaped suture).

22. Check of hemostasis and layer-by-layer celiorrhaphy: suture of the muscular layer and peritoneum with individual stitches, suture of skin with individual stitches.

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Practical training № 4

Topic. Clinical anatomy of the lumbar region, column, spinal cord and retroperitoneal space. Surgeries on the column, kidneys and ureters.

Purpose of the lesson

1. To study the topographic anatomy of the lumbar region, anatomical and physiological features of the column and spinal cord.
2. To master the technique of lumbar puncture, epidural and spinal anesthesia.
3. To master the technique of laminectomy.
4. To study the topographic anatomy of the retroperitoneal space.
5. To substantiate the ways of spreading the purulent process in to the retroperitoneal space.
6. To study the surgical anatomy of kidneys, adrenal glands, ureters and neurovascular formations of the retroperitoneal space.
7. To learn how to perform the surgical approach to the kidneys and ureters.
8. To master the technique of performing paranephric block.
9. To master the technique of nephrolithotomy, nephrectomy, resection of the kidney, ureterolithotomy, pyelolithotomy.

Control questions:

1. Topographical anatomy of the lumbar region.
2. Surgical anatomy of the column.
3. Surgical anatomy of the spinal cord, spinal meninges, epidural, subdural and subarachnoid spaces.
4. Technique of lumbar puncture, epidural and spinal anesthesia.
5. Laminectomy: indications, surgical technique, surgical instruments.
6. Spina bifida: classification, surgical treatment.

7. Surgical anatomy of the retroperitoneal space. Ways of spreading a purulent process from the retroperitoneal space.

8. Surgical anatomy of the kidneys and ureters.

9. Surgical approaches to the kidneys and ureters.

10. Nephrolithotomy, pyelolithotomy, resection of the kidney, nephrectomy, ureterolithotomy, nephropexy: indications, surgical technique.

11. Paranephric block by A. V. Vyshnevskyi: indications, surgical technique.

12. Surgical anatomy of the adrenal glands.

13. Surgical anatomy of the abdominal aorta and inferior vena cava.

14. Surgical anatomy of the lumbar region of sympathetic trunk, autonomic plexuses of the abdomen and lumbar plexus.

Practical skills:

1. To show on the physical body:
   - muscles of the lumbar region;
   - Petit triangle (inferior lumbar triangle);
   - Grynfeltt – Lesshaft's triangle (superior lumbar triangle);
   - subcostal neurovascular bundle;
   - iliohypogastric and ilioinguinal nerves;
   - renal pedicle;
   - adrenal glands;
   - blood vessels of the adrenal glands;
   - abdominal part of the ureter;
   - pelvic part of the ureter;
   - intravesical part of the ureter;
   - parietal and visceral branches of the abdominal aorta;
   - branches of the inferior vena cava;
   - lumbar region of the sympathetic trunk;
   - branches of the lumbar plexus.
2. To perform on the physical body:
   - lumbar puncture;

- spinal and epidural anesthesia;
- laminectomy;
- surgical approaches to the kidney and ureter by Fedorov, Pirogov, Bergmann, Bergmann – Israel, Simon, Ovnatanyan;
- paranephric procaine block by A. V. Vyshnevskyi method;
- nephrolithotomy;
- pyelolithotomy;
- kidney resection;
- kidney removal (nephrectomy);
- nephropexy by Rivoir's method in the Pytel –Lopatkin modification.

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Practical training № 5

Topic. Clinical anatomy and operative surgery of the pelvis.

Purpose of the lesson:

1. To learn surgical anatomy of the lesser pelvis.
2. To learn surgical anatomy of the urinary bladder and prostate.
3. To ground the ways of spreading the purulent inflammatory processes in the pelvic cavity.
4. To learn the methods of pelvic abscess drainage.
5. To master the technique of the urinary bladder puncture.
6. To master the technique of the suprapubic cystostomy.
7. To learn the technique of transvesical prostatic adenomectomy.
8. To study the surgical anatomy of the uterus, rectum and perineum.
9. To master the technique of culdocentesis.
10. To study the technique of the surgical treatment of ectopic pregnancy.
11. To study the technique of the surgical treatment of paraproctitis.
12. To master the technique of the surgical management of hemorrhoids.
13. To master the technique of the surgical treatment of hydrocele and varicocele.

Control questions:

1. Bones, joints, muscles, walls and foramina of the pelvis.
2. Surgical anatomy of the perineum, peritoneal space and subperitoneal space of the pelvis.
3. Surgical anatomy of the parietal and visceral pelvic fasciae.
4. Anatomical spaces of the pelvic cavity. Ways of spreading purulent inflammatory processes from the anatomical spaces of the pelvic cavity.
5. The methods for pelvic abscess drainage.

6. Surgical anatomy of the internal iliac artery. The open approach (intraperitoneal or extraperitoneal), endovascular approach and bilateral retroperitoneal approach to the internal iliac artery. Ligation of the internal iliac artery: indications, surgical technique.

7. Surgical anatomy of the sacral plexus. Intrapelvic procaine block by Shkolnikov-Selivanov.

8. Surgical anatomy of the urinary bladder, pelvic part of the ureter and prostate.

9. Puncture of the urinary bladder, suprapubic cystostomy, prostate adenomectomy: indications, surgical technique

10. Surgical anatomy of the uterus.

11. Surgical anatomy of the uterine appendages (fallopian tubes, ovaries, suspensory ligaments of the uterus).

12. Surgical treatment of ectopic pregnancy.

13. Caesarean section: indications, surgical technique.

14. Surgical anatomy of the rectum.

15. Milligan – Morgan hemorrhoidectomy.

16. Surgical methods of paraproctitis treatment.

17. Surgical anatomy of the testis and spermatic cord.

18. Spermatic cord block by Lorin-Epstein.

19. Surgical technique of treatment hydrocele and varicocele.

20. Surgical instruments for special purposes.

Practical skills:

1. To show on the physical body:

- branches of the internal iliac artery;
- pelvic part of the ureter;
- fallopian tubes and ovaries;
- broad, round and cardinal ligament uterus;
- uterine artery;
- superior rectal artery, middle rectal artery, inferior rectal artery;
- contents of spermatic cord.

2. To perform on the physical body:

- drainage of the prevesical (retropubic) space abscess by Buyalskyi-McWhorter;
- drainage of the perivesical space abscess by Kupriyanov;
- drainage of the lateral space abscess of the pelvis by Pirogov;
- surgical approach to the internal iliac artery;
- ligation of the internal iliac artery;
- intrapelvic procaine block by Shkolnikov-Selivanov;
- puncture of the urinary bladder;
- suprapubic cystostomy;
- prostate adenomectomy;
- salpingectomy and salpingotomy;
- suturing of the uterus;
- Winkelmann method for treatment of hydrocele;
- surgical treatment of varicocele by the Ivanissevich method;
- spermatic cord block (anesthesia) by Lorin-Epstein.

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Test questions and answers for practical lesson № 1

1. Name the boundaries of inguinal region:

+ the line that connects both anterior superior iliac spines, lateral edge of rectus abdominis muscle, inguinal ligament;

– the line that connects both anterior superior iliac spines, abdominal raphe, inguinal ligament;

– arcus costalis and processus xiphoideus, cristae illiaca, lig. inguinalis;

– linea bicostarum, lateral edge of rectus abdominis muscle, inguinal ligament?

2. Name the arteries located in the inguinal area:

+ a. epigastrica superficialis, a. circumflexa ilium superficialis, aa. pudendae externae, a. epigastrica inferior;

– a. epigastrica superficialis, a. epigastrica superior, a. epigastrica inferior, a. circumflexa ilium superficialis, aa. pudendae externae;

– a. epigastrica superficialis, a. circumflexa ilium superficialis et profunda, aa. pudendae externae;

– a. epigastrica superior et inferior, a. circumflexa ilium superficialis et profunda, aa. pudendae externae?

3. Identify sources of innervation of the anterolateral abdominal wall:

+ 6 lower intercostal nerves, n. ilioinguinalis, n. iliohypogastricus;

– intercostal nerves, n. ilioinguinalis, n. iliohypogastricus, n. genitofemoralis;

– intercostal nerves, n. ilioinguinalis, n. iliohypogastricus, n. genitofemoralis, n. obturatorius;

– 6 lower intercostal nerves, n. ilioinguinalis, n. iliohypogastricus, r. genitalis n. genitofemoralis?

4. What organs are projected onto the right inguinal area:

+ cecum, appendix vermicularis, ureter;
– cecum, appendix vermicularis, ureter, rectum;
– cecum, appendix vermicularis, urinary bladder;
– sigmoid colon, cecum, appendix vermicularis?

5. Identify organs projected onto the left inguinal area:
+ sigmoid colon, ureter;
– sigmoid colon, rectum, ureter;
– cecum, sigmoid colon, ureter;
– cecum, sigmoid colon, ureter, rectum?

6. Identify organs projected onto the right hypochondriac region:
+ liver (right lobe), flexura coli dextra, gall bladder, the superior pole of the right kidney, right adrenal gland;
– liver, pars superior duodeni, gallbladder, flexura coli dextra, the superior end of the right kidney and the right adrenal gland;
– liver, gallbladder, pyloric region of the stomach, pars superior duodeni, the right kidney and the right adrenal gland;
– liver, gallbladder, pars superior and pars descendens duodeni, the right kidney and the right adrenal gland?

7. What organs are projected into the regio epigastrica?
+ liver, stomach, pars superior duodeni, flexura duodenojejunalis, pancreas, aorta, celiac plexus;
– liver (left part and some right) stomach (part of the body and pyloric part), pars superior duodeni, pancreas, hila of kidneys, aorta, celiac plexus;
– liver, stomach, colon transversum, pars superior duodeni, pancreas, aorta, celiac plexus;
– liver, stomach, pancreas, gallbladder, pars superior duodeni, aorta, celiac plexus?

8. What organs are located in regio hypochondriaca sinistra:

+ stomach, spleen, tail of pancreas, flexura coli sinistra, part of the left kidney, adrenal gland;

– stomach, spleen, tail of pancreas, part of the left kidney, flexura duodenojejunalis;

– stomach (cardia, bottom, part of the body), spleen, body and tail of pancreas, aorta, inferior vena cava, left kidney, adrenal gland;

– stomach, spleen, the left part of the liver, tail of pancreas, flexura coli sinistra, part of the left kidney, adrenal gland?

9. What organs are projected in regio hypochondriaca dextra:

+ colon ascendens, ileum, right kidney, right ureter;

– colon ascendens, pars descendens duodenum, ileum, right kidney, right ureter;

– colon ascendens, right kidney, right adrenal gland, ileum, right ureter;

– colon ascendens, right kidney, jejunum, right ureter, pancreas?

10. What is projected in regio umbilicalis:

+ curvatura ventriculi major, colon transversum, part of the duodenum, hilum of kidney, loops of small intestines, aorta, v. cava inferior;

– stomach (part of the body, pyloric part and greater curvature) part of the duodenum, loops of small intestines, hilum of kidney, aorta, v. cava inferior;

– stomach, colon transversum, part of the duodenum, hilum of kidney, pancreas, loops of small intestines, aorta, v. cava inferior;

– stomach, part of the duodenum, pancreas, hilum of kidney, loops of small intestines, aorta, v. cava inferior?

11. What is projected in regio abdominalis lateralis sinistra:

+ colon descendens, loops of jejunum, left ureter, left kidney;

– colon descendens, loops of jejunum, left ureter, left kidney, tail of pancreas;

– colon descendens, loops of jejunum, left kidney, left adrenal gland, left ureter, flexura duodenojejunalis;

– colon descendens, loops of jejunum, left kidney, left ureter, aorta?

12. What is projected in regio pubica:

+ loops of small intestine, urinary bladder, part of sigmoid colon, uterus, ureter;

– loops of small intestine, urinary bladder, sigmoid colon, uterus, rectum;

– loops of small intestine, urinary bladder (filled), sigmoid colon, caecum, uterus, ureter;

– urinary bladder (filled), sigmoid colon, colon descendens, rectum, uterus, ureter?

13. Why do patients with pneumonia feel pain in the abdominal wall:

+ nn. intercostales innervate pleura and abdominal muscles;

– nn. intercostales and n. phrenicus innervate pleura and abdominal muscles;

– nn. intercostales innervate muscles of the abdomen, and n. phrenicus innervates pleura;

– nn. intercostales innervate abdominal muscles and pleura, and n. phrenicus innervates peritoneum?

14. Identify the weak points of anterior abdominal wall along the middle line:

+ umbilical ring, abdominal raphe;

– umbilical ring, abdominal raphe spigelian line;

– inguinal canal, umbilical ring, abdominal raphe;

– umbilical ring, rhombus lumbalis abdominal raphe?

15. Identify the weak places of anterior abdominal wall in lateral part of abdomen:

+ Spigelian line, inguinal canal;

– canalis obturatorius, inguinal canal;
– Pitit's triangle, inguinal canal;
– inguinal canal, rhombus lumbalis?

16. What anatomical formations are located in cellular tissue between the internal oblique and transverse abdominal muscles:

+ nn. intercostales, n. subcostalis, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales posterior, a. lumbales, r. ascendens a. circumflexa ilium profunda;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales anteriores et posteriores, aa. lumbalis;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinales, aa. intercostales posteriores, a. epigastrica superior;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales posteriores, aa. lumbales, a. epigastrica inferior?

17. How is the anterior wall of the sheath of the rectus abdominis muscle formed above the navel:

+ by aponeurosis of the external oblique abdominal muscle, superficial aponeurosis of the internal oblique abdominal muscle;

– by aponeurosis of the external oblique muscle of the abdomen;

– by aponeurosis of the external oblique muscle of the abdomen, superficial and deep aponeuroses of the internal oblique abdominal muscle;

– by all aponeuroses of abdominal muscles?

18. How is the anterior wall of the sheath of rectus abdominis muscle formed below the navel:

+ by all aponeuroses of abdominal muscles;

– by aponeurosis of external oblique muscle of the abdomen;

– by aponeurosis of the external oblique muscle of the abdomen and superficial aponeurosis of the internal oblique abdominal muscle;

– by aponeurosis of the internal oblique muscle of the abdomen and aponeurosis of the transverse muscle of the abdomen?

19. How is the posterior wall of the sheath of rectus abdominis muscle formed below the navel:

+ fascia transversa;

– by all three aponeuroses of abdominal muscles;

– by aponeurosis of transverse muscle of the abdomen and the deep aponeurosis of the internal oblique muscle;

– by aponeurosis of transverse muscle of the abdomen?

20. What layers does the navel consist of:

+ skin, scar tissue, umbilical cord residue, transverse fascia, peritoneum;

– skin, subcutaneous tissue, transverse fascia, peritoneum;

– skin, subcutaneous tissue, superficial fascia, transverse fascia, peritoneum;

– skin, transverse fascia, aponeuroses of three abdominal muscles, peritoneum?

21. What approaches in embryo to the umbilical ring from the top:

+ umbilical vein;

– umbilical arteriy;

– urachus;

– ductus Arantii?

22. What approaches in embryo to the umbilical ring from below:

+ umbilical arteries, urachus;

– ductus Arantii;

– lig. teres hepatis;

– umbilical vein?

23. What vessels pass in the sheath of rectus abdominis muscle:

+ a. et v. epigastrica superior, a. et v. epigastrica inferior, aa. intercostales;

– a. et v. epigastrica superior, a. et v. epigastrica inferior;

– a. et v. epigastrica superior, a. et v. epigastrica inferior, a. et v. epigastrica superficialis;

– a. thoracica interna, a. et v. intercostales?

24. Identify the basic types of vertical laparotomic incision:

+ median, paramedian, transrectal, pararectal;

– median, paramedian, transrectal, pararectal, Fedorov incision;

– median, paramedian, transrectal, pararectal, McBurneya-Volkovych-D'yakonovs incision;

– median, paramedian, transrectal, pararectal, Kocher's incision?

25. What is the gateway for umbilical hernia:

+ anulus umbilicalis;

– white line of the abdomen;

– fossa inguinalis lateralis;

– fossa inguinalis medialis?

26. Does the incision of the m. rectus in the transverse direction threaten the funcion;

+ no;

– yes?

27. Does the incision of the m. rectus in the paramedian direction treaten the funcion?

+ no;

– yes?

28. Does the incision of the m. rectus in the pararectal direction threaten the funcion?

+ yes;

– no?

29. Is the function of m. rectus abdominis disturbed when nn. intercostales are cut in the spinal region:

+ no;

– yes?

30. Name the authors who made the main methods of operations of inguinal hernias:

+ Lexer, Mayo, Sapezhko;

– Girard, Spasokukotskiy, Lexer;

– Lexer, Bassini, Sapezhko;

– Girard, Postemskiy, Mayo?

31. Name the authors who made the main methods of surgery in abdominal hernias of white line:

+ Sapezhko, Napalkov;

– Lexer, Mayo;

– Spasokukotskiy, Sapezhko;

– Lexer, Napalkov, Sapezhko?

32. What incision is performed at the treatment of umbilical hernia by the method of Sapezhko:

+ longitudinal avoiding navel from the left;

– double cross bordering hernia;

– horizontal cut around hernia;

– longitudinal avoiding navel?

33. How is the plastics of hernial orifices performed by Lexer's method:

+ imposing a purse-string suture around the umbilical ring nodal and sutures on the anterior of wall rectus abdominis muscle;

– the right edge of aponeurosis is sutured to the posterior wall of the sheath of the left rectus abdominis muscle and the left aponeurosis flap to the anterior wall of the rectus abdominis muscle sheath;

– hernia orifice are cut with cross incision the lower edge of the aponeurosis is stitched with the help of L-shaped sutures is connected to the posterior surface of the upper flap and the free upper flap edge is stitched with the help of nodal – to the anterior surface of the lower flap;

– hernial orifices are sutured with nodal sutures, the anterior leaves of rectus abdominis muscles sheaths are dissected from left and right of hernia origices, the internal aponeurosis adges are stitched and then external?

34. How is the plastics of hernial orifices performed by of Sapezhko's method:

+ hernial orifices expand vertical lines of white line cut, the edge of white line is sutured to the posterior wall of the sheath of rectus abdominis and the other end is sutured along the white line to the anterior wall of the sheath of rectus abdominis muscle from the opposite side;

– imposing a purse-string suture around the umbilical ring and the suture of the anterior wall of rectus abdominis muscle;

– hernial orifices are sutured with nodal sutures, the anterior leaves of rectus abdominis muscles sheaths are dissected from left and right of hernia origices, the internal aponeurosis adges are stitched and then external;

– hernia orifice are cut with cross incision the lower edge of the aponeurosis is stitched with the help of L-shaped sutures is connected to the posterior surface of the upper flap and the free upper flap edge is stitched with the help of nodal – to the anterior surface of the lower flap?

35. How is the plastics of hernial orifices performed by Mayo's method:

+ hernia orifice are cut with cross incision the lower edge of the aponeurosis is stitched with the help of L-shaped sutures is connected to the posterior surface of the upper flap and the free upper flap edge is stitched with the help of nodal – to the anterior surface of the lower flap;

– hernial orifices are sutured with nodal sutures, the anterior leaves of rectus abdominis muscles sheaths are dissected from left and right of hernia origices, the internal aponeurosis adges are stitched and then external;

– hernial orifices expand vertical lines of white line cut, the edge of white line is sutured to the posterior wall of the sheath of rectus abdominis and the other end is sutured along the white line to the anterior wall of the sheath of rectus abdominis muscle from the opposite side;

– imposing a purse-string suture around the umbilical ring and the suture of the anterior wall of rectus abdominis muscle?

36. How is the plastics of hernial orifices performed by Mayo's method:

+ hernia orifice are cut up and down along the white line, the edge of white line is sutured to the posterior wall of the rectus abdominis muscle sheath and the other end of white line – to the anterior wall of the rectus abdominis muscle sheath from the opposite side;

– hernial orifice are cut with cross incision, the lower edge of the aponeurosis is stitched with the help of L-shaped sutures to the posterior surface of the upper flap and the free upper flap edge is also stitched to the anterior surface of the lower flap;

– hernial orifices are sutured with nodal sutures, the anterior leaves of rectus abdominis muscles sheaths are dissected from left and right of hernia origices, the internal aponeurosis adges are stitched and then external;

– imposing a purse-string suture around the hernial orifices and 2–3 nodal sutures on the anterior wall of rectus abdominis muscle sheath?

37. What are the boundaries of the inguinal region:

+ line that connects both anterior superior iliac bones, lateral edge of m. rectus abdominis, inguinal ligament;

– line that connects crista iliaca anterior superior dextra et sinistra, linea alba, inguinal ligament;

– arcus costalis and processus xiphoideus, cristae iliacae, inguinal ligaments;

– linea bicostarum, margo lateralis m. rectus abdominis, inguinal ligament?

38. Name the arteries which pass in the inguinal region:

+ a. epigastrica superficialis, a. circumflexa ilium superficialis, aa. pudendae externae, a. epigastrica inferior;

– a. epigastrica superficialis, a. epigastrica superior, a. epigastrica inferior, a. circumflexa ilium superficialis, aa. pudendae externae;

– a. epigastrica superficialis, a. circumflexa ilium superficialis et profunda, aa. pudendae externae;

– a. epigastrica superior et inferior, a. circumflexa ilium superficialis et profunda, aa. pudendae externae?

39. Name the organs that are projected into the right inguinal region:

+ cecum, appendix, ureter;

– cecum, appendix, ureter, rectum;

– cecum, appendix, urinary bladder;

– colon sigmoideum, cecum, appendix?

40. Name the organs that are projected into the left inguinal region:

+ colon sigmoideum, ureter;

– colon sigmoideum, rectum, ureter;

– colon sigmoideum, cecum, ureter;

– colon sigmoideum, cecum, ureter, rectum?

41. The anterior wall of the inguinal canal is composed of:

+ aponeurosis of m. obliquus externus abdominis, fibers of m. obliquus internus abdominis;

– m. obliquus externus abdominis;

– m. obliquus externus et internus abdominis;

– aponeurosis of m. obliquus externus abdominis?

42. The superior wall of the inguinal canal is composed of:

+ margo inferior m. obliquus internus abdominis, margo inferior m. transversus abdominis;

– aponeurosis of m. obliquus externus abdominis;

– aponeurosis of m. obliquus externus abdominis, margo inferior m. obliquus internus abdominis and m. transversus abdominis;

– lig. inguinale?

43. The inferior wall of the inguinal canal is composed of:

+ lig. inguinale;

– lig. pectineale;

– margo inferior m. obliquus internus abdominis;

– lig. inguinale, lig. lacunare?

44. The posterior wall of the inguinal canal is composed of:

+ fascia transversa, aponeurotic fibers of m. obliquus internus abdominis et m. transversus abdominis;

– aponeurosis of m. obliquus externus abdominis;

– fascia transversa;

– Hesselbach's ligament, Henle's ligament?

45. What strengthens the posterior wall of the inguinal canal:

+ Hesselbach's ligament, Henle's ligament;

– Cooper's ligament;

– ligamentum lacunare;

– Henle's ligament?

46. The superficial inguinal ring is bounded laterally and inferiorly:

+ crus laterale;
– crus mediale;
– lig. reflexum;
– fibrae intercruralis?

47. Superficial inguinal ring is limited laterally and superiorly by:

+ fibrae intercruralis;
– crus laterale;
– crus mediale;
– falx inguinalis?

48. Superficial inguinal ring is limited medially and superiorly by:

+ crus mediale;
– crus mediale, fibrae intercruralis;
– lig. reflexum;
– falx inguinalis?

49. Superficial inguinal ring is limited inferiorly and from posteriorly by:

+ lig. reflexum;
– crus mediale;
– lig. pectineale;
– lig. lacunare?

50. What strengthened the medial area of posterior wall of the inguinal canal:

+ falx inguinalis;
– lig. interfoveolare;
– lig. lacunare;
– lig. pectineale?

51. Which forms of the inguinal gap do you know:
+ slit-like, oval, triangular;
– slit-like;
– oval;
– triangular?

52. What determines the shape of the inguinal gap:
+ height of the abdominal internal oblique muscle, height of transverse muscle of the abdomen, narrow inferior part of m. rectus abdominis;
– height of the internal oblique muscle of the abdomen, height of transverse muscle of the abdomen;
– narrow inferior part of rectus abdominis muscle;
– place of fibers divergence of abdominal external oblique muscle aponeurosis?

53. Name the medial border of the inguinal gap:
+ margo lateralis of rectus abdominis muscle sheath;
– lig. interfoveolare;
– inguinal ligament;
– margo inferior of abdominal internal oblique muscle?

54. Name the superior border of the inguinal gap:
+ margo inferior of abdominal internal oblique muscle, margo inferior of m. transversus abdominis;
– falx inguinalis;
– lig. interfoveolare;
– inguinal ligament?

55. Name the inferior border of the inguinal gap:
+ inguinal ligament;
– ligamentum lacunare;
– Cooper's ligament;
– falx inguinalis?

56. Name the weak places of the anterior abdominal wall of the lateral abdominal region:

+ linea semilunaris, inguinal canal;

– canalis obturatorius, canalis inguinalis;

– lumbar triangle, canalis inguinalis;

– canalis inguinalis, rhombus lumbalis?

57. What anatomic formations are located it the tissue between m. obliquus internus and m. transversus abdominis:

+ nn. intercostales, n. subcostalis, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales posterior, aa. lumbales, r. ascendens a. circumflexa ilium profunda;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales anteriores et posteriores, aa. lumbales;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales posteriores, a. epigastrica superior;

– nn. intercostales, n. iliohypogastricus, n. ilioinguinalis, aa. intercostales posteriores, aa. lumbales, a. epigastrica inferior?

58. Name the elements of the spermatic cord:

+ a. testicularis, plexus testicularis, plexus pampiniformis, ductus deferens, a. ductus deferentis, plexus deferentialis, processus vaginalis peritonaei;

– a. testicularis, plexus pampiniformis, ductus deferens, a. ductus deferentis, processus vaginalis peritonaei;

– a. testicularis, v. testicularis, ductus deferens, a. cremasterica, processus vaginalis peritonaei;

– a. testicularis, plexus testicularis, plexus pampiniformis, ductus deferens, a. ductus deferentis, plexus deferentialis, processus vaginalis peritonaei, a. cremasterica, n. ilioinguinalis, r. genitalis n. genitofemoralis?

59. What nerve accompanies spermatic cord and lies in front and above it:

+ n. ilioinguinalis;
– n. iliohypogastricus;
– r. genitalis n. genitofemoralis;
– r. femoralis n. genitofemoralis?

60. What nerve accompanies spermatic cord and lies below and behind it:
+ r. genitalis n. genitofemoralis;
– n. ilioinguinalis;
– n. iliohypogastricus;
– r. femoralis n. genitofemoralis?

61. What artery approaches to the spermatic cord from behind?
+ a. cremasterica;
– a. testicularis;
– a. ductus deferens;
– a. epigastrica inferior?

62. What are the topographical features of a. epigastrica inferior:
+ departs from a. iliaca externa, goes into the preperitoneal tissue behind the inguinal ligament, crosses the external edge of m. rectus abdominis and goes into the sheath of m. rectus abdominis, creates an anastomosis with a. epigastrica superior;
– departs from a. iliaca interna, goes into the preperitoneal tissue behind the inguinal ligament, crosses the external edge of m. rectus abdominis, creates an anastomosis with a. epigastrica superior;
– departs from a. iliaca communis, goes into the preperitoneal tissue, creates plica umbilicalis lateralis, goes into the sheath of m. rectus abdominis, locates between the anterior wall of the sheath and muscle;

– departs from a. iliaca externa, creates plica umbilicalis medialis, goes in parallel to external edge of m. rectus abdominis, creates anastomosis with a. epigastrica superior?

63. What creates the gates of the oblique inguinal hernia:
+ fossa inguinalis lateralis;
– fossa inguinalis medialis;
– fossa femoralis;
– anulus umbilicalis?

64. What creates the gates of the direct inguinal hernia:
+ fossa inguinalis medialis;
– fossa inguinalis lateralis;
– fossa supravesicalis;
– fossa femoralis?

65. What creates the hernial bag in congenital hernia:
+ processus vaginalis peritonei;
– fascia spermatica interna;
– fascia spermatica externa;
– fascia cremasterica?

66. In what direction is hernial ring dissected in oblique inguinal hernia:
+ upwards and laterally;
– upwards and medially;
– downwards and medially;
– downwards and laterally?

67. In what direction is hernial ring dissected in direct inguinal hernia:
+ upwards and medially;
– upwards and laterally;
– downwards and medially;
– downwards and laterally?

68. What hole does the direct inguinal hernia go through:
+ anulus inguinalis superficialis;
– anulus inguinalis profundus;
– fossa inguinalis lateralis;
– fossa inguinalis medialis?

69. What is the relation of hernial sac to the spermatic cord in oblique congenital inguinal hernia:
+ located inside of fascia spermatica interna surrounded by elements of spermatic cord;
– located behind fascia spermatica interna;
– located medially to spermatic cord;
– located laterally to spermatic cord?

70. What is the relation of hernial sac to the spermatic cord in direct inguinal hernia:
+ located behind fascia spermatica interna, medially to spermatic cord;
– located inside of fascia spermatica interna;
– located laterally to spermatic cord;
– located below and behind the spermatic cord?

71. In oblique inguinal hernia a. epigastrica inferior is located:
+ medially to the hernial sac;
– laterally to the hernial sac;
– behind the hernial sac;
– above the hernial sac?

72. In direct inguinal hernia a. epigastrica inferior is located:
+ laterally to the hernial sac;
– medially to the hernial sac;
– behind the hernial sac;
– above the hernial sac?

73. What wall of the inguinal canal is weakened in oblique inguinal hernia:

+ anterior and posterior;

– anterior;

– posterior;

– inferior?

74. What layers cover the hernial sac in oblique inguinal hernia:

+ skin, subcutaneous tissue, fascia superficialis, fascia cremasterica, m. cremaster, fascia spermatica interna, preperitoneal tissue;

– skin, subcutaneous tissue, fascia superficialis, fascia transversa, preperitoneal tissue;

– skin, subcutaneous tissue, fascia superficialis;

– skin, subcutaneous tissue, fascia superficialis, fascia transversa, fascia spermatica interna?

75. What layers cover the hernial sac in direct inguinal hernia:

+ skin, subcutaneous tissue, fascia superficialis, fascia transversa, preperitoneal tissue;

– skin, subcutaneous tissue, fascia superficialis;

– skin, subcutaneous tissue, fascia superficialis, fascia cremasterica, m. cremaster, fascia spermatica interna, preperitoneal tissue;

– skin, subcutaneous tissue, fascia superficialis, fascia transversa, fascia spermatica interna?

76. Specify methods of herniotomy that strengthen only the anterior wall of the inguinal canal:

+ Girard, Spasokukotskyi, Martynov;

– Girard, Martynov, Bassini;

– Girard, Bassini, Postempskyi;

– Girard, Kimbarovskyi, Martynov?

77. Specify methods of herniotomy that strengthen only the posterior wall of the inguinal canal:

+ Bassini, Postempskyi;

– Bassini, Postempskyi, Kukudzhanov;

– Bassini, Kimbarovskyi, Postempskiy;

– Bassini, Kukudzhanov, Postempskyi, Kimbarovskyi?

78. What structure is fixed to the inguinal ligament by girard's method:

+ inferior edges of m. obliquus internus and m. transversus abdominis and the superior leaf of aponeurosis of obliquus externus abdominis is stitched as the second layer of interrupted stitch;

– inferior edges of m. obliquus internus and m. transversus abdominis;

– aponeurosis of m. obliquus externus abdominis, m. obliquus internus and m. transversus abdominis;

– m. obliquus internus abdominis, m. transversus abdominis, fascia transversa?

79. What structure is fixed to the inguinal ligament by Martinov's method:

+ aponeurosis of m. obliquus externus abdominis, m. obliquus internus abdominis, m. transversus abdominis;

– inferior edges of m. obliquus internus and m. transversus abdominis and the superior leaf of aponeurosis of obliquus externus abdominis is stitched as the second layer of interrupted stitch;

– inferior edges of m. obliquus internus and m. transversus abdominis;

– m. obliquus internus abdominis, m. transversus abdominis, fascia transversa?

80. How is the duplicate by Martynov's method made:

+ the superior leaf of aponeurosis of m. obliquus externus abdominis is stitched to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf;

– superior leaf of aponeurosis with m. obliquus internus abdominis and m. transversus abdominis are stitched to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf;

– aponeurosis of m. obliquus externus abdominis, m. obliquus internus abdominis, m. transversus and the edge of m. rectus abdominis are stitched to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus adbominis is fixed to the superior leaf;

– the inferior edge of aponeurosis of m. obliquus externus adbominis is stitched to the inguinal ligament the supreior edge of aponeurosis of m. obliquus externus adbominis is fixed to the inferior leaf?

81. Which tissues are fixed to the inguinal ligament by Bassini technique:

+ m. obliquus internus adbominis, m. transversus adbominis, fascia transversa, edge of m. rectus abdominis;

– the superior leaf of aponeurosis of m. obliquus externus adbominis;

– aponeurosis of m. obliquus externus adbominis, m. obliquus internus adbominis, m. transversus adbominis;

– m. obliquus internus adbominis, m. transversus abdominis, fascia transversa?

82. Which tissues are fixed to the inguinal ligament by Postempskyi method:

+ the superior leaf of aponeurosis of m. obliquus externus abdominis, m. obliquus internus abdominis, m. transversus abdominis and fascia transversa and the edge of m. rectus abdominis;

– aponeurosis of m. obliquus externus abdominis, m. obliquus internus abdominis, m. transversus abdominis;

– m. obliquus internus abdominis, m. transversus abdominis and fascia transversa;

– the superior leaf of aponeurosis of m. obliquus externus abdominis?

83. How is the duplicate by of Postempskyi method performed:

+ the edge of m. rectus abdominis is stitched to the inguinal ligament and periosteum of the pubic bone the superior leaf of aponeurosis of m. obliquus externus abdominis with its muscles and fascia transversa are fixed to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf under the spermatic cord;

– the superior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf;

– the superior leaf of aponeurosis of m. obliquus externus abdominis with its muscles is fixed to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf;

– the inferior edge of m. obliquus internus abdominis and m. transversus abdominis with fascia transversa are fixed to the inguinal ligament the superior leaf of aponeurosis of m. obliquus externus abdominis is stitched to the inguinal ligament the inferior leaf of aponeurosis of m. obliquus externus abdominis is fixed to the superior leaf?

84. Name the authors of the main methods of surgeries in inguinal hernias:

+ Girard, Spasokukotskyi, Martynov, Bassini, Postempskyi, Kukudzhanov;

– Girard, Spasokukotskyi, Sapezhko, Martynov, Bassini, Postempskyi;

– Girard, Spasokukotskyi, Mayo, Bassini, Martynov, Kimbarovskyi;

– Girard, Spasokukotskyi, Martynov, Bassini, Mayo?

85. How is an organ covered from the all sides with peritoneum called:

+ intraperitoneal;

– retroperitoneal;

– mesoperitoneal;

– extraperitoneal?

86. What organ has mesoperitoneal relatich to the peritoneum:

+ liver;

– small intestine;

– sigmoid colon;

– pancreas?

87. How is the superior part of duodenum covered with the peritoneum:

+ intraperitoneally;

– retroperitoneally;

– mesoperitoneally;

– extraperitoneally?

88. What ligaments is omentum minor made of:

+ lig. hepatoduodenale, lig. hepatogastricum;

– lig. gastrolienale, lig. gastrocolicum;

– lig. hepatoduodenale, lig. falciforme;

– lig. hepatogastricum, lig. coronarium?

89. What feature of the peritoneum allows to make the peritoneal dialysis:

+ resorbtive;
– barrier;
– secretory;
– protective?

90. What leaf of peritoneum products serous fluid:
+ visceral;
– parietal;
– external;
– internal?

91. In which floor of abdominal cavity is the fluid absorption most intensive:
+ upper;
– lower;
– superior ileocecal recess;
– bursa pregastrica?

92. Name the ligament that is formed at the transition of peritoneum from diaphragm to the diaphragmal surface of liver in the sagittal direction:
+ lig. falciforme;
– lig. coronarium;
– lig. triangulare;
– lig. teres hepatis?

93. Name the ligament that is formed at the transition of peritoneum from diaphragm to the diaphragmal surface of liver in the frontal direction:
+ lig. coronarium;
– lig. triangulare;
– lig. falciforme;
– lig. teres hepatis?

94. How is the beginning of the greater omentum called:

+ lig. gastrocolicum;
– lig. hepatogastricum;
– lig. gastrophrenicum;
– lig. gastrolienale?

95. How is the prolongation of the greater omentum upward and to the left called:
+ lig. gastrolienale;
– lig. gastrophrenicum;
– lig. gastrocolicum;
– lig. gastropancreaticum?

96. What formations connect the upper floor of the abdominal cavity with the lower:
+ spatium preepiploicum, canalis lateralis dexter, canalis lateralis sinister;
– foramen epiploicum, canalis lateralis dexter, canalis lateralis sinister;
– foramen gastropancreaticum, canalis lateralis dexter, canalis lateralis sinister;
– spatium preepiploicum, left and right omental sinuses?

97. A surgeon makes the revision of the abdominal cavity in purulent inflammatory process in the left omental sinus. How is the purulence spread?
+ in pelvis minor;
– localization in its place;
– to the left subphrenic space;
– transition into the right omental sinus?

98. What separates bursa pregastrica from canalis lateralis sinister:
+ lig. phrenicocolicum;
– lig. gastrophrenicum;
– lig. gastrocolicum;

– lig. falciforme?

99. What anatomical structures help to determine the initial section of the small intestine:

+ the ligament of Treitz;
– lig. phrenicocolicum;
– pars ascendens duodenum;
– recessus duodenalis superior?

100. What structure creates the anterior wall of the omental foramen:

+ lig. hepatoduodenale;
– lig. hepatorenale;
– lig. hepatogastricum;
– lig. gastrocolicum?

101. What structure creates the posterior wall of the omental foramen:

+ lig. hepatorenale;
– lig. hepatoduodenale;
– lig. duodenorenale;
– lig. hepatogastricum?

102. What structure creates the superior wall of the omental foramen:

+ lobus caudatus hepatis;
– lobus quadratus hepatis;
– diaphragm;
– lig. hepatoduodenale?

103. What structure creates the inferior wall of the omental foramen:

+ lig. duodenorenale, the superior margin of pars superior duodenum;

– lig. hepatorenale, the inferior margin of pars superior duodenum;

– lig. gastrocolicum, the posterior margin of pars superior duodenum;

– lig. hepatoduodenale, the anterior margin of pars superior duodenum?

104. What cavities are connected by foramen omentale:

+ bursa hepatica and bursa omentalis;

– bursa pregastrica and saccus caecus lienalis;

– all of the above mentioned;

– superior and inferior ileocecal recesses?

105. Name the anterior wall of bursa omentalis:

+ the posterior surface of the stomach, omentum minus, lig. gastrocolicum;

– the anterior surface of the stomach, omentum minus, lig. hepatogastricum;

– lig. gastrolienale, lobus caudatus hepatis;

– lobus quadratus hepatis, diaphragm, lig. hepatoduodena-le?

106. Name the inferior wall of bursa omentalis:

+ colon transversum, mesocolon transversum;

– lobus caudatus hepatis, diaphragm;

– lobus quadratus hepatis, diaphragm;

– lig. phrenicocolicum?

107. What organs adhere closely to the posterior wall of bursa omentalis:

+ pancreas, v. cava inferior, aorta, left kidney, left adrenal gland;

– pancreas, v. cava inferior, spleen, duodenum, lobus hepatis sinister;

– gallbladder, a. vesicalis, extrahepatic bile ducts;

– aorta, left kidney, left adrenal gland, a. vesicalis, extrahepatic bile ducts?

108. In what section of peritoneal cavity can X-ray detect gas in perforating duodenal ulcer?

+ in right subphrenic space;

– in left subphrenic space;

– in right subhepatic space;

– in bursa pregastrica?

109. In what section of peritoneal cavity can X-ray detect gas in perforating peptic ulcer:

+ in left subphrenic space;

– in left subphrenic space;

– in left suphepatic space;

– in bursa pregastrica?

110. Name the posterior wall of bursa pregastrica:

+ omentum minus, the anterior surface of the stomach;

– lig. hepatogastricum, diaphragm;

– omentum minus, the posterior surface of the stomach;

– lobus hepatis sinister?

111. What organs are located in bursa pregastrica:

+ lobus hepatis sinister, the anterior surface of the stomach, spleen;

– left kidney, the anterior surface of the stomach, spleen;

– left adrenal gland, left kidney, the anterior surface of the stomach;

– pancreas?

112. What is located in bursa omentalis behind lobus caudatus hepatis:

+ recessus superior omentalis;

– recessus inferior;

– recessus lienalis;
– saccus caecus lienalis?

113. On what features of peritoneum is the application of serous-serous suture based:
+ close contact, fast adhesion;
– close contact, resorptive properties;
– barrier function, fast adhesion;
– all of the above mentioned?

114. What features does the peritoneum have:
+ all of the above mentioned;
– barrier function;
– products serous fluid;
– resorbs liquid and coarse dispersions?

115. What intestinal suture is the suture of choice in the intestinal surgery:
+ Albert's suture;
– Lembert suture;
– Kyrpatovskyi suture;
– Shmieden's suture?

116. Which of these sutures are "clean" intestinal sutures:
+ Lembert suture;
– Shmieden's suture;
– Kyrpatovskyi suture;
– Jolly suture?

117. Which sutures are stitched up on the anterior lips when performing "side to side" anastomosis:
+ Shmieden's suture, Lambert suture;
– continuous locking stitch;
– interrupted stitch;
– Jolly suture, Lambert suture?

118. Which sutures are stitched up on the posterior lips when performing "side to side" anastomosis:

+ continuous locking stitch;
– Shmieden's suture, Lambert suture;
– Pribram suture, Mikulicz suture;
– z-shaped suture, purse-string suture?

119. What layers of intestinal wall should be connected for providing hermetism after stitching a wound:

+ serous membrane;
– muscular layer;
– mucous membrane;
– submucous membrane?

120. What layers of intestinal wall should be connected for providing strength a suture after stitching a wound:

+ submucous membrane;
– serous membrane;
– muscular layer;
– mucous membrane?

121. Which suture has the most hemostatic properties:

+ continuous perforative suture;
– nodal suture;
– serous-muscular suture;
– Lembert suture?

122. What material is used for making continuous perforative sutures:

+ catgut;
– silk;
– lavsan;
– kapron?

Test questions and answers for practical lesson № 2

1. Identify the superior boundary of the liver on the right medial clavicular line:

+ IV intercostal space;
– V intercostal space;
– III intercostal space;
– VI intercostal space.

2. Identify the superior boundary of the liver on the left parasternal line:

+ V intercostal space;
– IV intercostal space;
– III intercostal space;
– VI intercostal space?

3. What veins are located in porta hepatis:

+ ramus dexter et sinister v. portae;
– ramus dexter et sinister v. hepaticae;
– v. cava inferior;
– ramus dexter et sinister v. umbilicalis?

4. What is v. portae composed by:

+ v. mesenterica superior, v. lienalis;
– v. renalis sinistra, v. lienalis;
– v. mesenterica superior, v. umbilicalis;
– v. gastrica dextra et sinistra?

5. Identify the sources of blood supply of the liver:

+ a. hepatica propria, v. portae;
– a. hepatica communis, v. umbilicalis;
– truncus coeliacus, v. portae;
– a. hepatica propria, v. umbilicalis?

6. Identify the superior boundary of extraparietal part of the liver:

+ IX intercostal space;
– VIII intercostal space;
– inferior margin of the XII rib;
– inferior margin of the XI rib?

7. Identify the medial boundary of the extraparietal part of the liver:

+ lin. paravertebralis;
– lin. mediana posterior;
– lin. scapularis;
– lin. axillaris media?

8. Identify the inferior boundary of the extraparietal part of the liver:

+ inferior margin of the XI rib;
– inferior margin of the X rib;
– inferior margin of the XII rib;
– inferior margin of the VIII rib?

9. Where is the needle inserted at subphrenic abscess puncture:

+ beneath the XI rib;
– beneath the X rib;
– beneath the XII rib;
– beneath the VIII rib?

10. What anatomical landmarks are used in determining the projection of fundus of stomach:

+ external margin of rectus abdominis mucsle, costal arch, the line wich joint the hevel with the apex of the right axillary crease;

– internal margin of rectus abdominis mucsle, xyphoid process, the line wich joint the hevel with the apex of the left axillary crease;

– xyphoid process, costal arch, the line wich joint the hevel with the apex of the right axillary crease;

– external margin of rectus abdominis mucsle, the line wich joint the hevel with the apex of the left axillary crease?

11. Name the parts of the common bile duct:

+ pars supraduodenalis, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars suprapancreatica, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars infrapancreatica, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars supraduodenalis, pars suprapancreatica, pars infrapancreatica, pars intramuralis?

12. At what level does the inferior margin of the liver transect the right costal arch:

+ IX–X ribs;

– VII rib;

– VIII rib;

– X rib?

13. At what level does the inferior margin of the liver transect the left costal arch:

+ VII rib;

– VI rib;

– VIII rib;

– IX–X ribs?

14. The branches of the right diaphragmatic nerve pass to the liver through:

+ v. cava inferior;

– esophagus;

– aorta;

– a. musculophrenica?

15. What is attached to the superior part of duodenum from above:

+ quadrate lobe of the liver, gallbladder;

– caudate lobe of the liver, gallbladder;

– diaphragm, head of pancreas;

– anterior abdominal wall, ductus choledochus?

16. What is adjacent to the superior part of duodenum from below:

+ head of pancreas;

– ductus choledochus;

– v. portae;

– gallbladder?

17. What is attached to the superior part of duodenum from behind:

+ ductus choledochus, v. portae, a. gastroduodenalis, a. pancreaticoduodenalis superior;

– v. cava inferior, a. gastroduodenalis, a. pancreaticoduodenalis superior;

– head of pancreas, a. gastroduodenalis,
a. pancreaticoduodenallis superior;

– right kidney, ductus choledochus, v. portae, a. gastroduodenalis?

18. Why does the tumor of the head of pancreas result in obstructive jaundice:

+ pars pancreaticus ductus choledochus is compressed;

– as a result of erythrocyte hemolysis;

– pars retroduodenalis of the common bile duct is compressed;

– pars intramuralis of the common bile duct is compressed?

19. Identify the structure of external hepatic bile ducts:

+ ductus hepaticus dexter, ductus hepaticus sinister, ductus hepaticus communis, ductus cysticus, ductus choledochus;

– ductus pancreaticus, ductus hepaticus sinister, ductus hepaticus communis, ductus cysticus, ductus choledochus;

– duct Wirsung, ductus hepaticus sinister, ductus hepaticus communis, ductus cysticus, ductus choledochus;

– duct of Santorini (accessory duct), ductus hepaticus sinister, ductus hepaticus communis, ductus cysticus, ductus choledochus?

20. What is Calot's triangle composed by:

+ ductus hepaticus communis, ductus cysticus, a. cystica;

– ductus choledochus, ductus cysticus, a. cystica;

– ductus hepaticus dexter, ductus cysticus, a. cystica;

– a. hepatica propria, ductus cysticus, a. cystica?

21. What sphincter is located under the union of bile ducts:

+ Mirizzi's sphincter;

– Lutken's sphincter;

– Boyden's sphincter;

– Oddi's sphincter?

22. What sphincter is identified in the gallbladder neck?

+ Lutken's;

– Mirizzi's;

– Boyden's;

– Oddi's?

23. What sphincter is identified around the periampullary part of common bile duct:

+ Boyden's;

– Lutken's;

– Mirizzi's;

– Oddi's?

24. What sphincter is identified in the wall of duodenal ampulla:

+ Oddi's?
– Mirizzi's;
– Lutken's;
– Boyden's?

25. Where do the pancreatic ducts open:

+ pars descendens duodeni;
– pars superior duodeni;
– pars horisontalis duodeni;
– pars ascendens duodeni?

26. Identify the first part of duodenum:

+ pars superior;
– pars descendens;
– pars horizontalis;
– pars ascendens?

27. What is the bed of the spleen limited by from the left and behind:

+ lig. phrenicolienale;
– lig. gastrolienale;
– lig. phrenicocolicum;
– lig. gastrocolicum?

28. What is the bed of the spleen limited by from above:

+ lig. gastrolienale;
– diaphragm;
– lig. phrenicolienale;
– lig. phrenicocolicum?

29. What is the bed of the spleen limited by from below:

+ lig. phrenicocolicum;
– lig. phrenicolienale;

– lig. gastrolienale;
– lig. gastrophrenicum?

30. What is identified in the omental bursa behind the caudate lobe of the liver:
+ recessus superior omentalis;
– recessus inferior omentalis;
– recessus lienalis;
– saccus caecus lienalis?

31. What is identified in the anterior part of the right sagital hepatic sulcus:
+ gallbladder;
– inferior vena cava;
– lig. teres hepatis;
– ductus venosus Arantii?

32. What is identified in the posterior part of the right sagital hepatic sulcus:
+ inferior vena cava;
– gallbladder;
– lig. teres hepatis;
– v. portae?

33. What is identified in the anterior part of the left sagital hepatic sulcus:
+ lig. teres hepatis
– inferior vena cava;
– gallbladder;
– atresia of ductus venosus Arantii?

34. What is identified in the medial part of hepatorenal ligament:
+ inferior vena cava;
– v. portae;

– ductus choledochus;
– a. pancreaticoduodenalis superior?

35. What is identified between the leaves of coronary ligament of the liver:
+ extraperitoneal subphrenic space;
– inferior vena cava;
– v. hepaticae;
– v. portae?

36. What vessels are adjacent to the superior margin of pancreas:
+ a. lienalis, a. hepatica communis, truncus coeliacus;
– a. mesenterica superior, v. lienalis, a. renalis sinistra;
– aorta, a. mesenterica superior, v. mesenterica superior;
– a. renalis sinistra, a. hepatica communis, truncus coeliacus?

37. What vessels are adjacent to the inferior margin of pancreas:
+ a. mesenterica superior, v. mesenterica superior, v. mesenterica inferior;
– v. lienalis, a. mesenterica superior, v. lienalis, a. renalis sinistra;
– aorta, a. mesenterica superior, v. mesenterica superior;
– a. renalis sinistra, a. hepatica communis, truncus coeliacus, a. lienalis?

38. What vessels are adjacent to the posterior surface of the head of pancreas:
+ aorta, v. lienalis, a. et v. renalis sinistra, a. mesenterica superior, v. cava inferior;
– v. portae, v. lienalis, a. et v. renalis sinistra, a. mesenterica superior, v. cava inferior;
– a. lienalis, a. mesenterica superior, v. mesenterica superior, v. mesenterica inferior;

– a. lienalis, a. hepatica communis, truncus coeliacus?

39. What is identified posteriorly to the descending part of duodenum:

+ right kidney, vasa renalia, ureter;
– right kidney, v. portae, v. cava inferior;
– ductus choledochus, vasa renalia, ureter;
– v. cava inferior, ductus choledochus, head of the pancreas?

40. What is attached medially to the descending part of duodenum:

+ v. cava inferior, ductus choledochus, head of the pancreas;
– v. portae, ductus choledochus, head of the pancreas;
– ascending colon
– right kidney, vasa renalia, ureter?

41. What passes laterally to the descending part of duodenum:

+ ascending colon;
– right kidney, vasa renalia, ureter;
– v. portae;
– v. cava inferior, ductus choledochus, head of the pancreas?

42. What is identified anteriorly to the descending part of duodenum:

+ colon transversum, mesocolon transversum;
– ascending colon;
– descending colon;
– right kidney, vasa renalia, ureter?

43. At what level is pars superior duodeni located:

+ I lumbar vertebra;
– XII thoracic vertebra;
– II lumbar vertebra;
– III lumbar vertebra?

44. What level is pars horizontalis duodeni located:
+ III lumbar vertebra;
– II lumbar vertebra;
– I lumbar vertebra;
– XII thoracic vertebra?

45. What anatomical formations are identified behind the horizontal and ascending parts of duodenum:
+ right ureter, vasa testicularia (ovarica), v. cava inferior, aorta;
– a. et v. mesenterica superior, a. et v. colica dextra;
– v. portae, ductus choledochus, head of the pancreas;
– right kidney, vasa renalia, ureter?

46. What anatomical formations are identified anteriorly to horizontal part of duodenum:
+ a. et v. mesenterica superior, a. et v. colica dextra;
– colon transversum;
– right ureter, vasa testicularia (ovarica), v. cava inferior, aorta;
– v. portae, ductus choledochus, head of the pancreas?

47. How does the peritoneum cover a superior part of duodenum:
+ mesoperitoneally:
– intraperitoneally;
– extraperitoneally;
– all of the abovementioned?

48. How does the peritoneum cover the duodenal bulb:
+ intraperitoneally;
– mesoperitoneally;
– all of the abovementioned;
– extraperitoneally?

49. How does the peritoneum cover the descending part of duodenum:

+ extraperitoneally;
– mesoperitoneally;
– all of the abovementioned;
– intraperitoneally?

50. How does the peritoneum cover the horizontal part of duodenum:

+ extraperitoneally;
– mesoperitoneally;
– all of the abovementioned;
– intraperitoneally?

51. How does the peritoneum cover the ascending part of duodenum:

+ mesoperitoneally;
– extraperitoneally;
– intraperitoneally;
– all of the abovementioned?

52. Name the superior border of the liver on linea medioclavicularis:

+ IV intercostal space;
– V intercostal space;
– III intercostal space;
– VI intercostal space?

53. Name the superior border of the liver on linea parasternalis sinistra:

+ V intercostal space;
– IV intercostal space;
– III intercostal space;
– VI intercostal space?

54. What veins are located at the porta hepatis:
+ ramus dexter et sinister v. portae;
– ramus dexter et sinister v. hepaticae;
– v. cava inferior;
– ramus dexter et sinister v. umbilicalis?

55. What is v. porta compesed of:
+ v. mesenterica superior, v. lienalis;
– v. renalis sinistra, v. lienalis;
– v. mesenterica superior, v. umbilicalis;
– v. gastrica dextra et sinistra?

56. Name the sources of blood supply of the liver:
+ a. hepatica propria, v. portae;
– a. hepatica communis, v. umbilicalis;
– truncus coeliacus, v. portae;
– a. hepatica propria, v. umbilicalis?

57. Name the superior border of retroperitoneal hepatic lobe:
+ IX intercostal space;
– VIII intercostal space;
– margo inferior costae XII;
– margo inferior costae XI?

58. Name the medial border of retroperitoneal hepatic lobe:
+ lin. paravertebralis;
– lin. mediana posterior;
– lin. scapularis;
– lin. axillaris media?

59. Name the inferior border of retroperitoneal hepatic lobe:
+ margo inferior costae XI;
– margo inferior costae X;
– margo inferior costae XII;

– margo inferior costae VIII?

60. Where is the needle is puncture of subphrenic space inserted?

+ under XI rib;

– under X rib;

– under XII rib;

– under VIII rib?

61. What anatomical marks are used in determining the projection of the gallbladder bottom:

+ margo lateralis m. recti abdominis, arcus costalis, linea that connects navel with the top of the right axillary cavity;

– margo medialis m. recti abdominis, processus xiphoideus, linea that connects navel with the top of the left axillary cavity;

– processus xiphoideus, arcus costalis, linea that connects navel with the top of the right axillary cavity;

– margo lateralis m. recti abdominis, linea that connects navel with the top of the left axillary cavity?

62. Name the parts of the common bile duct:

+ pars supraduodenalis, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars suprapancreatica, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars infrapancreatica, pars retroduodenalis, pars pancreatica, pars intramuralis;

– pars supraduodenalis, pars suprapancreatica, pars infrapancreatica, pars intramuralis?

63. At what level does the lower edge of the liver cross the right costal arch:

+ IX–X rib;

– VII rib;

– VIII rib;

– X rib?

64. At what level does the lower edge of the liver cross the left costal arch?

+ VII rib;
– VI rib;
– VIII rib;
– IX–X rib?

65. Branches of n. phrenicus dexter go to the liver along:

+ v. cava inferior;
– oesophagus;
– aorta;
– a. musculophrenica?

66. What passes in the upper part of duodenum from above:

+ lobus quadratus hepatis, gallbladder;
– lobus caudatus hepatis, gallbladder;
– diaphragm, caput pancreatis;
– anterior abdominal wall, ductus choledochus?

67. What passes in the upper part of duodenum from below:

+ caput pancreatis;
– ductus choledochus;
– v. portae;
– gallbladder?

68. What passes in the upper part of duodenum from behind:

+ ductus choledochus, v. portae, a. gastroduodenalis, a. pancreaticoduodenalis superior;
– v. cava inferior, a. gastroduodenalis, a. pancreaticoduodenalis superior;
– caput pancreatis, a. gastroduodenalis, a. pancreaticoduodenalis superior;

– ren dexter, ductus choledochus, v. portae, a. gastroduodenalis?

69. Why does obstructive jaundice occur in tumors of caput pancreatic:

+ pars pancreaticus ductus choledochus is compressed;

– as a result of hemolysis of erythrocytes;

– compression of pars retroduodenalis of the common bile duct;

– compression of pars intramuralis of the common bile duct?

70. Name the structure of the system of extrahepatic bile ducts:

+ ductus hepaticus dexter, ductus hepaticus sinister, ductus hepaticus communis, ductus cysticus, ductus choledochus;

– ductus pancreaticus;

– ductus choledochus;

– ductus thoracicus?

71. What sphincter is located around the periampullary part of the common bile:

+ Boyden's;

– Lutkens';

– Mirizzi's;

– Oddi's?

72. What sphincter is located in the wall of hepatogastric ampule:

+ Oddi's;

– Mirizzi's;

– Lutkens';

– Boyden's?

73. The inferior surface of the gallbladder is adjacent to:

+ colon transversum, pars superior duodeni, pars descendens duodeni, flexura coli dextra, pars pylorica gastris;

– ren dexter, pars horizontalis duodeni, pars descendens duodeni, flexura coli dextra, pars pylorica gastris;

– right adrenal, pars superior duodeni, pars descendens duodeni, flexura coli dextra, pars pylorica gastris;

– colon transversum, pars superior duodeni, pars descendens duodeni, flexura coli dextra, caput pancreatis?

74. Where do the ducts of pancreas open:

+ pars descendens duodeni;

– pars superior duodeni;

– pars horizontalis duodeni;

– pars ascendens duodeni?

75. Name the first part of the duodenum:

+ pars superior;

– pars descendens;

– pars horizontalis;

– pars ascendens?

76. How is the bed of the spleen limited from the left and behind:

+ lig. phrenicolienale;

– lig. gastrolienale;

– lig. phrenicocolicum;

– lig. gastrocolicum?

77. How is the bed of the spleen limited from above:

+ lig. gastrolienale;

– diaphragm;

– lig. phrenicolienale;

– lig. phrenicocolicum?

78. How is the bed of the spleen limited from below:

+ lig. phrenicocolicum;
– lig. phrenicolienale;
– lig. gastrolienale;
– lig. gastrophrenicum?

79. What is located in bursa omentalis behind lobus caudatus hepatis:
+ recessus superior omentalis;
– recessus inferior;
– recessus lienalis;
– saccus caecus lienalis?

80. What is located in the anterior part of sulcus sagittalis hepatis dexter:
+ gallbladder;
– v. cava inferior;
– lig. teres hepatis;
– ductus venosi Arantii?

81. What is located in the posterior part of sulcus sagittalis hepatis dexter:
+ v. cava inferior;
– gallbladder;
– lig. teres hepatis;
– v. porta?

82. What is located in the anterior part of sulcus sagittalis hepatis sinister:
+ lig. teres hepatis;
– v. cava inferior;
– gallbladder;
– overgrown ductus venosus Arantii?

83. What passes in the medial part of ligamentum hepatorenale:

+ v. cava inferior;
– v. porta;
– ductus choledochus;
– a. pancreaticoduodenalis superior?

84. What is located between the leaves of ligamentum coronarium hepatis:
+ retropertitoneal subdiaphragmatic space;
– v. cava inferior;
– v. hepaticae;
– v. porta?

85. What vessels are adjacent to the superior edge of pancreas?
+ a. lienalis, a. hepatica communis, truncus coeliacus;
– a. mesenterica superior, v. lienalis, a. renalis sinistra;
– aorta, a. mesenterica superior, v. mesenterica superior;
– a. renalis sinistra, a. hepatica communis, truncus coeliacus?

86. What vessels are adjacent to the inferior edge of pancreas:
+ a. mesenterica superior, v. mesenterica superior, v. mesenterica inferior;
– v. lienalis, a. mesenterica superior, v. lienalis, a. renalis sinistra;
– aorta, a. mesenterica superior, v. mesenterica superior;
– a. renalis sinistra, a. hepatica communis, truncus coeliacus, a. lienalis?

87. What vessels are adjacent to the posterior surface of the body of pancreas:
+ aorta, v. lienalis, a. et v. renalis sinistra, a. mesenterica superior, v. cava inferior;
– v. portae, v. lienalis, a. et v. renalis sinistra, a. mesenterica superior, v. cava inferior;

– a. lienalis, a. mesenterica superior, v. mesenterica superior, v. mesenterica inferior;
– a. lienalis, a. hepatica communis, truncus coeliacus?

88. What is adjacent to the descending part of the duodenum from behind:
+ ren dexter, vasa renalia, ureter;
– ren dexter, v. portae, v. cava inferior;
– ductus choledochus, vasa renalia, ureter;
– v. cava inferior, ductus choledochus, caput pancreatis?

89. What is adjacent to the descending part of the duodenum medially:
+ v. cava inferior, ductus choledochus, caput pancreatis;
– v. portae, ductus choledochus, caput pancreatis;
– colon ascendens;
– ren dexter, vasa renalia, ureter?

90. What passes laterally from the descending part of duodenum:
+ colon ascendens;
– ren dexter, vasa renalia, ureter;
– v. portae;
– v. cava inferior, ductus choledochus, caput pancreatis?

91. What is located in front of pars descendens duodeni:
+ colon transversum, mesocolon transversum;
– colon ascendens;
– colon descendens;
– ren dexter, vasa renalia, ureter?

92. At what level is located pars superior duodeni:
+ I lumbar vertebra;
– XII thoracic vertebra;
– II lumbar vertebra;

– III lumbar vertebra?

93. At what level is located pars horizontalis duodeni:
+ III lumbar vertebra;
– II lumbar vertebra;
– I lumbar vertebra;
– XII thoracic vertebra?

94. What anatomical structures are located behind the horizontal and ascending parts of duodenum:
+ ureter dexter, vasa testicularia (ovarica), v. cava inferior, aorta;
– a. et v. mesenterica superior, a. et v. colica dextra;
– v. portae, ductus choledochus, caput pancreatis;
– ren dexter, vasa renalia, ureter?

95. What anatomical structures are located in front of horizontal part of duodenum:
+ a. et v. mesenterica superior, a. et v. colica dextra;
– colon transversum;
– ureter dexter, vasa testicularia (ovarica), v. cava inferior, aorta;
– v. portae, ductus choledochus, caput pancreatis?

96. How is the superior part of duodenum covered with peritoneum:
+ mesoperitoneally;
– intraperitoneally;
– extraperitoneally;
– all of the abovementioned?

97. How is the duodenal bulb covered with peritoneum:
+ intraperitoneally;
– mesoperitoneally;
– all of the abovementioned;

– extraperitoneally?

98. How is the descending part of duodenum covered with peritoneum:

+ extraperitoneally;
– mesoperitoneally;
– all of the abovementioned;
– intraperitoneally?

99. How is the horizontal part of duodenum covered with peritoneum:

+ extraperitoneally;
– mesoperitoneally;
– all of the abovementioned;
– intraperitoneally?

100. How is ascending part of duodenum covered with peritoneum:

+ mesoperitoneally;
– extraperitoneally;
– intraperitoneally;
– all of the abovementioned?

101. What does the root of the mesentery of the small intestine cross:

+ aorta, v. cava inferior, a. et v. testicularia (ovarica), right ureter;
– aorta, v. cava inferior, v. portae, a. et v. testicularia (ovarica), left ureter;
– aotra, v. cava inferior, a. et v. renalis sinistra, a. et v. testicularia (ovarica), left ureter;
– aotra, v. cava inferior, a. et v. renalis sinistra, left ureter, a. et v. testicularia (ovarica), v. portae?

102. What anatomical marks are used in determining the first part of the small intestine:

+ the ligament of Treitz;
– lig. phrenicocolicum;
– pars ascendens duodeni;
– recessus duodenalis superior?

103. The root of the small intestin al mesentery covers the area:

+ from II lumbar vertebra to the right sacroiliac joint;
– from II lumbar vertebra to the pubic joint;
– from II lumbar vertebra to linea terminalis;
– from II lumbar vertebra to ileocecal angle?

104. What vessels compress the lower part of duodenum and can disturb its permeability:

+ a. and v. mesenterica superior;
– a. mesenterica superior and v. mesenterica inferior;
– a. colica media;
– a. colica sinistra?

105. What are the sources of blood supply of jejunum and ileum:

+ a. mesenterica superior;
– aa. gastricae;
– a. mesenterica inferior;
– a. hepatica communis?

106. What nervous plexuses are involved in the innervation of duodenum:

+ solar plexus;
– the superior mesenteric plexus;
– the inferior mesenteric plexus;
– anterior hepatic plexus?

107. Connection of what layers of the intestinal wall provides strength of the suture when stitching the wound:

+ submucous membrane;
– serous membrane;
– muscular membrane;
– mucous membrane?

108. Connection of what layers of the intestinal wall provides tightness when stitching the wound:

+ serous membrane;
– muscular membrane;
– mucous membrane;
– submucous membrane?

109. How can wound of the small intestine (size 0.5–0.8 cm) be stitched:

+ purse-string suture;
– lwo-layer Albert's suture;
– nodal serous-muscular Lembert's suture;
– Schmieden's suture?

110. How can the wound of diameter 1–2 cm can be sutured:

+ lwo-layer Albert's suture;
– Z-shaped suture?

111. What is the first stage of surgical resection of the small intestine with the "end to end" interintestinal anastomosis:

+ mobilization of the intestine;
– resection of the intestine;
– making of entero-enteroanastomosis;
– intestinal stump formation?

112. What is the second stage of surgical resection of the small intestine with the "end to end" interintestinal anastomosis?

+ resection of the intestine;

– mobilization of the intestine;
– making of entero-enteroanastomosis;
– intestinal stump formation?

113. What is the third stage of surgical resection of the small intestine with the "end to end" interintestinal anastomosis:
+ making of entero-enteroanastomosis;
– mobilization of the intestine;
– resection of the intestine;
– intestinal stump formation?

114. What is the fourth stage of surgical resection of the small intestine with the "end to end" interintestinal anastomosis:
+ anastomotic patency control;
– stitch the hole in the intestinal mesentery;
– mobilization of the intestine;
– making of entero-enteroanastomosis?

115. What is the fifth stage of surgical resection of the small intestine with the "end to end" interintestinal anastomosis?
+ stitch the hole in the intestinal mesentery;
– anastomotic patency control;
– making of entero-enteroanastomosis;
– intestinal stump formation?

116. What sutures are put on the posterior lips of the anastomosis:
+ uninterrupted twisted and Lebmert’s suture;
– Schmieden’s suture and Lembert’s suture;
– wninterrupted twisted suture;
– Lembert’s suture?

117. What sutures are put on the anterior lips of the anastomosis:
+ Schmieden’s suture and Lembert’s suture;

– continuous twisted and Lebmert's suture;
– Schmieden's suture;
– Lembert's suture?

118. Who developed the special palpable method for identification of flexura duodenojejunalis at the revision of the organs of the abdominal cavity:
+ Hubarev;
– Kocher;
– Billroth;
– Lembert?

119. What is the main requirement of suture applied to the intestinal ones:
+ tightness;
– hemostasis;
– strength;
– adaptability?

120. How many lines of sutures are usually put when stitching the wound of the small intestine:
+ two;
– one;
– three;
– four?

121. What anastomosis is the most physiological in the resection in the small intestine:
+ "end to end";
– "side to side";
– "end to side";
– all of the abovementioned?

122. In what case is it possible not to make resection of the intestine after its injuries:

+ after small punctate intestinal injuries;

– at presence of numerous wounds of the intestine located close to each other;

– at transversal ruptures of the intestine;

– at separation of the intestine from mesentery?

123. At what stage one should stitch the wound of small intestine at the revision the abdominal cavity organs:

+ after detecting all injuries of the intestine and mesenteric vessels;

– immediately after detecting the injuries;

– the number of injuries does not affect the surgeon's tactics;

– at small punctate intestinal injuries?

124. What is the border of body of stomach with antrum:

+ incisura angularis;

– incisura cardiaca;

– m. sphincter pyloricus;

– v. prepylorica?

125. Where is the entrance to the stomach located:

+ to the left of the column, at the level of X–XI thoracic vertebrae;

– to the right of the column, at the level of X–XI thoracic vertebrae;

– to the left of the column, at the level of the XII thoracic vertebra;

– to the right of the column, at the level of the XII thoracic and I lumbar vertebrae?

126. Where is the exit to the stomach located:

+ to the right of the column, at the level of T XII–L1;

– to the left of the column, at the level of T XII–L1;

– to the right of the column, at the level of X–XI thoracic vertebrae;

– to the left of the column, at the level of X–XI thoracic vertebrae?

127. The anterior wall of the stomach borders on:
+ the left lobe of the liver, diaphragm and anterior abdominal wall;
– the anterior abdominal wall, left lobe of the liver;
– the left lobe of the liver, anterior abdominal wall, gallbladder;
– diaphragm, the left lobe of the liver, gallbladder?

128. Which organs adjoin the posterior wall of the stomach:
+ pancreas, left kidney, left adrenal gland;
– pancreas, left kidney, left adrenal gland, diaphragm;
– pancreas, left kidney, left adrenal gland, spleen;
– pancreas, left kidney, left adrenal gland, transverse colon?

129. Which organs adjoin the fundus of stomach:
+ spleen;
– left kidney;
– transverse colon;
– gallbladder?

130. Which organs adhere to the greater curvature of the stomach:
+ transverse colon, mesocolon transversum;
– left kidney;
– pancreas;
– left lobe of the liver?

131. Name the border of the bottom of the stomach with cardia:
+ incisura cardiac;
– incisura angularis;

– m. sphincter pyloricus;
– v. praepylorica Mayo?

132. Name the superficial connections of the stomach:
+ lig. hepatogastricum, lig. gastrophrenicum, lig. gastrolienale, lig. gastrocolicum;
– lig. hepatogastricum, lig. gastrophrenicum, lig. gastrolienale, lig. hepatoduodenale;
– lig. hepatogastricum, lig. gastrophrenicum, lig. gastrolienale, lig. gastropancreaticum;
– lig. hepatogastricum, lig. gastrophrenicum, lig. gastrocolicum, lig. pyloropancreaticum?

133. Name the deep connections of the stomach:
+ lig. gastropancreaticum, lig. pyloropancreticum;
– lig. gastropancreaticum, lig. gastrophrenicum;
– lig. gastrocolicum, lig. pyloropancreaticum;
– lig. gastrolienale, lig. pyloropancreaticum, lig. phrenicoesophageale?

134. Name the arteries that are involved into blood supply of the stomach in small curvature:
+ a. gastrica dextra et sinistra;
– a. gastrica dextra et sinistra, a. gastroduodenalis;
– a. gastrica dextra et sinistra, aa. gastricae breves;
– a. gastroepiploica dextra et sinistra?

135. Name the arteries involved in blood supply of the stomach along the large curvature:
+ a. gastroepiploica dextra et sinistra, aa. gastricae breves;
– a. gastroepiploica dextra et sinistra;
– a. gastrica dextra et sinistra;
– a. gastroduodenalis, a. gastroepiploica dextra et sinistra?

136. A. gastrica sinistra leaves from:

+ truncus coeliacus;
– a. hepatica communis;
– a. lienalis;
– a. gastroduodenalis?

137. A. gastrica dextra leaves from:
+ a. hepatica propria;
– truncus coeliacus;
– a. lienalis;
– a. gastroduodenalis?

138. A. gastroepiploica sinistra leaves from:
+ a. lienalis;
– truncus coeliacus;
– a. gastroduodenalis;
– a. hepatica communis?

139. A. gastroepiploica dextra leaves from:
+ a. gastroduodenalis;
– a. hepatica communis;
– truncus coeliacus;
– a. lienalis?

140. A. gastricae breves leave from:
+ a. lienalis;
– a. hepatica communis;
– a. gastroduodenalis;
– truncus coeliacus?

141. Where does a. gastrica sinistra pass:
+ in lig. gastropancreaticum, lig. hepatogastricum;
– in lig. hepatogastricum;
– in lig. hepatogastricum, lig. hepatoduodenale;
– in lig. hepatogastricum, lig. gastrocolicum?

142. Where does a. gastrica dextra pass:
+ in lig. hepatoduodenal, lig. hepatogastricum;
– in lig. hepatogastricum;
– in lig. gastrocolicum;
– in lig. gastropancreaticum?

143. Where does a. gastroepiploica sinistra pass:
+ in lig. gastrolienale, lig. gastrocolicum;
– in lig. gastrocolicum;
– in lig. gastropancreaticum;
– in lig. gastropancreaticum, lig. gastrocolicum?

144. Where does a. gastroepiploica dextra pass:
+ in lig. gastrocolicum;
– in lig. gastrolienale;
– in lig. gastropancreaticum;
– in lig. hepatoduodenale?

145. Where does aa. gastricae breves pass:
+ in lig. gastrolienale;
– in lig. gastropancreaticum;
– in lig. gastrocolicum;
– in lig. hepatogastricum?

146. Name the function of the first of lymphatic drainage basin from the stomach by A.V. Melnikov:

+ collects the lymph from the pylorus of the stomach from the side of the great curvature, zone of the right gastrointestinal artery;

– collects the lymph from the pylorus of the stomach from the side of the lesser curvature, zone of the right gastric artery;

– collects the lymph from the body of the stomach from the side of the lesser curvature, area of the left gastric artery;

– collects the lymph from the vertical part of the greater curvature of the stomach, the region of the spleen artery?

147. Name the function of the second lymphatic drainage basin from the stomach by A.V. Melnikov:

+ collects the lymph from the pylorus of the stomach from the side of the lesser curvature, area of the right gastric artery;

– collects the lymph from the anterior and posterior walls of the body of the stomach, area of the left gastric artery;

– collects the lymph from the pylorus from the side of the great curvature, zone of the right gastrointestinal artery;

– collects the lymph from the vertical part of the great stomach curvature, region of the spleen artery?

148. What is the function of the third lymphatic drainage basin from the stomach by A.V. Melnikov:

+ collects the lymph from the body of the stomach along the lesser curvature and cardia, area of the left gastric artery;

– collects lymph from the vertical part of the greater curvature of the stomach, area of spleenic artery;

– collects lymph from the pylorus from the side of the greater curvature, area of the right gastric artery;

– collects lymph from the pylorus from the side of the greater curvature of the stomach, area of the right gastric artery?

149. What is the function of the fourth lymphatic drainage basin from the stomach by A.V. Melnikov:

+ collects lymph from the vertical part of the greater curvature and of body of the stomach, area of the splenic artery;

– collects lymph from the pylorus from the side of the greater curvatureof the stomach, area of the right gastroepiploic artery;

– collects lymph from the pylorus from the side of the lesser curvatureof the stomach, area of the right gastric artery;

– collects lymph from the body of the stomach along the lesser curvature of the stomach and cardia, area of the left gastric artery?

150. What nerve provides the evacuation function of the stomach:

+ nerve of Latarjet;

– n. vagus;

– n. phrenicus;

– nerve of Grassi?

151. Where does the nerve of Latarjet pass:

+ over the lesser curvature of the stomach, between the leaves of the lesser omentum;

– along the greater curvature of the stomach, between the leaves of lig. gastrocolicum;

– behind the esophagus to the bottom of the stomach;

– in the thickness of the lesser omentum along v. portae?

152. The surgeon did not find a source in the form of an ulcer after laparotomy because of severe stomach bleeding. What should one think about? Your actions:

+ Mallori – Weiss syndrome, to perform gastrostomy, tie a. gastrica sinistra, and suture the mucous membrane;

– Budd – Chiari syndrome to perform, make gastrostomy and tie a. gastrica dextra;

– to perform truncal vagotomy;

– to perform stomach resection?

153. Name the first stage of gastrostomy using the Witzel's method:

+ a rubber tube is placed on the anterior wall of which is invaginated wich serous-muscle sutures into the wall of the stomach;

– the front wall of the stomach is removed into the wound in the form of a cone and three purse-string sutures at a distance of 1–1.5 cm are stitched;

– the greater curvature of the stomach is mobilized and the right and left gastrointestinal arteries are tied;

– the lesser curvature of the stomach is mobilized and the left and right stomach arteries are tied?

154. What is the second stage of gastrostomy by Witzel's method:

+ a purse-string suture is stitched at the end of the tube on the stomach; in the center of this suture the stomach is inserted and the end of the tube is into the lumen of the stomach;

– in the center of the purse-string suture, the wall of the stomach is transeeted and a rubber tube is inserted into its lumen, the purse-string sutures are tied and immersed with the wall of the stomach to its lummen;

– the top of the cone is dissected and a rubber tube is immersed into the lumen of the stomach;

– the anterior and posterior walls of the stomach are dissected between the forceps up to 3 cm, the incision is prolonged in parallel to the greater curvature of the stomach up to 5 cm?

155. What is the third stage of gastrostomy by Witzel's method:

+ the tube is output through the counterpuncture, fixed to the skin and gastropexy is carried out;

– a rubber tube is put on the formed graft and the edges of the graft are stitched with two-row suture, the end of the graft is sewed into the abdominal incision;

– the purse-string sutures are tied on the rubber tube and the cone formed at the level of the first purse-string sutures is stitched to the peritoneum the second – to the rectus abdominis muscle, the third – to the skin;

– the top of the cone is dissected and a rubber tube is immersed into the lumen of the stomach, the purse-string sutures are tied?

156. What is the first stage of gastrostomy Toprover's method:

+ the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitched;

– on the anterior wall of the stomach is put a rubber tube that is invaginated with the serous-muscular sutures in the wall of the stomach;

– the greater curvature of the stomach is mobilized;

– the anterior and posterior walls of the stomach are dissected between the clamps, 3 cm in length perpendicular to the greater curvature of the stomach?

157. What is the second stage of gastrostomy by Toprover's method:

+ in the center of the first purse-string sutures the stomach is dissected and a rubber tube is intubated, the purse-string sutures are tied on the tube;

– at the end of the tube a purse-string sutures is stitched on the stomach, in the center of which the stomach is dissected, and the end of the tube is immersed into the lumen of the stomach;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is immersed; the purse-string sutures are tied on the tube and delivered and with the wall of the stomach into its lumen;

– the anterior and posterior walls of the stomach are dissected between the clamps, 3 cm in length perpendicular to the greater curvature of the stomach?

158. What is the third stage of gastrostomy by Toprover's method:

+ the cone is sutured at the level of the first purse-string sutures to the parietal peritoneum, at the level of the second – to the rectus abdominis muscle, and the third – to the skin;

– the tube is output through the counterpuncture, fixed to the skin and of the gastropexy is carried out;

– a rubber tube is put on the graft stomach, and the edges of the graft are stitched with two-row suture;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted, the purse-string sutures are tied on the tube and immersed with the wall of the stomach into its lumen?

159. What is the first stage of gastrostomy by the Stamm – Senn – Kader's method:

+ three purse-string sutures are stitched on the wall of the stomach;

– a rubber tube that is invaginated with the serous-muscular sutures in the wall of the stomach is put on the anterior wall of the stomach;

– the greater curvature of the stomach is mobilized;

– perpendicular to the greater curvature of the stomach, the anterior and posterior walls of the stomach are dissected between the clamps, 3 cm in length?

160. Name the second stage of gastrostomy by Stamm – Senn – Kader's method:

+ in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted; the purse-string sutures are tied on the tube and immersed with the wall of the stomach into its lumen;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted; the purse-string sutures are tied on the tube;

– at the end of the tube a purse-string sutures in stitched on the stomach, in the center of which the stomach is dissected, and the end of the tube is immersed into the lumen of the stomach;

– a rubber tube is put on the graft of the stomach, and the edges of the graft are stitched with a two-row suture?

161. Name the third stage of gastrostomy by Stamm – Senn – Kader's method:

+ a rubber tube is outpul through the counterpuncture, fixed to the skin and gastropexy is carried out;

– the cone is sutured at the level of the first purse-string sutures to the parietal peritoneum, at the second level – to the rectus abdominis muscle, and the third – to the skin;

– a rubber tube is put on the graft of the stomach, and the edges of the graft are stitched with a two-row suture;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted; the purse-string sutures are tied on the tube and immersed with the wall of the stomach into its lumen?

162. Name the first stage of gastrostomy by Beck – Carrel – Jian's method:

+ the greater curvature of the stomach is mobilized;

– on the anterior wall of the stomach is put a rubber tube that is invaginated with serous-muscular sutures in the wall of the stomach;

– the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitchet;

– perpendicular to the greater curvature of the stomach, the anterior and posterior walls of the stomach are dissected, between the clamps, 3 cm in length?

163. Name the second stage of gastrostomy by Beck – Carrel – Jian's method:

+ perpendicular to the greater curvature of the stomach; the anterior and posterior of the walls of the stomach are dissected, between the clamps, 3 cm in length; the incision is prolonget parallel to the greater curvature, 5 cm in length;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted, the purse-string sutures are tied on the tube and immersed with the wall of the stomach into its lumen;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted, the purse-string sutures are tied on the tube;

– at the end of the tube a purse-string sutures is stitchet on the stomach, in the center of which the stomach is dissected, and the end of the tube is immersed into the lumen of the stomach?

164. What is the third stage of gastrostomy by Beck – Carrel – Jian's method:

+ on the graft of the stomach is put a rubber tube, and the edges of the graft are stitched wich two-row suture;

– the cone is suture at the level of the first purse-string sutures to the parietal peritoneum, at the second level – to the rectus abdominis muscle, and the third – to the skin;

– in the center of the first purse-string sutures the stomach is dissected and a rubber tube is inserted; the purse-string sutures are tied on the tube and immersed with the wall of the stomach into its lumen;

– at the end of the tube a purse-string suture is stitched on the stomach in the center of which the stomach is dissected, and the end of the tube is immersed into the lumen of the stomach?

165. What is the fourth stage of gastrostomy by Beck – Carrel – Jian's method:

+ the end of the tubular graft is sutured into incision of the anterior abdominal wall;

– a rubber tube is output through the counterpuncture, fixed to the skin and gastropexy is carried out;

– the cone is sutured at the level of the first purse-string suture to the parietal peritoneum, at the second level – to the rectus abdominis muscle, and the third – to the skin;

– at the end of the tube a purse-string suture is stitched on the stomach, in the center of which the stomach is dissected, and the end of the tube is immersed into the lumen of the stomach?

166. Name the preserving surgery on the stomach, which reduces the secretion and acidity of the gastric contents:

+ vagotomy;

– gastrectomy;

– pyloroplasty;

– gastrostomy?

167. What is the first stage of stem vagotomy:

+ upper middle laparotomy, revision of the organs of the upper abdominal cavity, mobilization of the left lobe of the liver;

– upper middle laparatomy, mobilization, denervation of the greater curvature of the stomach;

– upper middle laparotomy, the abdominal part of the esophagus is retracted;

– upper middle laparotomy, lig. phrenicoesophageum, is transected the left vagus nerve is found and transected below the departing of the liver branches?

168. Name the second stage of stem vagotomy:

+ lig. phrenicoesophageum is transected the abdominal part of the esophagus, is retracted the left and right vagus nerves are found;

– mobilization and denervation of the greater curvature of the stomach;

– the branches of the nerve of Latarjet together with the vessels, going to the body and bottom of the stomach are transected;

– the right vagus nerve is found and below the departing of the abdominal branch?

169. Name the third stage of stem vagotomy:

+ the 1% solution of novocaine is administered perineural and a part of the nerve in length of 2–3 cm is dissected out;

– the branches of the nerve of Latarjet together with the vessels going to the body and bottom of the stomach are transected;

– the right vagus nerve is found and transected it below the departing of the abdominal branch;

– the left vagus nerve is found and transected it below the departing of the hepatic branches?

170. Name the first stage of selective vagotomy:

+ upper middle laparotomy, revision of organs of the upper abdominal cavity, mobilization of the left lobe of the liver;

– upper middle laparotomy, mobilization and denervation of the greater curvature of the stomach;

– upper middle laparotomy, lig. phrenicoesophageum is transected and the abdominal part of esophagus, is extirpated the left and right vagus nerves are found;

– the upper middle laparotomy, the abdominal part of the esophagus, is extirpated the left vagus nerve and is found transected below the departing of the hepatic branches?

171. Name the second stage of selective vagotomy:

+ lig. phrenicoesophageum is transected and the abdominal part of the esophagus, is extirpated the left vagus nerve and is found transected below the departing of hepatic branches;

– the branches of the nerve of Latarjet which go to the body and bottom of the stomach are transected;

– the left and right vagus nerves and are found a part of the nerve in length of 2–3 cm is dissected out;

– the mobilization of the greater curvature of the stomach is carried out?

172. Name the third stage of selective vagotomy:

+ the right vagus nerve is found and transected it below the departing of the abdominal branch;

– the branches of the nerve of Latarjet are transected together with the vessels that go to the body and bottom of the stomach;

– the 1 % solution of novocaine is administered perineural and a part of the nerve in length of 2–3 cm is dissected out;

– mobilization and denervation of the greater curvature of the stomach are carried out?

173. What is the technique of selective proximal vagotomy:

+ the branches of the nerve of Latarjet are transected together with the vessels that go to the body and bottom of the stomach;

– the 1% solution of novocaine is administered perineural and a part of the nerve in length of 2–3 cm is dissected out;

– the left vagus nerve is transected below the departing of the hepatic branches, and the right one is transected below the departing of the abdominal branches;

– mobilization and denervation of the greater and lesser curvatures of the stomach are carried out?

174. Name the drainage operations of the stomach:

+ gastroenterostomy, pyloroplasty, gastroduodenostomy;

– pyloroplasty;

– resection, gastrostomy, pyloroplasty;

– gastrostomy, pyloroplasty?

175. What is the first stage of pyloroplasty by Heineke-Mikulicz method:

+ longitudinal section of the duodenum and pylorus is carried out;

– the upper part of duodenum is sutured to the greater curvature of the stomach;

– the mobilization of duodenum by Kocher is carried out;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision?

176. What is the second stage of pyloroplasty by Heineke-Mikulicz:

+ the edges of the incision are sutured with Albert's two-row suture;

– the upper part of duodenum is sutured to the greater curvature of the stomach;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the posterior and anterior lips of anastomosis are formed with Albert's two-row suture?

177. What is the first stage of pyloroplasty by Finney's method:

+ the upper part of the duodenum is sutured the greater curvature of the stomach with nodal serous-muscular sutures;

– a longitudinal section of the duodenum and pylorus is carried out;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitched?

178. What is the second stage of pyloroplasty by Finney's method:

+ the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– a longitudinal section of the duodenum and pylorus is carried out;

– the edges of the incision are stitched with a two-row suture;

– the mobilization of duodenum by Kocher is carried out?

179. What is the third stage of pyloroplasty by Finney's method:

+ the posterior and anterior lips of anastomosis are formed with Albert's two-row suture;

– the mobilization of duodenum by Kocher is carried out;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the edges of the incision are stitched with a two-row suture?

180. What is the first stage of pyloroplasty by Jaboulay's method:

+ mobilization of the duodenum by Kocher;

– a longitudinal section of the duodenum and pylorus is carried out;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the duodenum is stitched to the greater curvature of the stomach?

181. Name the second stage of pyloroplasty by Jaboulay's method:

+ the wall of duodenum is stitchet to the wall of stomach;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the edges of the incision are stitched with a two-row suture;

– a longitudinal section of the duodenum and pylorus is carried out?

182. What is the third stage of pyloroplasty by Jaboulay's method:

+ gastrointestinal anastomosis is formed;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the wall of duodenum is stitchet to the wall of stomach;

– the edges of the incision are stitched with a two-row suture;?

183. Name the first stage of gastroenterostomy by Welfler's method:

+ jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures;

– in the vascular zone of transverse mesocolon is formed a hole through which the posterior wall of the stomach is protruded;

– the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitched;

– a longitudinal section of the duodenum and pylorus is carried out?

184. What is the second stage of gastroenterostomy by the Welfler's method:

+ retreating 0,5 cm from the line of the suture, the walls of the stomach and jejunum are dissected and the posterior and anterior lips of anastomosis are formed;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– the upper part of duodenum is sutured to the greater curvature of the stomach;

– Brown's interintestinal enteroanastomosis is stitched?

185. What is the third stage of gastroenterostomy by Welfler's method:

+ retreating 12–20 cm from gastroenterostomy Brown's enteroanastomosis is stitched;

– in the center of the first purse-string suture the stomach is dissected and a rubber tube is inserted; the purse-string sutures are stitched on the tube;

– on the graft of the stomach is put a rubber tube, and the edges of the graft are stitched with a suture;

– retreating 10–12 cm from ligamentum suspensorium duodeni vertically oriented gastroenterostomy is performed?

186. What is the first stage of gastroenterostomy by Hacker – Petersen method:

+ in the avascular zone of the transverse mesocolon is formed a hole through which the posterior wall of the stomach is protruded;

– jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures;

– the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitched;

– the wall of duodenum is stitched to the wall of stomach?

187. What is the second stage of gastroenterostomy by Hacker – Petersen method:

+ a vertically directed gastroenterostomosis is formed between the short jejunal loop and the posterior wall of the stomach;

– jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures;

– interintestinal Brown's enteroanastomosis is stitched;

– the anterior wall of the stomach is delivered into the wound in the form of a cone and three purse-string sutures are stitched;

188. What is the third stage of gastroenterostomy by Hacker – Petersen method:

+ the wall of the stomach is stitched in the hole of transverse mesocolon with interrupted sutures;

– Brown's interintestinal enteroanastomosis is stitched;

– the pylorus and the descending part of duodenum are dissected with U-shaped incision;

– jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures?

189. Name the first stage of gastrectomy by Billroth's operation I:

+ mobilization of the greater curvature of the stomach;

– mobilization of the lesser curvature of the stomach;

– the duodenum is transected between the clamps;

– mobilization of the duodenum by Kocher?

190. What is the second stage of gastrectomy by Billroth's operation I:

+ mobilization of the lesser curvature of the stomach;

– mobilization of the greater curvature of the stomach;

– the duodenum is transected between the clamps;

– jejunal loop is put through the hole in the transverse mesocolon in the upper abdomen?

191. What is the third stage of gastrectomy by Billroth's operation I:

+ the duodenum is transected between the clamps;

– jejunal loop is put through the hole in the transverse mesocolon in the upper abdomen;

– Brown's interintestinal enteroanastomosis is stitched;

– jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures?

192. What is the fourth stage of gastrectomy by Billroth's operation I:

+ removal of a part of the stomach;

– in the avascular zone of the transverse mesocolon is formed the hole through which the posterior wall of the stomach is protruded;

– jejunal loop is put through the hole in the transverse mesocolon in the upper abdomen;

– jejunal loop is sutured to the anterior wall of the stomach in isoperistaltic direction with interrupted serous-muscular sutures?

193. Name the fifth stage of gastrectomy by Billroth's operation I:

+ two-thirds of the gastric remnant on the side of the lesser curvature is sutured with a two-row suture;

– Brown's interintestinal enteroanastomosis is stitched;

– a vertically directed gastroenterostomosis is formed between the short jejunal loop and the posterior wall of the stomach;

– jejunal loop is sutured to the anterior wall of the stomach and gastroenteroanastomosis is formed?

194. What is the sixth stage of gastrectomy by Billroth's operation I:

+ gastric remnant and duodenum are approached and gastroenteroanastomosis is formed with two-row sutures;

– Brown's interintestinal enteroanastomosis is stitched;

– a vertically directed gastroenterostomosis is formed between the short jejunal loop and the posterior wall of the stomach;

– jejunal loop is sutured to the anterior wall of the stomach and gastroenteroanastomosis is formed?

195. What is the first main stage of gastrectomy by Billroth's operation II in the modification of the Hofmeister – Finsterer:

+ gastric mobilization;

– the duodenum is transected;

– jejunal loop is put through the hole in the transverse mesocolon in the upper abdomen;

– the initial department of the jejunum?

196. What is the second main stage of gastrectomy by Billroth's operation II in the modification of the Hofmeister – Finsterer:

+ the duodenum is transected and its stump is processed;

– resection of the stomach;

– jejunal loop is put forward from the transverse mesocolon and is sutured to the wall of gastric remnant;

– the stomach is resected and 2/3 of its remnant is treated?

197. What is the third stage of gastrectomy by Billroth's operation II in the modification of Hofmeister – Finsterer:

+ the stomach is resected and 2/3 of its remnant is treated;

– gastric remnant and duodenum are apposed and «end-to-end» gastroenteroanastomosis is formed with two – row sutures;

– jejunal loop is sutured to the anterior wall of the stomach and gastroenteroanastomosis is formed;

– mobilization of duodenum by Kocher?

198. What is the fourth stage of gastrectomy by Billroth's operation II in the modification of Hofmeister – Finsterer:

+ the formation of gastroenteroanastomosis between the short jejunal loop and gastric remnant;

– the duodenal stump and gastric remnant are apposed and the gastrointestinal anastomosis is formed;

– jejunal loop is sutured to the anterior wall of the stomach and gastroenteroanastomosis is formed;

– Brown's interintestinal enteroanastomosis is stitched?

Test questions and answers for practical lesson № 4

1. What goes in the subcutaneous tissue of the lumbar region:

+ rr. dorsiles a. lumbales, rr. dorsiles nn. lumbales, rr. dorsiles nn. intercostales, rr. cutanei lateralis n. iliohypogastricus;

– rr. dorsilis a. lumbales, rr. dorsiles nn. lumbales, rr. dorsiles nn. intercostales, rr. cutanei ilioinguinalis;

– rr. dorsilis a. lumbales, rr. dorsiles nn. lumbales, rr. dorsiles nn. intercostales, n. cutaneus femoris lateralis;

– rr. dorsilis a. lumbales, rr. dorsiles nn. lumbales, rr. dorsiles nn. intercostales, rr. cutanei ilioinguinalis, n. cutaneus femoris lateralis?

2. What is located in the first muscular layer of the lumbar region:

+ m. latissimus dorsi, m. obliquus externus abdominis;

– m. latissimus dorsi, m. erector spinae;

– m. trapezius, m. latissimus dorsi, m. obliquus externus abdominis;

– m. latissimus dorsi, m. obliquus internus abdominis?

3. Name the medial wall of the Petit triangle (inferior lumbar triangle):

+ margo lateralis of m. latissimus dorsi;

– margo posterior of m. obliquus externus abdominis;

– margo lateralis of m. erector spinae;

– margo medialis of m. latissimus dorsi?

4. Name the lateral wall of the Petit triangle (inferior lumbar triangle):

+ margo posterior of m. obliquus externus abdominis;

– margo lateralis of m. latissimus dorsi;

– margo medialis of m. latissimus dorsi;

– margo lateralis of m. erector spinae?

5. What is the bottom of Petit triangle (inferior lumbar triangle):

+ m. obliquus internus abdominis;
– m. obliquus externus abdominis;
– m. transversus abdominis;
– m. serratus posterior inferior?

6. What is located in the second muscular layer of the lateral part of lumbar region:

+ m. serratus posterior inferior, m. obliquus internus abdominis;
– m. transversus abdominis;
– m. latissimus dorsi;
– m. erector spinae?

7. Name the medial wall of Grynfeltt – Lesshaft's triangle (superior lumbar triangle):

+ margo lateralis of m. erector spinae;
– margo inferior of m. obliquus internus abdominis;
– m. latissimus dorsi;
– XII rib?

8. Name the superior wall of Grynfeltt – Lesshaft's triangle (superior lumbar triangle):

+ margo inferior of m. serratus posterior inferior, XII rib;
– margo inferior of m. obliquus internus abdominis, XII rib;
– margo inferior of m. trapezius;
– margo lateralis of m. latissimus dorsi?

9. What forms the lower lateral border of Grynfeltt – Lesshaft's triangle (superior lumbar triangle):

+ free margin of m. obliquus internus abdominis;
– margo lateralis of m. latissimus dorsi;
– crista iliaca;
– free margin of m. obliquus externus abdominis?

10. What makes the bottom of Grynfeltt – Lesshaft's triangle (superior lumbar triangle):

+ aponeurosis of m. transversus abdominis;
– m. obliquus internus abdominis;
– m. serratus posterior inferior;
– m. erector spinae?

11. What covers Grynfeltt – Lesshaft's triangle (superior lumbar triangle) externally:

+ m. latissimus dorsi;
– m. obliquus externus abdominis;
– m. obliquus internus abdominis;
– m. transversus abdominis?

12. What is located in the third layer of the lateral part of lumbar region:

+ aponeurosis of m. transversus abdominis;
– fascia lumbalis;
– m. obliquus internus abdominis;
– m. erector spinae?

13. What is located in the medial part of the lumbar region under m. latissimus dorsi:

+ m. erector spinae;
– m. trapezius;
– m. psoas major;
– m. quadratus lumborum?

14. What is located under the deep leaf of fascia thoracolumbalis:

+ m. psoas major, m. quadratus lumborum;
– m. latissimus dorsi;
– m. erector spinae;
– m. transversus abdominis?

15. What goes between m. quadratus lumborum and fascia that covers it:

+ n. iliohypogastricus, n. ilioinguinalis, subcostal neurovascular bundle;

– a. et v. lumbales, n. iliohypogastricus, n. ilioinguinalis;

– n. iliohypogastricus, n. ilioinguinalis, n. genitofemoralis, a. et v. subcostales, n. subcostalis;

– n. iliohypogastricus, n. ilioinguinalis, n. genitofemoralis, a. et v. lumbales?

16. What are the weak places of the lumbar region:

+ Petit triangle, Grynfeltt – Lesshaft's triangle:

– Petit triangle, Grynfeltt – Lesshaft's triangle, fissura Bochdaleki;

– Petit triangle, Grynfeltt – Lesshaft's triangle, fissura Bochdaleki, Larrey's fissure;

– Petit triangle, Grynfeltt – Lesshaft's triangle, fissura Bochdaleki, Larrey's fissure, Morgagni's fissure?

17. Name the first layer of the peritoneal tissue:

+ textus cellulosus retroperitonealis;

– paranephron, paraureterium;

– paracolon;

– paranephron?

18. How is the inflammation of the first layer of retroperitoneal tissue called:

+ retroperitoneitis;

– paranephritis;

– paracolitis;

– parametritis?

19. What are the parts of the second layer of the retroperitoneal tissue:

+ medianus (“mediastinum abdominalis”), adrenal fascial-cellular sheath, paranephron, paraureterium;
– textus cellulosus retroperitonealis;
– paranephron, paraureterium;
– paranephron, paraureterium, adrenal fascial-cellular sheath?

20. The second layer of the retroperitoneal tissue is limited by:
+ leaves of fascia retroperitonealis;
– postetior part of peritoneum parietalis, fascia intraperitonealis;
– Toldt’s fascia and fascia prerenalis;
– fascia intraperitonealis, fascia retroperitonealis?

21. What blocks novocaine solution injected into perinephric space:
+ plexus renalis, plexus solaris;
– plexus renalis;
– plexus lumbalis;
– plexus sacralis?

22. Name the cellular space that is located behind fascia retroperitonealis:
+ textus cellulosus retroperitonealis;
– paranephron;
– paracolon;
– paraureterium?

23. How is the III layer of the retroperitoneal cellular tissue called:
+ paracolon;
– paranephron;
– textus cellulosus retroperitonealis;
– spatium retroperitoneale?

24. Where is the III layer of the retroperitoneal tissue located:

+ between Toldt's fascia anteriorly and fascia prerenal and fascia periureteric posteriorly;

– between peritoneum parietalis and fascia intraperitonealis;

– between the leaves of fascia retroperitonealis;

– between colon ascendens, colon descendens and Toldt's fascia?

25. The III layer of the retroperitoneal tissue is limited superiorly by:

+ mesocolon transversum;

– diaphragm;

– lobus caudatus hepatis;

– Toldt's fascia?

26. Name the medial border of paracolon:

+ radix mesenterii intestini;

– mesocolon transversum;

– columna vertebralis;

– colon ascendens and descendens?

27. Where does the right paracolon go:

+ in retroduodenal and retropancreatic cellular tissue;

– in canalis lateralis dexter;

– in spatium preepiploicum;

– in paranephron?

28. How is the inflammation of the II layer of the retroperitoneal space called:

+ paranephritis;

– paraproctitis;

– paracolitis;

– retroperitonitis?

29. How is the inflammation of the III layer of the retroperitoneal space called:

+ paracolitis;

– paraproctitis;

– paranephritis;

– retroperitonitis?

30. Specify the possible ways of pus spreading from the retroperitoneal space upwards:

+ posterior mediastinum posterior through foramen v. cavae and hiatus aorticus;

– anterior mediastinum through Jarrey's and Morgagni fissure;

– posterior mediastinum through hiatus esophagus;

– in subdiaphragmatic space through fissura Bochdaleki?

31. Specify the way of pus spreading from retroperitoneal space to parapleural tissue and pleural cavity:

+ through fissura Bochdaleki;

– through hiatus esophagus;

– through Jarrey's and Morgagni fissure;

– through foramen v. cavae and hiatus aorticus?

32. Specify the way of pus spreading from the retroperitoneal space to the subcutaneous tissue of the lumbar region:

+ through fissurae in aponeurosis musculus transversus abdominis, Grynfeltt – Lesshaft's triangle, Petit triangle;

– through Jarrey's and Morgagni fissure;

– through hiatus aorticus;

– through lacuna musculorum?

33. Specify the ways of pus spreading from the retroperitoneal space to the small pelvis:

+ paraureterium and tissue of "mediastinum abdominalis";

– hiatus aorticus, foramen v. cavae;

– ureter, paraureterium, Jarrey's and Morgagni fissure;
– Grynfeltt – Lesshaft's triangle, Petit triangle?

34. The most common causes of abscesses of retroperitoneal space are:
+ suppurative focus of small pelvis, inflammation of pancreas, inflammation of the appendix vermicularis;
– inflammation of the appendix vermicularis, inflammation of pancreas, inflammation of gall bladder;
– mediastinitis, pancreatitis, cholecystitis, paracolitis;
– appendicitis, pancreatitis?

35. What is located between pars posterior of parietal peritoneum and intra-abdominal fascia?
+ retroperitoneal space;
– paranephron;
– paracolon;
– peritoneal cavity?

36. Specify marks for the perinephric blockade:
+ outer edge of m. erector spinae and XII rib;
– outer edge of m. erector spinae and arcus costalis;
– outer edge of m. rectus abdominis and arcus costalis;
– linea Jacoby's and linea Lesshaft's?

37. What is adjacent to renal parenchyma:
+ capsula fibrosa;
– capsula adiposa;
– paranephron;
– fascia renalis?

38. What is located outside of the fibrous membrane of the kidney:
+ paranephron;
– fascia renalis;

– peritoneum;
– textus cellulosus retroperitonealis?

39. What is located outside of the adipose capsule of the kidney?
+ fascia renalis;
– capsula fibrosa;
– paranephron;
– textus cellulosus retroperitonealis?

40. How is located the left kidney relatively to spine:
+ from XI thoracic to II lumbar vertebra;
– from XII thoracic to III lumbar vertebra;
– from XI thoracic to III lumbar vertebra;
– from XII thoracic to II lumbar vertebra?

41. How is located the right kidney relatively to spine:
+ from XII thoracic to III lumbar vertebra;
– from XI thoracic to II lumbar vertebra;
– from XI thoracic to III lumbar vertebra;
– from XII thoracic to II lumbar vertebra?

42. Name the projection of the renal hilum on the anterior abdominal wall:
+ in the corner between the outer edge of m. rectus abdominis and arcus costalis;
– in the corner between the outer edge of m. erector spinae and XII rib;
– in the corner between the inner edge of m. rectus abdominis and arcus costalis;
– at the inner edge of processus xiphoideus?

43. Name the projection of the renal hilum on the posterior abdominal wall:

+ in the corner between the outer edge of m. erector spinae and XII rib;

– in the corner between m. rectus abdominis and arcus costalis;

– on Jacoby's line;

– in the corner between the outer edge of m. erector spinae and crista iliaca?

44. The 'most part of the anterior surface of the right kidney is adjacent to:

+ liver;

– caput pancreatis;

– the anterior abdominal wall;

– pars descendens duodenum?

45. The lower third of the anterior surface of the right kidney adjoins to:

+ flexura coli dextra;

– liver;

– gallbladder;

– pars descendens duodenum?

46. What is located along the medial margin of the right kidney:

+ pars descendens duodenum;

– pars ascendens duodenum;

– caput pancreatis;

– pyloric part of the stomach?

47. The anterior surface of the left kidney in the upper third adjoins to:

+ gaster;

– pancreas;

– spleen;

– pars ascendens duodenum?

48. The anterior surface of the left kidney in the middle third adjoins to:

+ pancreas;
– gaster;
– spleen;
– flexura coli sinistra?

49. The lateral edge of the left kidney adjoins to:

+ spleen;
– pancreas;
– pars descendens duodenum;
– flexura coli sinistra?

50. The anterior surface of the left kidney in the lower third adjoins laterally to:

+ flexura coli sinistra;
– loops of jejunum;
– spleen;
– gaster?

51. The anterior surface of the left kidney in the lower third adjoins medially to:

+ loops of jejunum;
– flexura coli sinistra;
– gaster;
– pancreas?

52. The posterior surface of the kidney adjoins above the XII rib to:

+ diaphragm and recessus costodiaphragmaticus;
– m. quadratus lumborum;
– aponeurosis of m. transversus abdominis;
– m. psoas major?

53. The posterior surface of the kidney adjoins below the XII rib to?

+ m. psoas major, m. quadratus lumborum, aponeurosis of m. transversus abdominis;

– m. psoas major;

– m. quadratus lumborum;

– diaphragm?

54. What vessel is located near the hilum of the right kidney:

+ v. cava inferior;

– aorta;

– vena portae;

– a. mesenterica superior?

55. What vessel is located near the hilum of the left kidney:

+ aorta;

– v. cava inferior;

– v. portae;

– a. mesenterica superior?

56. In what position is the renal artery in renal pedicle located:

+ upwards and behind the renal vein;

– dowhwards and behind the renal vein;

– mostly behind;

– upwards and anteriorly to the renal vein?

57. In what position is the renal vein in renal pedicle located:

+ dowhwards and anteriorly to the renal artery;

– upwards and behind the renal artery;

– dowhwards and behind the renal artery;

– mostly behind?

58. In what position are the renal pelvis and the ureter in the renal pedicle located:

+ mostly behind;
– anteriorly to the renal artery;
– anteriorly to the renal vein;
– behind the renal vein?

59. What is located anteriorly to the right renal artery:
+ caput pancreatis, v. cava inferior, pars descendens duodenum;
– pars ascendens duodenum, corpus pancreatis, v. cava inferior;
– pars descendens duodenum, ductus choledochus, v. cava inferior;
– caput pancreatis, v. portae, a. mesenterica superior?

60. What is located anteriorly to the left renal artery:
+ pancreas;
– v. cava inferior;
– pars ascendens duodenum;
– gaster?

61. What vessels can be damaged during the partial nephrectomy of the upper pole of the right kidney:
+ v. cava inferior, accessory renal artery;
– aorta, a. lienalis;
– a. mesenterica superior;
– v. portae?

62. What vessels can be damaged during the partial nephrectomy of the lower pole of the kidney:
+ accessory renal artery;
– v. cava inferior;
– a. lienalis;
– a. mesenterica superior?

63. Where does the left renal artery pass:

+ anteriorly to abdominal aorta, behind a. mesenterica superior, behind pancreas;

– behind pancreas, anteriorly to abdominal aorta, anteriorly to a. mesenterica superior;

– anteriorly to pancreas, behind abdominal aorta, anteriorly to a. mesenterica superior;

– anteriorly to pancreas, anteriorly to abdominal aorta, behind a. mesenterica superior?

64. What veins pass into the left renal vein:

+ v. suprarenalis, v. testicularis sinistra;

– v. suprarenalis, v. testicularis, v. lienalis;

– v. testicularis sinistra, v. mesenterica inferior;

– v. suprarenalis, v. testicularis sinistra, v. mesenterica inferior, v. lienalis?

65. What is located outwards from the right ureter?

+ caecum, colon ascendens;

– pars descendens duodenum;

– v. cava inferior;

– caecum, pars descendens duodenum?

66. What is located medially to the left ureter:

+ abdominal aorta;

– v. cava inferior;

– colon descendens;

– caput pancreatis?

67. What is located anteriorly to the right ureter?

+ pars descendens duodenum, a. et v. ileocolica, radix mesenterii, a. et v. testicularis, appendix vermicularis;

– pars superior duodenum, radix mesenterii, caput pancreatis, appendix vermicularis, a. et v. ileocolica;

– pars horizontalis duodenum, a. et v. ileocolica, a. et v. testicularis, appendix vermicularis;

– pars ascendens duodenum, a. et v. testicularis, a. et v. ileocolica, appendix vermicularis?

68. What is located anteriorly to the left ureter:

+ a. et v. mesenterica inferior, a. et v. testicularis (ovarica), a. et v. colica sinistra;

– pars ascendens duodenum, a. et v. mesenterica inferior;

– pars horizontalis duodeni, a. et v. mesenterica inferior, a. et v. testicularis (ovarica);

– pancreas, pars ascendens duodenum, a. et v. mesenterica inferior, a. et v. testicularis (ovarica)?

69. What is located behind the ureter:

+ m. psoas major, n. genitofemoralis, iliac vessels;

– m. transversus abdominis, m. quadratus lumborum, m. psoas major, n. genitofemoralis, iliac vessels;

– m. quadratus lumborum, m. psoas major, n. genitofemoralis;

– pars horizontalis duodenum, m. psoas major, n. genitofemoralis?

70. What vessels does the ureter cross when it goes to the small pelvis on the right:

+ a. et v. iliacae externae;

– a. et v. iliacae communis;

– a. et v. iliacae internae;

– a. et v. iliacae communis, a. et v. obturatoria?

71. What vessels does the ureter cross when it goes to the small pelvis on the left:

+ a. et v. iliacae communis;

– a. et v. iliacae externae;

– a. et v. iliacae internae;

– a. et v. iliacae externae, a. et v. obturatoria?

72. Name the authors of the surgical approaches to the kidneys and ureters:

+ Fedorov, Bergmann, Israel, Simon, Pirogov, Ovnatanyan, Tsulukidze;

– Fedorov, Bergmann, Pirogov, Shalimov;

– Kocher, Fedorov, Bergmann, Israel;

– Fedorov, Bergmann, Israel, Simon, Ovnatanyan, Tsulukidze?

73. What layer will be the next after the cut of m. transversus during the surgical approach by Bergmann – Israel:

+ fascia intra-abdominalis;

– m. serratus posterior inferior;

– fascia retroperitonealis;

– retroperitoneal cellular tissue?

74. What layer will be the next after the cut of fascia intra-abdominalis during the surgical approach by Bergmann – Israel:

+ retroperitoneal cellular tissue;

– m. serratus posterior inferior;

– fascia retroperitonealis;

– m. transversus abdominis?

75. What layer is the next after the cut of retroperitoneal tissue during the surgical approach by Bergmann – Israel:

+ fascia retroperitonealis;

– peritoneum;

– fascia intra-abdominalis;

– m. transversus abdominis?

76. What layer is the next after the cut of fascia renalis posterior during the surgical approach by Bergmann – Israel:

+ capsula adiposa renalis;

– paracolon;

– retroperitoneal cellular tissue;

– peritoneum?

77. What stage of the operation will be the next after the cut of aponeurosis of m. obliquus externus abdominis during the surgical approach by Pirogov:

+ the lower edge of m. obliquus internus abdominis and m. transversus abdominis are put upwards, then fascia transversa is transected;

– m. obliquus internus abdominis and m. transversus abdominis with fascia transversa are transected;

– the preperitoneal tissue is put away and the ureter is revealed;

– the anterior wall of the sheath of m. rectus abdominis is transected; rectus abdominis muscle is medially relocated, the posterior wall of the sheath of the rectus abdominis muscle, fascia transversa and peritoneum are transected?

78. What stage of the operation will be the next after the cut of fascia transversa during the surgical approach by Pirogov:

+ the preperitoneal is put away tissue and reveal the ureter is revealed;

– m. obliquus internus abdominis and m. transversus abdominis are transected;

– the lower edge of m. obliquus internus abdominis and m. transversus abdominis with the preperitoneal tissue are put upwards, the ureter is revealed;

– the anterior wall of the sheath of m. rectus abdominis is transected; rectus abdominis muscle is shigted medially, the posterior wall of the sheath of the rectus abdominis muscle is transected and the ureter is revealed?

79. What layer will be the next after the cut of the skin with the subcutaneous tissue and fascia propria during the I stage of nephrectomy:

+ m. latissimus dorsi and m. obliquus externus abdominis are transected;

– m. serratus posterior inferior and m. obliquus internus abdominis are transected;

– the deep leaf of fascia thoracolumbalis and m. transversus abdominis are transected;

– m. trapezius and m. latissimus dorsi are transected?

80. What is the I stage of nephrectomy?

+ the lumbotomy is held, parietal peritoneum is put forwards and upwards;

– skin, subcutaneous tissue, fascia propria, m. latissimus dorsi, m. obliquus externus abdominis, m. serratus posterior inferior, m. transversus abdominis are transected;

– the posterior leaf of fascia renalis and is transected and capsula adiposa renis is revealed;

– ligations are put on the ureter and then ureter is cut between them?

81. What is the II stage of nephrectomy:

+ the posterior leaf of fascia renalis, is transected capsula adiposa renis is revealed, fatty tissue is removed with the swab, vein, artery, renal pelvis and ureter are revealed;

– ligations are put on the ureter and then ureter is cut between them;

– renal vessels are kept by Fedorov's forceps closer to the renal hila and then they are cut between the forceps and the hila;

– ligatures are put to each vessel by Deschamp's needle and then they are tied?

82. What is the III stage of nephrectomy:

+ ligations are put on the ureter and then ureter is cut between them;

– ligatures are put to each vessel by Deschamp's needle and then they are tied;

– the posterior leaf of fascia renalis, is transected capsula adiposa renis is revealed, fatty tissue is removed with the swab, vein, artery, renal pelvis and ureter are revealed;

– both vessels are kept by Fedorov's forceps closer to the hila and then they are cut between the forceps and the hila?

83. What is the IV stage of nephrectomy:

+ the vessels of the renal pedicle are separately tied, kept by Fedorov's forceps closer to the hila, and then they are cut between the forceps and the hila, and the kidney is removed;

– ligatures are put on the ureter and then the ureter is cut between them;

– capsula fibrosa and renal parenchyma are transected in longitudinal or transverse direction;

– the piece on the vascular pedicle is made of m. psoas major?

84. What stage of nephrotomy will be the next after the lumbotomy and mobilization of kidney:

+ the vascular pedicle is specifically clamped;

– capsula fibrosa and renal parenchyma are transected in longitudinal or transverse direction;

– the stone is removed;

– the parenchyma is stitched up by U-shaped sutures?

85. Nephrotomy is performed by the following incisions and in the following direction:

+ Zondek's incision in longitudinal direction, 1 cm back from the edge;

– Kocher's incision in transverse direction;

– Bergmann – Israel's incision in longitudinal direction in the middle of the convex edge;

– Fedorov's incision in longitudinal direction, 2 cm back from the edge?

86. Name the author of the kidney cross section:
+ Hesselbach;
– Zondek;
– Pirogov;
– Fedorov?

87. What stage of partial nephrectomy follows the lumbotomy and mobilization of kidney:
+ the soft vascular forceps are put on the vascular pedicle, 1,5–2 cm distal from the resection line; fibrous capsule of the kidney is incised and peeled;
– the soft vascular forceps are put on the vascular pedicle; the ligatures are put by Deschan's needle hila under each vessel and tied;
– both vessels are hooked by Fedorov's forceps closer to the hila, and cut between the forceps and the hila;
– the piece on the vascular pedicle is made of m. psoas major which is subcapsularly and fixed to the renal capsule?

88. Name the stages of nephropexy by Rivoir's metod in Pytel' – Lopatkin modification:
+ after the mobilization of the kidney from the lateral edge of m. psoas major the piece on the vascular pedicle is made which is put subcapsularly through the tunnel upwards and fixed to the renal capsule;
– the soft vascular forceps are put on the vascular pedicle, 1.5–2 cm distal from the resection line the fibrous capsule is peeled and the renal parenchyma is wedge-shaped cut within the healthy tissue;
– ligatures are put on the ureter, then the ureter is cut, the vessels of the renal pedicle are tied, hooked by Fedorov's forceps closer to the hila and cut between the forceps and the hila;
– the fibrous capsule is peeled from the renal parenchyma, the peeled edges are stitched by continuous catgut suture, the ligatures are at the back of the XII rib, then they are tied?

89. Name the stages of ureterolithotomy:

+ the longitudinal cut is made on the anterior wall of mobilized ureter between sutures-holders, calculus is removed; ureteral wound is stitched with nodal, impervious sutures in the transverse direction;

– after the mobilization of the kidney from the lateral edge of m. psoas major the piece on the vascular pedicle is made which is subcapsularly carried out through the tunnel upwards and fixed to the renal capsule;

– the vessels of the renal pedicle are separately tied, hooked by Fedorov's forceps and cut between the forceps and the hila;

– the mobilized ureter is cut in the transverse direction, the calculus is removed, ureter wound is stitched by the atraumatic needle with the continuous suture?

90. What is located anteriorly to the right adrenal gland:

+ liver;
– kidney;
– omental bursa;
– caput pancreatis?

91. What is located medially to the adrenal gland:

+ v. cava inferior;
– aorta;
– caput pancreatis;
– gaster?

92. What is located anteriorly to the left adrenal gland:

+ bursa omentalis, gaster, pancreas;
– diaphragm;
– aorta;
– pars ascendens duodeni, v. cava inferior, bursa omentalis?

93. What is located medially to the left adrenal gland:

+ aorta;

– v. cava inferior;
– pars descendens duodeni;
– ureter?

94.What is located anteriorly to the abdominal aotra:
+ pars ascendens duodeni, radix mesenterii, pancreas, v. renalis sinistra, v. lienalis;
– pars horizontalis duodeni, pancreas, truncus sympathicus, v. renalis sinistra;
– pancreas, gaster, pars ascendens duodeni, v. renalis sinistra, radix mesenterii;
– pancreas, gaster, left kidney, radix mesenterii, v. lienalis, left ureter?

95. What is located to the right of the abdominal aotra:
+ v. cava inferior;
– pars descendens duodeni;
– right ureter;
– right kidney and right ureter?

96. What is located to the left of the abdominal aotra:
+ truncus sympathicus sinister;
– pars ascendens duodeni;
– spleen;
– v. cava inferior?

97. What is located anteriorly to v. cava inferior:
+ liver, radix mesenterii, pars horizontalis duodeni, v. portae, caput pancreatis;
– pars horizontalis duodeni, caput pancreatis, a. renalis dextra, radix mesenterii;
– pars descendens duodeni, caput pancreatis, gaster, radix mesenterii, v. portae;
– pars ascendens duodeni, radix mesenterii, caput pancreatis, gaster, a. renalis dextra?

98. Where does the spinal cord end:
+ L II;
– L I;
– L III;
– L IV?

99. What line helps to find the point of injection during the lumbar puncture:
+ Jacoby's line;
– Lesshaft's line;
– linea bispinalis;
– linea paravertebralis?

100. Between which spinous processes the lumbar puncture is made:
+ between IV and V lumbar vertebrae;
– between I and II lumbar vertebrae;
– between II and III lumbar vertebrae;
– between T XII – L I?

101. Which operation is performed to eliminate compression of the spinal cord if the spinal column and spinal cord are damaged:
+ laminectomy:
– spondylodesis;
– osteoplastic trepanation;
– microdiscectomy?

102. Which operation is performed to eliminate compression of the spinal cord after spinal column injury in order to avoid its motion:
+ spondylodesis;
– laminectomy;
– discectomy;
– osteoplastic trepanation?

103. What occurs when nucleus pulposus enters a verteblal tissue:

+ Schmorl's node;
– osteochondrosis;
– spondylolysis;
– spondylarthrosis?

104. What stage of laminectomy follows the incision of skin, subcutaneous tissue and fascia:

+ spinous processes are skeletonized;
– spinous processes are cracked;
– resection of arcs;
– removal of arcs and spinous processes?

105. What stage of laminectomy follows the muscle detachment:

+ resection of spinous processes;
– spinous precesses are skeletonized;
– resection of arcs;
– incision of dura mater?

106. Which tool is used for resection of spinous processes:

+ Liston's forceps;
– Luer's forceps;
– Borchard's forceps;
– Dahlgren's forceps?

107. What stage of laminectomy follows the resection of spinous processes:

+ resection of arcs;
– spinous processes are skeletonized;
– incision of dura mater of spinal cord;
– incision of arachnoidea mater spinalis?

108. What stage of laminectomy follows the resection of arcs:

+ dissection of dura mater of spinal cord and arachnoidea mater spinalis;

– revision of the subarachnoid space;

– resection of spinous processes;

– spinous processes are skeletonized?

109. What can one do for better view of the anterior surface of the spinal cord:

+ denticulate ligament and 1–2 posterior nerve roots are cut;

– dissection of lig. flavum;

– resection of spinous processes and arcs;

– dissection of dura mater of spinal cord and arechnoidea mater spinalis?

Test questions and answers for practical lesson № 5

1. How is greater ischiadic foramen bounded:

+ lig. sacrospinale and incisura ischiadica major;

– lig. sacrotuberale and incisura ischiadica major;

– lig. sacrospinale and lig. sacrotuberale;

– lig. sacrospinale, lig. sacrotuberale, incisura ischiadica minor?

2. How is lesser ischiadic foramen bounded:

+ lig. sacrospinale, lig. sacrotuberale, incisura ischiadica minor;

– lig. sacrospinale and incisura ischiadica major;

– lig. sacrospinale and lig. sacrotuberale;

– lig. sacrotuberale and incisura ischiadica major?

3. What goes through the greater ischiadic foramen:

+ m. piriformis, superior gluteal artery, vein and nerve, inferior gluteal artery, vein and nerve, n. ischiadicus, n. cutaneus femoris posterior, a. et v. pudenda interna, n. pudendus;

– m. obturatorius internus, superior gluteal artery, vein and nerve;

– a. glutea superior, v. glutea superior, n. gluteus superior;

– m. piriformis, n. pudendus, a. et v. pudenda interna?

4. What goes through the lesser ischiadic foramen:

+ m. obturatorius internus, n. pudendus, a. pudenda interna, v. pudenda interna;

– m. piriformis, a. pudenda interna, v. pudenda interna, n. pudendus;

– a. glutea inferior, v. glutea inferior, n. gluteus inferior;

– m. piriformis, a. et v. glutea inferior, a. et v. pudenda interna, n. gluteus inferior, n. pudendus?

5. What goes through foramen suprapiriforme:

+ a. glutea superior, v. glutea superior, n. gluteus superior;
– m. piriformis, a. et v. glutea superior, n. gluteus superior;
– m. obturatorius internus, a., v. et n. obturatorii;
– a. et v. glutea superior, a. et v. glutea inferior, n. gluteus superior et inferior?

6. What goes through foramen infrapiriforme?
+ a. et v. glutea inferior, n. gluteus inferior, n. ischiadicus, n. cutaneus femoris posterior, a. et v. pudenda interna, n. pudendus;
– a. et v. glutea inferior, n. gluteus inferior;
– m. piriformis, a. et v. glutea inferior, n. gluteus inferior;
– m. obturatorius, a. et v. glutea inferior, n. gluteus inferior?

7. What divides pelvis into anterior and posterior parts:
+ Denonvillier's aponeurosis;
– lig. pubovesicale;
– lig. puboprostaticum;
– fascia diaphragmatis urogenitalis superior?

8. Name the fascial compartment for the rectal ampulla:
+ Amussat's capsule;
– Pirogov – Retzius capsule;
– Denonvillier's aponeurosis;
– parietal pelvic fascia?

9. Name the fascial compartment for bladder and prostate:
+ Pirogov – Retzius capsule;
– Amussat's capsule;
– Denonvillier's aponeurosis;
– parietal pelvic fascia?

10. Name the parietal cellular spaces of the small pelvis:
+ spatium prevesicale, spatium retrovesicale, spatium retrorectale, spatia lateralia dextrum et sinistrum;

– parametrium, spatium paravesicale, spatium retrorectale, spatia lateralia dextrum et sinistrum;

– spatium retropubicum, spatium paravesicale, spatium retrorectale, spatia lateralia dextrum et sinistrum;

– spatium retropubicum, parametrium, spatium retrorectale?

11. Name the anterior wall of spatium prevesicalis:

+ fascia transversa, symphysis pubica;

– preperitoneal cellular tissue;

– fascia prevesicale;

– parietal peritoneum?

12. How is spatium prevesicale bounded from behind:

+ fascia prevesicale;

– Denonvillier's aponeurosis;

– fascia transversa;

– parietal peritoneum?

13. Fascia visceralis vesicae urinariae is outwardly fixed to:

+ obliterated umbilical arteries (plica umbilicalis medialis);

– parietal muscles;

– Denonvillier's aponeurosis;

– visceral pelvic fascia?

14. Name the inferior wall of spatium prevesicalis:

+ diaphragma urogenitale;

– Denonvillier's aponeurosis;

– m. levator ani;

– fascia transversa?

15. Which cellular spaces are located between fascia transversa and peritoneum behind pubic symphysis:

+ spatium prevesicale, spatium paravesicale, preperitoneal space;

– spatium prevesicale;

– spatium paravesicale;
– spatium prevesicale, spatium paravesicale?

16. Where can abscesses of spatium prevesicale spread:
+ spatia lateralia dextrum et sinistrum, thigh, spatium paravesicale, peritoneal cavity, preperitoneal cellular tissue;
– spatia lateralia dextrum et sinistrum, thigh;
– spatia lateralia dextrum et sinistrum, spatium paravesicale;
– spatia lateralia dextrum et sinistrum, spatium paravesicale, preperitoneal cellular tissue, peritoneal cavity?

17. What incisions are made for the drainage of spatium prevesicale:
+ Buyalskyi – McWhorter's method, Kupriyanov's method;
– Buyalskyi – McWhorter's method;
– Kupriyanov's method;
– Pirogov's method?

18. Where is the incision by Buyalskyi – McWhorter's method made:
+ on the inner surface of thigh, 3–4 cm from plica inguinalis;
– parallelly and 3–4 cm higher from plica inguinalis;
– through the anterior abdominal wall along the median line;
– inferior left-side paramedian laparotomy is performed?

19. What stage of operation follows the incision of skin, subcutaneous tissue and fascia propria by Buyalskyi – McWhorter's method:
+ they pul of with sponge forceps, pass through membrana obturatoria to the cavity of the lesser pelvis;
– they penetrate through the urogenital diaphragm into pelvic cavity;
– they aponeurosis of m. obliquus externus abdominis is out; m. obliquus internus abdominis and m. transversus abdominis are

shifted upwards; they cut intra-abdominal fascia and penetrate into the subperitoneal cellular tissue;

– they penetrate into subperitoneal tissue through the diaphragm between two tubers of the ischium?

20. Where is the incision by Kupriyanov's method made:

+ through the anterior abdominal wall along the midline;

– on the inner surface of the thigh, 3–4 cm from plica inguinalis;

– parallel and 3–4 cm above the inguinal ligament;

– the lower right-side paramedian laparotomy is performed?

21. How is spatium prevesicale drained by Kupriyanov's method:

+ after the incision of the anterior abdominal wall one penetrates through the urogenital diaphragm and with the tip of the forceps protrudes the skin, which is cut near the inferior edge of pubis, and captures the drainage, which the forceps penetrated into the pelvic cavity by the reverse way;

– fascia femoris propria is cut closer to the upper edge of foramen obturatorium, the muscles, are peeled off; the drainage tube is put through membrana obturatoria into pelvis cavity;

– parallel and 3-4 cm above ligamentum inguinale the soft tissues and aponeurosis of m. obliquus externus abdominis, are incised m. obliquus internus abdominis and m. transversus abdominis are shifted upwards and fascia intra-abdominalis is incised;

– the semilunar incision between anus and coccyx is made, the fibers of m. levator ani are peeled and the purulent cavity is drained?

22. How is spatium laterale bounded laterally:

+ folium parietale fasciae pelvis, m. piriformis, m. obturatorius internus;

– folium parietale fasciae pelvis, m. levator ani;

– Denonvillier's aponeurosis;

– thickened part of folium viscerale fasciae pelvis?

23. How is spatium laterale bounded superiorly:
+ peritoneum;
– fascia diaphragmatica pelvis superior;
– m. levator ani;
– fascia diaphragmatica pelvis inferior?

24. How is spatium laterale bounded medially:
+ thickened part of folium viscerale fasciae pelvis;
– Denonvillier's aponeurosis;
– fascia transversa;
– folium parietale fasciae pelvis?

25. How is spatium laterale bounded inferiorly:
+ fascia diaphragmatica pelvis superior, m. levator ani;
– m. piriformis, m. obturatorius internus;
– m. obturatorius internus, m. levator ani;
– fascia diaphragmatica pelvis inferior, m. levator ani?

26. The content of spatium laterale is as follows:
+ pars pelvica ureteris, a. et v. iliaca interna, ductus deferens, pl. sacralis;
– prostate, ureter, a. et v. iliaca interna, ductus deferens;
– vesica urinaria, prostate, a. et v. iliaca interna;
– rectum, vesica urinaria, prostate, pl. sacralis, ureter, a. et v. iliaca interna?

27. What incision is used for the drainage of spatium laterale:
+ Pirogov;
– Kupriyanov;
– Buyalskyi – McWhorter;
– Fedorov?

28. How is spatium retrorectale bounded anteriorly:

+ Amussat's capsule;
– Denonvillier's aponeurosis;
– m. levator ani;
– urogenital diaphragm?

29. The content of spatium retrorectale is as follows:
+ a. sacralis lateralis, a. sacralis mediana, pl. venosus sacralis, pl. sacralis, medial rectal vessels;
– a. sacralis lateralis, pl. sacralis, inferior rectal vessels, ureter, pl. venosus sacralis;
– Amussat's capsule, pl. sacralis, a. sacralis lateralis, a. sacralis mediana, pars pelvica ureteris;
– pars pelvica ureteris, pl. sacralis, pl. venosus sacralis, superior rectal arteries, a. sacralis lateralis, a. sacralis mediana?

30. How is spatium retrorectale drained:
+ semilunar incision between anus and coccyx;
– Pirogov's incision;
– Buyalskyi – McWhorter's method;
– Kupriyanov's method?

31. For the treatment of purulent parametritis is often used:
+ colpotomy;
– laparotomy;
– Buyalskyi – McWhorter's method;
– Kupriyanov's method?

32. What is adjacent to vesica urinaria in men posteriorly:
+ ampulla ductus deferentis, vesiculae seminales, rectum;
– rectum;
– prostate, rectum;
– vesiculae seminales, rectum?

33. What is adjacent to vesica urinaria in women posteriorly:
+ vagina, uterus;

– uterus;
– vagina;
– rectum?

34. What is adjacent to vesica urinaria in men inferiorly:
+ prostate;
– ureter;
– rectum;
– vesiculae seminales?

35. What operation is performed for the temporary urinary diversion:
+ epicystotomy;
– cystostomy;
– puncture of the bladder;
– catheterization of bladder?

36. How is fossa ovarica bounded anteriorly and superiorly:
+ a. et v. iliaca externa;
– a. et v. iliaca interna;
– a. et v. obturatoria;
– a. uterina?

37. How is fossa ovarica bounded posteriorly:
+ a. et v. iliaca interna, ureter;
– a. et v. iliaca externa;
– a. et v. obturatoria;
– a. uterina?

38. How is fossa ovarica bounded inferiorly:
+ a. uterina, a. et v. obturatoria, n. obturatorius;
– a. et v. iliaca interna, a. uterina;
– a. et v. iliaca interna, a. uterina, ureter;
– a. uterina, a. et v. obturatoria, n. obturatorius, ureter?

39. What is the floor of fossa ovarica:
+ m. obturatorius internus;
– m. piriformis;
– m. levator ani;
– m. obturatorius externus?

40. What goes to the superior border of ovary?
+ lig. suspensorium ovarii, fimbria ovarica;
– lig. ovarii proprium, fimbria ovarica;
– fimbria ovarica;
– lig. suspensorium ovarii?

41. What passes in the thickness of lig. suspensorium ovarii:
+ vasa ovarica;
– ureter;
– lig. teres uteri;
– a. uterina?

42. How is mesovarian border of ovary fixed?
+ to posterior leaf of lig. latum uteri;
– to anterior leaf of lig. latum uteri;
– to pelvis fascia;
– to lig. suspensorium ovarii?

43. What passes along the superior edge of lig. latum uteri:
+ tuba uterina;
– lig. cardinale uteri;
– ureter;
– lig. teres uteri?

44. What passes along the basis of lig. latum uteri:
+ a. uterina, ureter, lig. cardinale uteri;
– a. uterina, ureter, lig. teres uteri;
– ureter, lig. ovarii proprium, a. uterina;
– lig. teres uteri, a. uterina, lig. suspensorium ovarii?

45. What are the portions of the uterine artery:
+ descendens, horizontalis, ascendens;
– descendens, horizontalis, pelvic, ascendens;
– descendens, horizontalis;
– horizontalis, ascendens?

46. Pars descendens a. uterina is located:
+ from the beginning to the crossing with the ureter;
– from ureter to cervix uteri;
– from cervix uteri to angulus uterotubarius;
– from ureter to angulus uterotubarius?

47. Horizontal portions of uterine artery is located:
+ from ureter to cervix uteri;
– from the beginning to the crossing with the ureter;
– from ureter to uterine tubal angle;
– from cervix uteri to uterine tubal angle?

48. Pars ascendens a. uterina is located:
+ from cervix uteri to uterine tubal angle;
– from the beginning to the crossing with the ureter;
– from ureter to cervix uteri;
– from ureter to uterine tubal angle?

49. Which incisions are used for the performance of female genital organs surgeries:
+ lower midline laparotomy, Pfannenstiel incision, Cherney incision;
– lower midline laparotomy, Fedorov incision, Pirogov incision;
– lower midline laparotomy, Bergman incision, Fedorov incision, Key incision;
– lower midline laparotomy, Pfannenstiel incision, Pirogov incision, Fedorov incision?

50. What ligament is cut at the removement of the uterine tube during the surgery at ectopic pregnancy (salpingectomy):

+ lig. infundibulopelvicum;
– lig. teres uteri;
– lig. cardinale;
– lig. latum uteri?

51. What is the first stage of surgery at ectopic pregnancy (salpingectomy):

+ mobilization of fallopian tube;
– removement of fallopian tube;
– peritonization of mesosalpinx stump;
– culdocentesis?

52. What is the second stage of surgery at ectopic pregnancy (salpingectomy):

+ removement of fallopian tube;
– mobilization of fallopian tube;
– peritonization of mesosalpinx stump;
– culdocentesis?

53. What is the third stage of surgery at ectopic pregnancy (salpingectomy):

+ peritonization of mesosalpinx stump;
– mobilization of fallopian tube;
– removement of fallopian tube;
– culdocentesis?

54. Which ligament is used for peritonization of mesosalpinx stump during the surgery at ectopic pregnancy (salpingectomy):

+ lig. teres uteri;
– lig. latum uteri;
– lig. cardinale;
– lig. ovarii proprium?

55. Which ligaments are not hooked by forceps at removal of fallopian tube during the surgery at ectopic pregnancy:

+ lig. teres uteri, lig. ovarii proprium;

– lig. latum uteri, lig. ovarii proprium;

– lig. cardinale, lig. teres uteri;

– lig. suspensorium ovarii, lig. latum uteri?

56. What stage of corporeal cesarean section follows the laparotomy:

+ the anterior uterine wall is cut with the scalpel on the median line in the longitudinal direction;

– plica vesicouterina is cut in the transverse direction;

– the anterior uterine wall is dissected in the transverse direction;

– plica vesicouterina is cut in the longitudinal direction?

57. What stage of corporeal cesarean section follows the dissection of uterine wall?

+ fetal membrane is dissected and the fetus is removed;

– placenta is removed and the uterine cavity is observed;

– the umbilical cord is cut between the forceps;

– the lower segment of the uterus is exposed?

58. What stage of surgery follows the laparotomy if the cesarian section is performed in the lower segment of the uterus:

+ plica vesicouterina is cut in the transverse direction;

– anterior uterine wall is cut with the scalpel on the median line in the longitudinal direction;

– the lower segment of the uterus is exposed;

– the anterior uterine wall is dissected in the transverse direction?

59. What stage of corporeal cesarean section in the lower segment of the uterus follows the mobilization of the urinary bladder:

+ the lower segment of the uterus is exposed;

– the lower segment of the uterus is dissected in the transverse direction 2,5–3 cm long;

– plica vesicouterina is cut in the transverse direction;

– the anterior uterine wall is cut wich scalpel on the median line in the longitudinal direction?

60. How is the lower segment of the uterus cut during the cesarian section:

+ is dissected in the transverse direction 2,5–3 cm long;

– is dissected in the transverse direction 10–12 cm long;

– is cut in the longitudinal direction on the median line;

– they cutit in the longitudinal direction, penetrate index fingers and extend the cut to the size of the fetal head?

61. How is fossa ischiorectalis bounded outwardly:

+ m. obturatorius internus, tuber ischiadicum;

– m. levator ani;

– m. obturatorius externus;

– membrana obturatoria?

62. How is fossa ischiorectalis bounded from the middle and superiorly:

+ m. levator ani;

– m. obturatorius internus;

– m. gluteus maximus;

– m. transversus perinei profundus?

63. How is fossa ischiorectalis bounded inferiorly:

+ fascia perinei superficialis;

– fascia perinei propria;

– fascia diaphragmatis pelvis superior, m. levator ani;

– m. levator ani, fascia diaphragmatis pelvis inferior?

64. How is fossa ischiorectalis bounded anteriorly:

+ m. transversus perinei superficialis;
– m. ischiocavernosus;
– m. bulbospongiosus;
– symphysis pubis?

65. How is fossa ischiorectalis bounded posteriorly:
+ m. gluteus maximus, sacral bone;
– m. levator ani;
– m. coccygeus;
– tuber ischiadicum?

66. What goes through the tissue of fossa ischiorectalis?
+ vasa rectalis inferior, n. rectalis inferior;
– a. et v. pudenda interna;
– n. pudendus;
– a. et v. glutea inferior?

67. What passes along the lateral wall of fossa ischiorectalis:
+ a. et v. pudenda interna, n. pudendus;
– a. et v. rectalis inferior, n. rectalis inferior;
– a. et v. glutea inferior, n. gluteus inferior;
– a. et v. glutea superior, n. gluteus superior?

68. Specify the most radical treatment for hemorrhoids:
+ Milligan – Morgan technique;
– Winkelmann technique;
– Bergmann technique;
– Palomo technique?

69. Name the authors of the most common hydrocele surgeries:
+ Winkelmann and Bergmann;
– Milligan and Morgan;
– Palomo;
– Ivanissevich?

70. Name the authors of surgical treatment of varicocele:
+ Palomo and Ivanissevich;
– Winkelmann and Bergmann;
– Milligan and Morgan;
– Pytel, Lopatkin and Rivoir?

71. Which tissues are not dissected during the varicocele surgery:
+ fibers of m. obliquus internus et transversus abdominis, parietal peritoneum;
– m. rectus abdominis;
– elements of spermatic cord;
– parietal peritoneum?

72. Name the deep muscles of urogenital diaphragm:
+ m. transversus perinei profundus, m. sphincter urethrae;
– m. transversus perinei superficialis et profundus;
– m. bulbospongiosus, m. ischiocavernosus;
– m. levator ani, m. coccygeus?

73. Name the superficial muscles of urogenital diaphragm:
+ m. transversus perinei superficialis, m. bulbospongiosus, m. ischiocavernosus;
– m. transversus perinei superficialis, m. sphincter urethrae;
– m. transversus perinei superficialis et profundus;
– m. sphincter urethrae, m. bulbospongiosus, m. ischiocavernosus?

74. Name the deep muscles of pelvic diaphragm:
+ m. levator ani, m. coccygeus;
– m. sphincter ani externus et internus, m. levator ani;
– m. levator ani, m. sphincter urethrae;
– m. levator ani, m. sphincter ani externus?

75. Name the superficial muscles of pelvic diaphragm:
+ m. sphincter ani externus;
– m. levator ani, m. coccygeus;
– m. gluteus maximus;
– m. transversus perinei superficialis?

The list of theoretical questions on the theme "Clinical anatomy and operative surgery of the abdomen and pelvis" to the final modular control

1. Boundaries of the abdomen. Quadrants and regions of abdomen. Projection of abdominal organs on the anterolateral abdominal wall.
2. Surgical anatomy of the anterolateral abdominal wall.
3. Abdominal incisions: midline incision, paramedian incision, pararectal incision, Lanz incision, Pfannenstiel incision, transverse incision, Kocher incision. Performance technique.
4. Methods of hernioplasty in umbilical and epigastric (white line) hernias.
5. Topographic anatomy of the inguinal region.
6. Surgical anatomy of inguinal hernias.
7. The stages of herniotomy and methods of hernioplasty in oblique and direct inguinal hernias.
8. Surgical treatment of strangulated hernias of anterior abdominal wall.
9. Surgical anatomy of the peritoneum. The path of the peritoneum in the planes of the sagittal and transverse sections.
10. Surgical anatomy of bursas, sinuses, canals and fossae of the abdominal cavity.
11. Laparotomy and technigue of abdominal organs revision.
12. Intestinal sutures. Requirements for putting intestinal sutures.
13. Surgical treatment of internal injuries after penetrating abdominal trauma.
14. Surgical anatomy of the liver, gallbladder and bile ducts.
15. Cholecystostomy, cholecystectomy, choledochotomy, choledochoduodenostomy, papillosphincterotomy and transduodenal papillosphincteroplastics: indications, surgical technique.
16. Surgical anatomy of duodenum. Mobilization of the duodenum by Kocher: indications, surgical technique.

17. Surgical anatomy of the portal vein. Methods of surgical treatment of portal hypertension.

18. Surgical anatomy of the pancreas. Surgical approaches to the pancreas.

19. Surgical anatomy of the spleen. Splenectomy: indications, surgical technique.

20. Surgical anatomy of the small intestine.

21. Small bowel resection: indications, surgical technique.

22. Surgical anatomy of the colon.

23. Appendectomy: indications, surgical technique.

24. Imposition of the preternatural anus: indications, surgical technique.

25. Surgical anatomy of the stomach.

26. Indications and technique of gastrostomy.

27. Gastroenteroanastomosis: types, surgical technique.

28. Resection of the stomach by Billroth I and Billroth II in the Hofmeister – Finsterer modification: indications, surgical technique.

29. Vagotomy: types, indications, surgical technique.

31. Pyloroplasty: methods, surgical technique.

32. Methods of suturing a perforated ulcer of the stomach.

33. Topographical anatomy of the lumbar region.

34. Surgical anatomy of the column.

35. Surgical anatomy of the spinal cord, spinal meninges, epidural, subdural and subarachnoid spaces.

36. Technique of lumbar puncture, epidural and spinal anesthesia.

37. Laminectomy: indications, surgical technique, surgical instruments.

38. Spina bifida: classification, surgical treatment.

39. Surgical anatomy of the retroperitoneal space. Ways of spreading a purulent process from the retroperitoneal space.

40. Surgical anatomy of kidneys and ureters.

41. Surgical approaches to the kidneys and ureters.

42. Nephrolithotomy, pyelolithotomy, resection of the kidney, nephrectomy, ureterolithotomy, nephropexy: indications, surgical technique, surgical instruments.

43. Paranephric block by A. V. Vyshnevskyi: indications, surgical technique.

44. Surgical anatomy of the adrenal glands.

45. Surgical anatomy of the abdominal aorta and inferior vena cava.

46. Surgical anatomy of the lumbar region of sympathetic trunk and autonomic plexuses of the abdomen.

47. Surgical anatomy of the lumbar plexus.

48. Bones, joints, muscles, walls and foramina of the pelvis.

49. Surgical anatomy of perineum, peritoneal space and subperitoneal space of the pelvis.

50. Surgical anatomy of the parietal and visceral pelvic fascia. Anatomical spaces of the pelvic cavity. Ways of pyoinflammatory processes spreading from the anatomical spaces of the pelvic cavity.

51. The methods of pelvic abscess drainage.

52. Surgical anatomy of the internal iliac artery. The open access (intraperitoneal or extraperitoneal), endovascular approach and bilateral retroperitoneal approaches to the internal iliac artery. Ligation of the internal iliac artery: indications, surgical technique.

53. Surgical anatomy of the sacral plexus. Intrapelvic procaine block by Shkolnikov – Selivanov.

54. Surgical anatomy of the urinary bladder, pelvic part of the ureter and prostate.

55. Puncture of the urinary bladder, suprapubic cystostomy, prostate adenomectomy: indications, surgical technique.

56. Surgical anatomy of the uterus.

57. Surgical anatomy of the uterine appendages (fallopian tubes, ovaries, suspensory ligaments of the uterus).

58. Surgical treatment of ectopic pregnancy.

59. Caesarean section: indications, surgical technique.

60. Surgical anatomy of the rectum.

61. Milligan – Morgan hemorrhoidectomy.
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65. Surgical technique of hydrocele and varicocele treatment.

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