SURGERY

Tests for the 4th year students of the Faculty of
Foreign Students with English language medium

ХИРУРГИЯ

Тесты для студентов 4 курса факультета
иностранных учащихся
(курс обучения на английском языке)

Гродно
ГрГМУ
2012

Министерство здравоохранения Республики Беларусь

УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«ГРОДНЕНСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ»

Кафедра хирургических болезней №1

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The tests on surgery are made up for the 5th year students of the Faculty of Foreign Students. The questions are intended for consolidation of student's theoretical knowledge, practical skills and abilities and for formation of student's clinical thinking.

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INTRODUCTION

The 5th year students of the Faculty of Foreign Students continue to study private surgery. According to the syllabus on surgical diseases the students are supposed to study clinical peculiarities of various pathological processes, complications of the most widespread diseases as well as diagnosing and treatment basis of the most complicated parts of abdominal, thoracal and vascular surgery. Classical methods of educational process, used by the department of surgical diseases №1, still meet the requirements claimed to the high school. These methods are constantly being improved, that helps to train qualified specialists. It should be noted that the modern science requires not only classical educational methods but new technologies that include test system. Therefore the department of surgical diseases №1 made up tests on private surgery for the 5th year foreign students.

It should be mentioned that this book appeared thanks to the technique of the department and computer labs which help to introduce new educational methods. Undoubtedly the book will develop students' clinical thinking, theoretical and practical skills, objectification of knowledge during the running and final tests. In the result it will help to improve the quality of training in the Grodno state medical university.

Head of the department of surgical diseases № 1,
professor N.I.Batvinkov

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UNIT 1. ACUTE APPENDICITIS

1. A 76-year-old patient suffers from transmural myocardial infarction. Acute destructive appendicitis is suspected. What are your actions?

1. -Emergency surgery

2. Observation and surgery in case of peritonitis symptomes
3. Indication of massive doses of broad spectrum antibiotic and surgery if this therapy is ineffective
4. Surgery in case of diagnosis confirmation by laparoscopy
5. All variants are wrong

2. During outpatient reception hours you have suspected acute appendicitis in a patient. What measures are reasonable?

1. -Emergency hospitalisation

2. Indication of spasmolytics and reexamination of a patient in 4-6 hours
3. Control of body temperature during 12-24 hours and leukocyte level in blood
4. Anti-inflammatory therapy and examination of a patient the next day
5. Outpatien observation and hospitalization in case of general state worsening

3. Acute catarrhal appendicitis has following clinical signs:

1. Kocher-Volkovich symptom
2. Bartomier-Michelson's sign
3. Body temperature increase
4. Rovsing`s sign
5. Blumberg`s sign

Choose the right answer combination:

a) 1, 2, 5
b) 2, 3, 5
c) 1, 4, 5
d) -1, 2, 3, 4
e) 1, 3, 4, 5

4. Which of the states listed below is the indication for abdominal cavity tamponade in acute appendicitis?

1. Diffuse capillary bleeding in vermiform appendix area
2. III class obesity
3. Gangrenous appendicitis
4. Periappendicular abscess
5. Local peritonitis

Choose the right answer combination:

a) 1, 2, 4
b) 2, 3, 4
c) 3, 4, 5
d) -1 and 4
e) Only 4

5. Appendectomy in acute appendicitis is contraindicated in:

1. -Appendiceal infiltrate

2. Acute myocardial infarction

3. Pregnancy on the 36-40th week
4. Novocaine intolerance
5. Coagulation failure

6. What will you do to differentiate acute appendicitis from right-sided biliary colic?
1. Spasmolytics injection
2. Narcotic anaesthetics injection
3. Urgent urine test
4. Chromocystoscopy or excretory urography
5. Angiography of renal arteries

Choose the right answer combination:
a) 1, 3, 5
b) 2, 3, 4
c) 3, 4, 5
d) -1, 3, 4
e) All variants are corrrect

7. Following sighs are characteristic of perforative appendicitis:
1. Free gas in the abdominal cavity
2. Reduction of circulating blood volume
3. Sudden increase of abdominal pains
4. Muscles tension of the anterior abdominal wall
5. Positive Blumberg`s sign

Choose the right answer combination:
a) 1, 3, 4
b) 2, 4, 5
c) -3, 4, 5
d) 1, 4, 5
e) Only 3

8. Primary gangrenous appendicitis develops due to:
1. Inferior mesenteric vein thrombosis
2. Iliocolic artery opening stenosis
3. Nonspecific arteritis of visceral aortic branches
4. Participation of bacteroid infection
5. -Vermiform appendi artery thrombosis

9. Following symptom is observed in acute phlegmonous appendicitis:
1. Blumberg`s sign
2. Bartomier-Michelson`s sign
3. Volkovich-Kocher`s sign
4. Rovsing`s sign
5. Murphy`s sign

Choose the right answer combination:
a) 1, 2, 4, 5
b) -1, 2, 3, 4
c) 2, 3, 5
d) 3, 4, 5

e) All variants are correct

10. What special methods should be used for differentiation of acute appendicitis from concealed perforated duodenal ulcer?

1. Gastroduodenoscopy
2. Plan radiography of the abdominal cavity
3. Ultrasonography of the abdominal cavity
4. Laparoscopy
5. Stomach radiography with barium sulfate

Choose the right answer combination:

a) 1, 2, 3
b) 2, 3, 5
c) -1, 2, 4
d) Only 2 and 4
e) Only 2 and 5

11. Which of the following symptoms is not common among elderly people?

1. Insignificant pain in right iliac area
2. -High body temperature
3. Muscular tension in right iliac area
4. Stool retention
5. Moderate leukocytosis

12. Which of the listed examinations is the least informative in acute appendicitis diagnosing?

1. Laboratory test. Leukocytes level especially
2. -Laparocentesis
3. Rectal investigation
4. Axillary and rectal thermometry
5. Clinical examination with painfulness zone detection by palpation and percussion of protective muscle tension

13. Clinical peculiarities of acute appendicitis in elderly people are:

1. Possibility of primary-gangrenous form developmen
2. Not evident pain syndrom
3. Uncontrollable vomiting
4. Hectic temperature
5. Not evident symptoms of peritoneum stimulation

Choose the right answer combination:

a) 1, 2, 4
b) 2, 3, 4
c) -1, 2, 5
d) 1, 3, 5
e) All variants are correct

14. Following clinical signs should be taken in account to differentiate acute appendicitis from apoplexy of the auricle:

1. Volkovich-Kocher`s sign
2. Promptov`s sign
3. Dizziness or faintness

4. Bartomier-Michelson`s sign
5. Irradiation of pains into sacrum and perineum
6. Kulenkampff`s symptom

Choose the right answer combination:

a) 1, 2, 4, 6
b) 2, 3, 6, 5
c) 1 and 4
d) 3, 5, 6
e) -All variants are correct

15. A 23-year-old patient with 32 weeks of pregnancy stayed at the surgical department for 18 hours. Acute appendicitis can not be absolutely excluded during case monitoring. What is your therapeutic approach?

1. -The patient should be operated
2. It is necessary to continue case monitoring
3. Ultrasonography of abdominal cavity
4. To bring on induced abortion together with gynecologist
5. Perform appendectomy
6. All variants are incorrect

16. You have to perform a surgery in a patient with typical picture of acute phlegmonous appendicitis. What surgical approach should be used in that case?

1. Lower midline incision
2. -Volkovich-Dyakonov incision
3. Right-sided pararectal approach
4. Right-sided transrectal incision
5. Transverse laparotomy above the pubis

17. In what case of acute appendicitis general anesthesia is indicated?

1. Patient with the early terms of pregnancy
2. -Acute appendicitis complicated with diffuse peritonitis
3. Patients of 14-16 years old
4. Suspected retrocecal position of vermiform appendix
5. Elderly patient with typical picture of noncomplicated acute appendicitis

18. Operative intervention in acute appendicitis is contraindicated in:

1. -Appendicular infiltrate formation
2. Pregnancy of 36-38 weeks
3. Decompensated valvular defect
4. Acute myocardial infarction
5. All variants are correct

19. What measures should be taken if acute appendicitis is suspected

1. Indication of cold locally, anaesthetics and spasmolytics with case monitoring
2. Appendectomy
3. Appendectomy with abdominal cavity drainage
4. Appendectomy after exclusion of pathology in terminal part of ileum and small pelvis organs
5. -Case monitoring for 4-6 hours with body temperature and blood leucocytes control

20. Following symptom is not characteristic of acute appendicitis:
1. Rovsing`s sign
2. Voskresensky`s sign
3. –Merphy`s sign
4. Obraztsov`s sign
5. Bartomier-Michelson`s sign

21. Following symptom is specific for acute appendicitis:
1. Volkovich-Kocher`s sign
2. Rovsing`s sign
3. Sitkovsky`s symptom
4. All 3 symptomes
5. -None of the symptomes

22. In acute appendicitis following symptoms are concerned to peritoneal ones:
1. Voskresensky`s sign
2. Blumberg`s sign
3. Razdolsky`s symptom
4. -All mentioned symptomes
5. None of the symptomes

23. Acute appendicitis should be differentiated from all the mentioned diseases except:
1. -Glomerulonephritis
2. Acute pancreatitis
3. Acute adnexitis
4. Acute gastroenteritis
5. Right-sided renal colic

24. Clinically acute appendicitis can be mixed up with:
1. Salpingitis
2. Acute cholecystitis
3. Meckel`s diverticulitis
4. Extrauterine pregnancy
5. -Any kind of pathology

25. What is not true about acute appendicitis?
1. Abdominal wall rigidity can be absent in retrocecal appendix position
2. Rigidity can be absent in pelvic position
3. -Vomiting is always precedes the pain
4. Pain can be felt first at the navel area
5. Pain can be felt first at the epigastric area чаще

26. Primary-gangrenous appendicitis is most common:
1. In children
2. In patients with severe traumas
3. In men
4. In women
5. -In elderly people

27. Acute appendicitis in children differs from appendicitis in adults by everything except:
1. Cramping pain, diarrhea, recurrent vomiting
2. Rapid development of general peritonitis
3. High temperature

4. Evident intoxication
5. -Dramatic muscle tension in the right iliac area

28. What anesthesia is most reasonable in surgery on acute appendicitis in elderly patients?
1. Endotracheal narcosis
2. Intravenous appendicitis
3. -Local anesthesia
4. Peridural anasthesia
5. Cerebro spinal anasthesia

29. What is characteristic of perforated appendicitis?
1. Razdolsky`s sign
2. Intensifying of peritonitis clinical picture
3. Sudden increase of abdominal pains
4. Muscle tension of the anterior abdominal wall
5. -Everything mentioned

30. The determining factor in differential diagnosing of acute appendicitis from extrauterine pregnancy is:
1. Volkovich-Kocher`s sign
2. Promptov
3. Dizziness and fainting
4. Bartomier-Michelson`s sign
5. -Puncture in the posterior vaginal fornix

31. What is not applied for acute appendicitis diagnosing?
1. Abdominal wall palpation
2. Clinical blood analysis
3. Digital rectal examination
4. -Irrigoscopy
5. Vaginal examination

32. What are contraindications for urgent appendectomy?
1. -Appendicular infiltrate
2. Myocardial infarction
3. Late pregnancy
4. Hemorrhagic diathesis
5. Diffuse peritonitis

33. What is applied in diffuse purulent peritonitis of appendicular origin?
1. Midline laparotomy
2. Appendectomy
3. Abdominal cavity lavage
4. Abdominal cavity drainage
5. -Everything mentioned above

34. What methods are used for acute appendicitis diagnosing?
1. Laparoscopy
2. Clinical blood analysis
3. Rectal examination
4. Thermography
5. -Everything mentioned is correct

35. What should be taken in consideration for differentiation of right-sided pneumonia of the inferior lobe and acute appendicitis?

1. Respiratory apparatus auscultation data
2. Laparoscopy data
3. Chest radioscopy data
4. -Blood leucocytes level
5. Abdominal cavity thermography data

36. What is indicated in diffuse purulent peritonitis of appendicular origin?
1. Appendectomy and abdominal cavity sanation
2. Water-electrolytic disorders correction
3. Antibacterial therapy
4. Parenteral nutrition during 1-2 days after surgery
5. -Everything mentioned is correct

37. Everything mentioned below is characteristic of late stage of appendicular peritonitis except:
1. Abdominal distension
2. Dehydration
3. Bowel sound disappearance
4. Pypoproteinemia
5. -Hyperperistalsis

38. The most rational method of appendix stump processing in adults is:
1. Bandaging with a silk thread and stump immersion
2. Bandaging with a lavsan thread and stump immersion
3. Immersion of a not bandaged stump
4. Bandaging with a catgut thread without stump immersion
5. -Bandaging with a catgut thread and stump immersion

39. Development of a pathologic process in acute appendicitis starts at:
1. Serous coating of the vermiform appendix
2. -Mucous membrane of the vermiform appendix
3. Muscle layer of the vermiform appendix
4. Mucous membrane of head of blind colon
5. Mesentery of the vermiform appendix (lymphangitis develops)

40. Meckel's diverticulum develops:
1. On the jejunum
2. On the ileum
3. On the ascending colon
4. As a result of appendectomy
5. As a result of vitelline canal nonclosure
Right variants:
a) 1, 5
b) 2, 4
c) -2, 5
d) 3, 4
e) 3, 5

41. What examination technique is most informative in differential diagnosing of acute appendicitis and disturbed ectopic pregnancy?
1. Examination of leukocytosis in peripheral blood
2. Skin thermometry
3. Plan radiography of abdominal cavity organs
4. Rectal and vaginal investigation
5. -Puncture in the posterior vaginal fornix

42. What is the principle difference of surgeries in catarrhal and flegmonous forms of acute appendicitis?
1. -Necessity of abdominal organs inspection before appendectomy in catarrhal appendicitis
2. Necessity of procaine block of vermiform appendix mesentery in phlegmonous appendicitis
3. Obligatory drainage introduction in the abdominal cavity in phlegmonous appendicitis
4. Necessity of abdominal organs inspection after vermiform appendix removal in catarrhal appendicitis
5. Necessity of abdominal organs inspection before vermiform appendix removal in phlegmonous appendicitis

43. During medical examination of a 76-year-old patient a district doctor suspected acute appendicitis, though he wasn`t confident in diagnosis. 6 hours have passed from the onset. What measures should be taken?
1. Recommend a surgeon consultation
2. Urgently send a patient to clinic for additional laboratory tests
3. Recommend conservative therapy taking into consideration a patient's age and not a long term from the onset. Rest, cold locally, antibiotics.
4. Case monitoring of a patient in the outpatient setting
5. -Urgent hospitalization of a patient in a surgical department

44. It is known that Volkovich-Kocher`s sign concerns to the most informative symptoms in acute appendicitis diagnosing. What disease gives the similar pain shift?
1. Acute pyelonephritis
2. Crohn's disease
3. Acute right-sided appendicitis
4. -Perforated stomach or duodenal ulcer
5. Biliary colic

45. Give the signs, not characteristic of acute appendicitis clinical representation in elderly patients:
1. Abdominal pains are not intensive and have nonlocalized character
2. Muscular defense and peritoneum stimulation symptoms are evident
3. The disease is often accompanied by stool retention
4. As usual, the high leukocytosis and hyperthermia is observed
5. Development of periappendiceal mass
Choose the right answer combination:
a) -2, 4
b) 1, 2
c) 4, 5
d) 3, 4
e) 3, 4, 5

46. Phlegmonous appendicitis was diagnosed in a 76-year-old patient with transmural myocardial infarction. What are your actions?
1. -Emergency surgery
2. Surveillance and surgery in case of peritonitis symptoms
3. Massive doses of antibiotics and surgery in case of ineffective antibiotic therapy
4. Laparoscopy, if the diagnosis is confirmed – surgery
5. All variants are incorrect

47. Acute catarrhal appendicitis has following clinical signs:
1. Volkovich-Kocher`s sign
2. Bartomier-Michelson`s sign
3. Increase of body temperature
4. Rovsing`s sign
5. Blumberg`s sign
Choose the right answer combination:

a) 1, 2, 5
b) 2, 3, 5
c) 1, 4, 5
d) -1, 2, 3, 4
e) 1, 3, 4, 5

48. What symptoms are characteristic of gangrenous form of acute appendicitis?
1. Wooden belly
2. Sudden pains increase in the right iliac area
3. Pains reduction
4. Tachycardia
5. Positive Blumberg's sign in thy right iliac area
Choose the right answer combination:
a) 1, 2, 5
b) -3, 4, 5
c) 1, 4, 5
d) 2 and 3
e) 2 and 5

49. Tamponing of the right iliac fossa after appendectomy is indicated in:
1. Periappendiceal abscess
2. Vermiform appendage gangrene
3. Retrocecal location of vermiform appendage
4. Capillary hemorrhage in tissues in the area of vermiform appendage location
5. Peritonitis
Choose the right answer combination:
a) -1, 4
b) 3, 5
c) 4, 5
d) 1, 2, 3
e) 2, 3, 4

50. Kocher-Volkovich symptom is:
1. Pains increase in the right iliac area when knocking the right iliac area
2. Pains increase in the right iliac area when straining the right iliopsoas muscle
3. Pains increase in the right iliac area in left lateral decubitus
4. Pains increase in the right iliac area when a patient turns to the left side
5. -Shift of the pains from the epigastric area or upper part of the stomach to the iliac area

51. A 23-year-old patient with 32 weeks of pregnancy has been staying in the surgical department for 18 hours. Case monitoring can`t exclude acute appendicitis. What is your therapeutic approach?
1. A patient should be operated
2. Observation over a patient
3. Ultrasonography of abdominal cavity
4. To bring on induced abortion together with gynecologist and perform appendectomy later on.
5. -Perform laparoscopy and if the diagnosis is confirmed – to perform a surgery

52. The main symptom helping to diagnose pelvic position of acute appendicitis is:
1. Blumberg`s sign
2. Rovsing`s sign
3. -Painfulness of the anterior mucosal prolapse of the rectum during rectal investigation
4. Muscle tension in the right iliac area
5. Kocher-Volkovich symptom

53. Diagnostic program in acute appendicitis includes:
1. Thorough anamnestic data acquisition
2. Somatic diseases stimulating acute pathology in the stomach are excluded
3. Rectal investigation in men and additional vaginal touch
4. Laboratory tests
5. Emergency chromocystoscopy

Choose the right answer combination:

a) 1, 2, 3, 4
b) 1, 2, 3
c) 3, 4, 5
d) 1, 3, 4, 5
e) -All variants are correct

54. Primary-gangrenous appendicitis develops as a result of:
1. Massive adhesions in the abdominal cavity
2. Retrocecal position of the vermiform appendix
3. Disorders of rheological properties of blood
4. -Arterial thrombosis of the vermiform appendix
5. Reduction of a patient's organism reactivity

55. What should be used to differentiate acute appendicitis from acute calculous cholecystitis?
1. General blood analysis
2. Plan radioscopy of the abdominal cavity
3. Ultrasonic scanning
4. Oral cholecystography
5. Laparoscopy

Choose the right answer combination

a) 1, 3, 4
b) 2, 3, 4
c) -3, 5
d) 4, 5
e) All variants are correct

56. What special examination techniques should be used in differential diagnosis of acute appendicitis with coverted perforated duodenal ulcer?
1. Gastroduodenoscopy
2. Plan radioscopy of the abdominal cavity
3. Ultrasonography of abdominal cavity
4. Laparoscopy
5. Irrigoscopy

Choose the right answer combination:

a) 1, 2, 3
b) 2, 3, 5
c) -1, 2, 4
d) 2, 4
e) 2, 5

57. Acute appendicitis has following symptomes:
1. Kocher-Volkovich symptom
2. Rovsing`s sign
3. Mayo-Robson`s sign
4. Sitkovsky`s sign
5. Bartomier-Michelson`s sign

Choose the right answer combination:

a) 1, 2, 3, 4
b) 1, 3, 5
c) -1, 2, 4, 5
d) 2, 3, 4, 5
e) 1, 2, 3, 4, 5

58. A day before menstrual cycle healthy 17-year-old girl suddenly felt pain in the right iliac area. Medical examination detected painfulness in the right iliac area. Rectal investigation detected the same. Body temperature was 37.2 °C (99°F), leucocytes in general blood analysis was 10000 mcl. The most probable diagnosis:
1. Acute appendicitis
2. Acute adnexitis
3. Sigmoid epiploic appendages inflammation
4. Urinary tracts infection
5. -Mittelschmerz

59. A patient complains of pain above the pubis, frequent painful urination. Body temperature is 38,2 °C, leucocytes level is 12000 mcl., formula shifts to the left. Examination detects painfulness above the pubis with protective muscle guarding. The right iliac area is intact.Rectal investigation detects painfulness in the right. Urine test is without pathology. What is your preliminary diagnosis?
1. Acute cystitis
2. Retrocecal appendicitis
3. -Pelvic appendicitis
4. Medially located appendicitis
5. Subhepatic appendicitis

UNIT 2. COMPLICATIONS OF ACUTE APPENDICITIS. CHRONIC APPENDICITIS

1. In what case of acute appendicitis general anesthesia is indicated?
1. A patient with early term of pregnancy
2. -Acute appendicitis complicated with diffuse peritonitis
3. Patients from 14 to 16 years old
4. In suspected retrocecal laocation of the vermiform appendix
5. An elderly patient with typical picture of noncomplicated acute appendicitis

2. In a patient operated on acute phlegmonous appendicitis and diffuse peritonitis through an approach in the right iliac area right-sided subdiaphragmatic abscess was diagnosed. What was the possible reason of its formation?
1. A patient didn`t take Trendelenburg`s position after the surgery
2. A patient didn`t take Fowler`s position after the surgery
3. The wrong approach had been chosen, inferomedian laparotomy had to be performed
4. Exudate in the abdominal cavity hadn`t been drained
5. Tamponade of the abdominal cavity hadn`t been performed
Choose the right answer combination:
a) 1, 3, 5
b) 1 and 4
c) 1 and 5
d) -2, 3, 4
e) 2, 3, 5

3. Which of the following methods are not used for abscesses detection in the abdominal cavity?

1. Ultrasonic scanning
2. Plan radiography of the abdominal cavity
3. Colonoscopy
4. Computer tomography
5. Laparoscopy

Choose the right answer combination:

a) 1, 3, 5
b) 2, 4
c) -3, 5
d) 2, 4, 5
e) 1, 5

4. In 76-year-old patient with transmural myocardial infarction phlegmonous appendicitis was detected. What are your actions?

1. -Emergency surgery
2. Observation and surgery in case of peritonitis symptoms
3. Indication of massive doses of antibiotics and surgery in case of ineffective antibioticotherapy
4. Laparoscopy, in case of diagnosis confirmation - surgery
5. All variants are wrong

5. Pylephlebitis is usually a complication of:

1. Perforated stomach ulcer
2. Volvulus of the small bowel
3. Small bowel infarction as a result of embolism of the superior mesenteric artery
4. -Destructive appendicitis
5. Splitting tumors of the blind gut with paracolic lymphadenitis

6. Appendicular infiltrate usually develops:

1. First 2 days from the onset
2. -3-4 days from the onset
3. 7 - 9 days from the onset
4. Early period after appendectomy
5. Late period after appendectomy

7. Tamponade of the right iliac fossa after appendectomy is indicated after:

1. Periappendiceal abscess
2. Vermiform appendix gangrene
3. Retrocecal position of the vermiform appendix
4. Capillary bleeding from the tissues in the area of the vermiform appendix location
5. Peritonitis

Choose the right answer combination:

a) -1, 4
b) 3, 5
c) 4, 5
d) 1, 2, 3
e) 2, 3, 4

8. In complication of acute appendicitis with appendicular infiltrate conservative therapy is indicated because:

1. Self-recovery is possible
2. Infiltrate resorption is possible
3. In attempt to carry out appendectomy small bowel perforation is possible
4. After infiltrate resorption the mild case of the disease is chronic appendicitis
5. In attempt to expose the vermiform appendix from the infiltrate peritonitis can develop

Choose the right answer combination:
a) 1, 3
b) 2, 4
c) 1, 2, 3
d) 3 and 5
e) -All variants are correct

9. In differentiation of subdiaphragmatic abscess from right-sided lower lobe pneumonia the most evident sign for establishing the diagnosis is:
1. Restriction of motions of the right cupula of diaphragm in chest radioscopy
2. Superhepatic liquid in a plan radiography of the abdominal cavity
3. Presence of pus in puncture of the pleural cavity
4. Presence of pus in puncture of subdiaphragmatic area
5. Fluoroscopic picture: shadowing of the lower lobe of the right lung
Choose the right answer combination:
a) 1, 3, 5
b) -1, 2, 4
c) 1, 2, 5
d) 2, 3, 4
e) 2, 4, 5

10. You suspect Douglas abscess in a patient. What examinations should be carried out for its diagnosing?
1. Proctoscopy
2. Digital investigation of the rectum
3. Ultrasonography
4. Laparoscopy
5. Plan radiography of the abdominal cavity
Choose the right answer combination:
a) 1, 3, 5
b) 2, 4, 5
c) -2, 3
d) 3, 4
e) 1, 5

11. A 23-year-old patient with 32 weeks of pregnancy has been staying at a surgery department for 18 hours. Case follow-up can't exclude acute appendicitis. What is your therapeutic approach?
1. -A patent should be operated
2. Continue supervision of a patient
3. Ultrasonography of abdominal cavity
4. To bring on induced termination of pregnancy together with gynecologist
5. Perform laparoscopy and surgery if diagnosis is approved

12. Douglas abscess after appendectomy is characterized by following signs:
1. Hectic temperature
2. Pains deep in the pelvis and tenesmus
3. Limited diaphragm mobility
4. Overhanging vaginal walls or anterior walls of the rectum
5. Muscles tension of the anterior abdominal wall
Choose the right answer combination:
a) 1, 3, 5
b) -1, 2, 4
c) 1, 3, 4
d) 2, 3, 4
e) 2, 3, 5

13. Emergency appendectomy is not indicated in:
1. Acute catarrhal appendicitis
2. Acute appendicitis in late pregnancy
3. The first attack of acute appendicitis
4. -Obscure diagnosis of acute appendicitis in elderly patients
5. Acute appendicitis in children

14. Symptoms of appendicular infiltrate are following except:
1. Low grade fever
2. Disease duration of 4-5 days
3. -Intractable diarrhea
4. Increased level of blood leukocytes
5. Palpable tumor-like mass in the right iliac area

15. Local painfulness reduced in a patient 5 days after appendectomy, but he felt worsening of general condition: temperature increase, its hectic character, increase of leukocytes level. Moderate pains appeared deep in the pelvis as well as transient dysuric symptoms, tenesmus. What additional examination technique will you indicate to find out the reasons of such clinical representation?
1. Chromocystoscopy
2. Repeated blood and urine tests
3. -Digital rectal examination
4. Proctoscopy
5. Control irrigoscopy

16. The reason of wound abscess after appendectomy is:
1. Fecal fistula
2. -Wound infection during a surgery
3. Actinomycosis
4. Blind gut cancer
5. Foreign body (tissue)

17. Abdominal cavity tamponade after appendectomy due to acute appendicitis is not indicated in:
1. Unstopped capillary bleeding
2. Uncertainty in total removal of impacted feces, fallen out of the ruptured vermiform appendix
3. -Turbid exudates in the right iliac area
4. Uncertainty in adequate appendix stump immersion
5. Leaving of the appendix tip in the wound in retrograde appendectomy

18. What symptoms are characteristic of gangrenous form of acute appendicitis?
1. «Wooden belly»
2. Sudden pains increase in the right iliac area
3. Reduction of pain sensation
4. Tachycardia
5. Blumberg`s sign in the right iliac area
Choose the right answer combination:
a) 1, 2, 5
b) -3, 4, 5
c) 1, 4, 5
d) 2, 3
e) 2, 5

19. Tamponade of the right iliac fossa after appendectomy is indicated in:
1. Wermiform appendix gangrene

2. Retrocecal location of the vermiform appendix
3. Capillary bleeding from the tissues in the area of the vermiform appendix location
4. Suspected appendix tip avulsion in its retrograde removal
5. Impacted feces dropping during the vermiform appendix exposure
Choose the right answer combination:
a) 1, 2, 3
b) 2, 3, 4
c) -3, 4, 5
d) l, 4, 5
e) All variants are correct

20. The most important symptoms of abscess in differential diagnosing of subdiaphragmatic abscess from right-sided pneumonia of the lower lobe are:
1. Limitation of the right diaphragm cupula mobility in chest radioscopy
2. Superhepatic liquid level in plan radiography of the abdominal cavity
3. Pus in puncture of the pleural cavity
4. Pus in puncture of subdiaphragmatic area
5. Shadowing of the lower lobe of the right lung in chest radioscopy
Choose the right answer combination:
a) 1, 3, 4
b) -1, 2, 4
c) 1, 2, 5
d) 2, 3, 4
e) 3, 4, 5

21. Pylephlebitis development is most probable in one of the following forms of acute appendicitis:
1. Appendicular colic
2. Catarrhal appendicitis
3. Phlegmonous appendicitis
4. Phlegmonous appendicitis, accompanied by vermiform appendix mesentery inflammation
5. -Primary gangrenous appendicitis

22. What method would you choose to diagnose Douglas abscess?
1. Proctoscopy
2. Laparoscopy
3. Percussion and auscultation of the abdomen
4. -Digital rectal investigation
5. Abdominal cavity radioscopy

23. What measures would you take to differentiate acute appendicitis from right-sided renal colic?
1. Spasmolytics injection
2. Narcotics injection
3. Urgent urine test
4. Chromocystoscopy
5. Renal arteries angiography
Choose the right answer combination:
a) 1, 3, 5
b) 2, 3, 4
c) 3, 4, 5
d) -1, 3, 4
e) All variants are correct

24. Following features are characteristic of perforated appendicitis:
1. Free gas in the abdominal cavity

2. Reduction of volume of circulating erythrocytes
3. Sudden pains increase in the abdomen
4. Muscle tension of the anterior abdominal wall
5. Positive Blumberg`s sign

Choose the right answer combination:

a) 1, 2, 3
b) 2, 4, 5
c) -3, 4, 5
d) 1, 4, 5
e) All variants are correct

25. Abscess of the small pelvis developed in an 18-year-old patient 7 days after appendectomy. What would you undertake?

1. Massive antibiotic therapy
2. Open the abscess through inferomedian approach and drain the small pelvis
3. Open the abscess through the right iliac area
4. -Drain the abscess through the anterior wall of the rectum
5. Open the abscess through right-sided extra-abdominal approach

26. In a 40-year-old patient 2 days after appendectomy due to gangrenous appendicitis enteroparesis, shivering, pains in the right side of the abdomen and jaundice developed, the liver became enlarged. Symptoms of peritoneum are absent. What complication should be suspected first?

1. Peritonitis
2. Subdiaphragmatic abscess
3. Interintestinal abscess
4. -Pylephlebitis
5. Subhepatic abscess

27. Phlegmon of the retroperitoneal space as a complication of acute appendicitis develops in:

1. Anterior subhepatic vermiform appendix location
2. Local peritonitis in the right iliac area
3. -Retroperitoneal location of the vermiform appendix
4. Medial location of the vermiform appendix
5. Lateral location of the vermiform appendix from the blind gut

28. Opening of the subdiaphragmatic abscess is performed through:

1. Ehoracolaparotomy
2. Lumbotomy
3. Two-staged transpleural approach
4. Fedorov`s laparotomy in the right hypochondrium
5. Extrapleural extraperitoneal approach

Choose the right answer combination:

a) 1, 2, 3
b) 1, 4, 5
c) 2, 3, 5
d) -3, 4, 5
e) All variants are correct

29. During the surgery on acute appendicitis appendicular infiltrate was detected. What tactic solution should be taken?

1. Carry out diagnostic puncture of the infiltrate
2. -Refuse further manipulations and suture the incisional wound tight
3. Bound the inflamed infiltrate with gauze tampons
4. Drain the abdominal cavity

5. Expose the vermiform appendix from the infiltrate and perform appendectomy

30. In treatment of diffuse peritonitis of appendicular origin first it is necessary to:
1. Elimination of peritonitis source
2. Antibacterial therapy
3. Correction of water-electrolyte disorders
4. Abdominal cavity sanation
5. -All variants are correct

31. Typical complications of acute appendicitis are:
1. Appendiculat infiltrate
2. Omental bursa abscess
3. Pylephlebitis
4. Douglas abscess
5. Pyelonephritis
Right variants:
a) 1, 2, 3
b) -1, 3, 4
c) 2, 4, 5
d) 1, 2, 4
e) 2, 3, 5

32. What can develop before or after appendectomy?
1. Appendicular infiltrate
2. Diffuse peritonitis
3. Periappendicular abscess
4. Local abscess of abdominal cavity
5. Retroperitoneal phlegmon
Right variants:
a) 1, 2, 3, 4
b) 1, 3, 5
c) -2, 4, 5
d) 3, 4, 5
e) 2, 3, 4, 5

33. Perforation of the vermiform appendix exposes in:
1. The sharpest pain in the iliac area, especially evident together with subsided imaginary pains in gangrene development
2. Abdominal wall tension first in the right iliac area and then spreading to other areas
3. Increasing abdominal distension
4. Leukocytosis
5. Lowering of the body temperature
Right variants:
a) -1, 2, 3, 4
b) 2, 3, 4, 5
c) 1, 2, 3, 5
d) 1, 3, 4, 5
e) 1, 2, 4, 5

34. In acute appendicitis and perforated ulcer following symptoms can be observed:
1. Volkovich-Kocher`s sign
2. Spizharniy`s symptom
3. Blumberg`s sign
4. Voskresensky`s symptom

5. Krymov`s symptom
Right variants:
a) -1, 2, 3, 4
b) 1, 2, 4, 5
c) 1, 2, 3, 5
d) 1, 3, 4, 5
e) 2, 3, 4, 5

35. Following measures help to differentiate acute appendicitis from perforated ulcer:
1. Thoroughly gathered and correctly interpreted close and remote anamnesis
2. Plan abdominal cavity X-ray picture
3. Selective celiacography
4. Laparoscopy
5. Laparocentesis using a ″wandering″ catheter
Right variants:
a) 1, 2, 3, 4
b) -1, 2, 4, 5
c) 1, 2, 3, 5
d) 2, 3, 4, 5
e) 1, 3, 5

36. In acute appendicitis as well as in acute pancreatitis the following common symptoms can be observed:
1. Sudden onset
2. Localisation of pains in the epigastric area
3. Girdle pains
4. Localisation of pains in the right iliac area
5. Recurrent bile vomiting without a relief
Right variants:
a) 1, 2, 5
b) 2, 3, 4, 5
c) -1, 2, 4
d) 1, 2, 3, 4
e) 1, 2, 4, 5

37. Indications for abdominal cavity tamponade after appendectomy are:
1. Impossibility to remove the whole vermiform appendix or its part
2. Periappendicular abscess opening
3. Unreliable hemostasis
4. Danger of failure of sutures, immersing the appendix stump due to blind gut cupula infiltration
5. Retrocecal appendicitis.
Right variants:
a) -1, 2, 3, 4
b) 2, 3, 4, 5
c) 1, 2, 3, 4, 5
d) 2, 3, 5
e) 1, 4, 5

38. Tammponade after appendectomy is indicated after appendectomy in:
1. Opening of the appendicular infiltrate abscess formation
2. Phlegmonous appendicitis with abundant exudates in the abdominal cavity
3. Retrocecal appendicitis
4. Peritonitis
5. Capillary bleeding from the bed of the vermiform appendix
Right variants:

a) 1, 2, 3, 4
b) 2, 3, 4
c) -1, 5
d) 3, 4, 5
e) 2, 3, 4, 5

39. What measures should be taken for treatment of dense pelvic infiltrates without signs of abscess formation:
1. Elevate the head of the bed
2. Use broad spectrum antibiotics
3. Give warm camomile tea enemas
4. Sparing digestible high-calorie diet
5. Regular cleansing enemas
Right variants:
a) 1, 2, 3, 4
b) 1, 3, 4, 5
c) 1, 2, 4, 5
d) 1, 2, 3, 5
e) -2, 3, 4, 5

40. What modern methods can be used today for diagnosing subdiaphragmatic abscess?
1. X-ray examination
2. Ultrasonic scanning
3. Selective celiacography
4. Computer tomography
5. Thermography
Right variants:
a) 1, 2, 3, 4
b) 1, 2, 3, 5
c) 3, 4, 5
d) 2, 3, 4, 5
e) -1, 2, 4, 5

41. Conditions favouring the development of appendicular infiltrate are:
1. Late visit to a doctor
2. Diagnostic mistakes in pre-hospital and hospital periods
3. 3 - 5 days from the onset
4. Phlegmonous changes of the vermiform appendix
5. Vermiform appendix perforation
Right variants:
a) -1, 2, 3, 4
b) 1, 2, 4, 5
c) 1, 2, 3, 5
d) 1, 3, 4, 5
e) 2, 3, 4, 5

42. The primary period of appendicular infiltrate formation is characterized by:
1. Reduction of pains, evident in the first days of the disease
2. Improvement of patients` general condition
3. Body temperature increase
4. Leukocytosis increase and shift of the leukogram to the left
5. Dense, non-mobile, non-painful lump in the right iliac area
Right variants:
a) 1, 2, 3, 4

b) 1, 2, 3, 5
c) 1, 4, 5
d) -1, 2, 3, 4, 5
e) 2, 3, 4, 5

43. What is characteristic of acute appendicitis complicated with appendicular infiltrate in comparison with the blind gut tumor?
1. Short anamnesis
2. Acute character of the pains in the right iliac area accompanied by increased temperature
3. Volkovich-Kocher's sign
4. Frequent signs of partial intestinal obstruction in anamnesis
5. Tendency to tumor mass reduction during the observation
Right variants:
a) 1, 2, 5
b) 1, 3, 4, 5
c) -1, 2, 3, 5
d) 3, 4, 5
e) 1, 2, 3, 4, 5

44. The question on appendicular infiltrate abscess formation can arise in case of:
1. High temperature especially if it has hectic character
2. Pain resumption and increase
3. Symptoms of peritoneum irritation
4. Leukocytosis increase and shift of the leukogram to the left, ESR increase
5. Absent tendency to infiltrate reduction in 7-10 days of intensive therapy, especially while antibiotics administration.
Right variants:
a) 1, 2
b) 2, 4, 5
c) -1, 2, 3, 4
d) 2, 3, 4, 5
e) 3, 4, 5

45. When opening the appendicular infiltrate after abscessation:
1. The surgery is performed under the general anaesthetization
2. Extraperitoneal (Pirogov`s) approach is used if possible
3. Infiltrate is carefully carefully separated by blunt, not damaging the infiltrated intestinal loops
4. Destructively altered vermiform appendix is exposed and removed
5. Abscess cavity is carefully washed and drained
Right variants:
a) 1, 3, 4, 5
b) 1, 2, 3, 4, 5
c) -1, 2, 3, 5
d) 2, 4, 5
e) 2, 3, 4, 5

46. On the sixth day after laparotomy on appendicular peritonitis a patient felt pains in the lower part of the abdomen, tenesmus, dysuric symptoms, fever. Temperature rose to 39,5^{0}C and aquired a hectic character. Tongue was wet, the abdomen was soft and moderately painful above the pubis. Rectal investigation through the anterior wall of the rectum detected large painful infiltrate with softening. What would you diagnose?
1. Pylephlebitis
2. -Small pelvis abscess

3. Periappendicular abscess
4. Intrafilar abscess
5. Sepsis

47. Rigors are characteristic of pylephlebitis:
1. No
2. -Yes

48. A 34-year-old patient was operated on plegmonous gangrenous appendicitis. 7 days after the surgery he felt shivering, rectal pains, tenesmus, frequent painful urination. Rectal investigation detected an infiltrate in the small pelvis. 3 days after the therapy (warm chamomile tea enemas and antibiotics) the patient`s condition didn't improve. Rectal re-investigation showed the infiltrate softening. Temperature aquired a hectic character. What therapy should be prescribed?
1. Antibiotics, physiotherapy, hyperbaric oxygenation
2. -Drain of the pelvic abscess via the rectum
3. Other methods

49. Evident local tension of the abdominal wall in normal pulse rate and bradycardia is observed in acute appendicitis and is characteristic of the following peritonitis stage:
1. Toxic
2. Terminal
3. -Reactive

50. Moderate tension of the abdominal wall in normal pulse rate of good filling is observed in acute appendicitis and is characteristic of the following peritonitis stage:
1. Terminal
2. -Toxic
3. Reactive

51. The most often reason of surgical sepsis after appendectomy is:
1. Blind gut cancer
2. Foreign body (tissue)
3. Actinomycosis
4. -Wound infecting during the surgery
5. Fecal fistula

52. One of the following examination technique allows to approve appendicitis in a patient:
1. Colonoscopy
2. Laparoscopy
3. Ultrasonic scanning of the abdomen
4. -Irrigoscopy
5. Plan abdominal cavity film

53. What diseases chronic appendicitis should be differentiated from?
1. Right kidney pathology
2. Chronic adnexitis
3. Chronic colitis

4. Cholelithiasis
5. Helminthic invasion

Choose the correct answer combination:

a) 2, 3, 4
b) 1, 2, 3
c) 2, 3, 5
d) 1, 2, 4
e) -All the mentioned diseases

54. A patient operated was on acute phlegmonous appendicitis and local peritonitis through a typical approach. The 9th day after the surgery right-sided subdiaphragmatic abscess was diagnosed. What is the reason of its formation?

1. Trendelenburg`s position wasn't used in a patient
2. Fowler`s position wasn't used in a patient
3. Inferomedial laparotomic approach had to be used
4. Exudate in the abdominal cavity wasn`t drained
5. The tamponade of the abdominal cavity wasn`t performed

Choose the correct answer combination:

a) 1, 4
b) -2, 4
c) 3, 4, 5
d) 1, 3, 4
e) 2, 3, 5

55. During the surgery in a patient with acute appendicitis you have found a dense infiltrate. What would you undertake?

1. Perform midline laparotomy and appendectomy under narcosis
2. -Suture the abdominal cavity wound and indicate antibiotics and cold locally.
3. Expose the vermiform appendix from the inflammatory infiltrate and perform appendectomy
4. Introduce tampone and drain in the abdominal cavity
5. All variants are incorrect

56. You have diagnosed an appendicular infiltrate in a patient. Complex of what conservative measures is most reasonable in the first three days?

1. Cold on the stomach
2. Antibiotics indication
3. UHF or ultraviolet irradiation locally
4. Warm compress on the right iliac area
5. Proteolytic ferments parenterally

Choose the correct answer combination:

a) 2, 3
b) 4, 5
c) -1, 2
d) 1 and 5
e) Only 2

57. The most characteristic signs of chronic appendicitis are:

1. Voskresensky's sign
2. Moderate blood leukocytosis

3. Continuous retention of barium meal in the vermiform appendix during the roentgenological examination
4. Frequent pains in the right iliac area
5. Positive Sitkovsky's symptom

Choose the correct answer combination:

a) 1, 2, 4
b) 1 and 3
c) -3 and 4
d) 2, 3, 4
e) 2, 3, 5

58. Clinical signs of subdiaphragmatic abscess are:

1. Pains in the right part of the chest and upper abdomen
2. Painfulness when pressing the lower ribs area
3. Hectic temperature
4. Bulging of the lower intercostal space
5. Extension of liver dullness margin

Choose the best answer combination:

a) 3, 4, 5
b) 1, 2, 3, 4
c) 1, 2, 3, 5
d) -All variants are correct
e) All variants are incorrect

59. 7 days after appendectomy abscess of the small pelvis developed in an 18-year-old patient. What would you undertake?

1. Massive antibioticotherapy
2. Open the abscess using inferomedial approach and drain the small pelvis
3. Open the abscess using Volkovich-Dyakonov approach
4. Open the abscess using right-sided extraperitoneal approach
5. -Drain the abscess through the anterior wall of the rectum

60. A patient was operated on gangrenous appendicitis. The 2nd day after appendectomy enteroparesis developed, the liver became enlarged and jaundice appeared; the patient felt shivering and pains in the right part of the stomach. Symptoms of peritoneum irritation are absent. What complication can be suspected?

1. Subdiaphragmatic abscess
2. -Pylephlebitis
3. Peritonitis
4. Interintestinal abscess
5. Subhepatic abscess

61. In acute appendicitis retroperitoneal space phlegmon develops in:

1. Anterior subhepatic location of the vermiform appendix
2. Local peritonitis in the right iliac area
3. Retrocecal location of the vermiform appendix
4. -Retroperitoneal location of the vermiform appendix
5. Lateral location of the vermiform appendix

62. Pylephlebitis is a complication of one of the following diseases
1. Non-occlusive infarction of the small intestine
2. Non-specific ulcerative colitis
3. -Primary gangrenous appendicitis
4. Primary gangrenous cholecystitis
5. Phlegmonous appendicitis accompanied by appendix mesentery inflammation

63. A 21-year-old patient was operated on phlegmonous appendicitis. Turbid exudate was detected. 3 days after appendectomy and drainage of the right paracolic gutter the patient felt increasing pain over the whole abdomen, 38,4 ^{0}C temperature, pulse was 94 bpm. The physical examination showed moderately grave condition, dry tongue, painfulness and tension in all parts of the abdomen but more in the right. Shchotkin`s sign was positive. Peristalsis was placcid. Rectal investigation detected overhanging and painfulness anterior wall. Plan X-ray showed liquid levels in the loops of the small intestine. Blood leucocytes were 18200. What is your diagnosis?
1. Abscess of vesicorectal pouch
2. Mesenterial vessels thrombosis
3. Acute pancreatitis
4. -Widespread peritonitis
5. Intestinal obstruction

64. The 3rd day after appendectomy you have diagnosed diffused peritonitis on the basis of complex examination. What is your further policy?
1. Amplify antibioticotherapy
2. Indicate spasmolytics, painkillers
3. Perform angiography
4. Perform laparoscopy
5. -Perform laparotomy

65. The 6th day after appendectomy on perforated appendicitis patent acquired following symptoms: painful urination, tenesmus, liquid stool, body temperature rose to 38,4^{0}C, blood leucocytes – 16000. Digital rectal investigation detected painfulness, overhanging anterior rectal wall. Your diagnosis is:
1. Interintestinal abscess
2. -Douglas abscess
3. Intraperitoneal bleeding
4. Periproctitis
5. Dysentery or enterocolitis

66. The 6th day after appendectomy you have diagnosed Douglas abscess. What are your actions?
1. -Open Douglas abscess through the rectum
2. Indicate physiotherapy
3. Open periproctitis
4. Transfuse the blood
5. Emergency relaparotomy

67. Appendicular infiltrate usually develops:
1. First 48 hours from the onset
2. -The third-fourth day after the onset
3. The seventh-ninth day after the onset

4. In early period after appendectomy
5. In late period after appendectomy

68. The fifth day after appendectomy during rectal investigation an inflammatory infiltrate without abscess signs was detected in the small pelvis of a patient. Following measures should be taken.
1. Antibacterial therapy
2. Blended saline twice a day
3. Warm microclyster with camomile
4. Parenteral introduction of proteolytic enzymes
5. Operative therapy

Right variants:
a) -1, 2, 4
b) 1, 3, 4
c) 2 and 4
d) 1 and 5
e) 2 and 5

69. A patient was hospitalized due to appendicular infiltrate in the right iliac area. On the 6th day of the diseases the signs of abscess formation appeared. What method of its opening should be used?
1. -Volkovich-Diakonov`s incision
2. Lower midline laparotomy
3. Lenander`s approach
4. Through the anterior wall of the rectum
5. A horizontal incision in the right iliac area

70. Douglas abscess after appendectomy is characterized by all signs except:
1. Hectic temperature
2. Pains deep in the pelvis and tenesmus
3. -Restraint of diaphragm movement
4. Overhanging vaginal walls or anterior rectal wall
5. Painfulness during rectal investigation

71. What is not applied in the therapy of infiltrate?
1. Physiotherapy
2. Antibiotics
3. Hospitalization
4. -Narcotics
5. Diets

UNIT 3. EXTERNAL ABDOMINAL HERNIAS

1. What factor does not predispose to development of abdominal hernias?
1. Elderly age
2. Progressive weight loss
3. Peculiarities of the structure of anterior abdominal wall in the regions of hernia's development
4. -Diseases bringing on rise in intra-abdominal pressure
5. Paralysis of the nerves of abdominal wall

2. What serves as an inferior wall of inguinal canal?
1. Transverse fascia

2. Lower part of external abdominal skew muscle
3. Gimbernat ligament
4. -Inguinal ligament
5. Edge of iliac bone

3. Inguinal-scrotal hernia is differentiated from all the following except:
1. Varicocele
2. Tumour of the spermatic cord
3. Tumour of testis
4. Hydrocele
5. -Aneurisms of v. saphena magna

4. Larrey's hernia is diagnosed during:
1. Survey radioscopy of abdominal cavity
2. -Radiographic contrast study of stomach
3. Ultrasound
4. Contrast studies of esophagus

5. Presence of testis in the hernia sac is typical for:
1. Sliding hernia
2. Strangulated hernia
3. Femoral hernia
4. -Congenital hernia
5. Indirect inguinal hernia

6. Weakness of what wall is typical for direct inguinal hernia?
1. -Posterior
2. Superior
3. Anterior
4. Inferior
5. All walls

7. Irreducibility of hernia is the consequence of:
1. -Commissures between organs protruding into hernial sac and the wall of the sac
2. Commissures between loops of intestine protruding into hernial sac
3. Cicatricial process between hernial sac and surrounding tissues
4. Inequality of organs protruded into the hernial sac and sizes of hernial orifices
5. All mentioned above

8. What method facilitates differentiation inguinal-scrotal hernia from hydrocele?
1 Puncture
2. Auscultation
3. Emergency surgery
4. -Transillumination
5. Palpation

9. Femoral hernia ia differentiated from all the following diseases except:
1. Cold abscess
2. Inguinal hernia
3. Lipoma
4. –Bartholin`s gland cyst
5. Varicose node

10. What is typical for post-operative ventral hernia?

1. Frequent irreducibility
2. Wide hernial orifice
3. Dense edges of hernial orifice
4. Disposition to incarceration
5. -No tendency towards enlarging of hernial orifice

11. Hernial sac of congenital hernia is formed by:
1. Parietal peritoneum
2. Bowel mesentery
3. –Nuck`s diverticulum
4. Visceral peritoneum
5. Transverse fascia

12. What is indicated for treatment of combination of prostatic adenoma and inguinal hernia requiring surgical treatment?
1. Observation
2. -Adenomectomy; later herniotomy
3. Conservative treatment
4. Herniotomy; later adenomectomy
5. Use of bandage

13. What enables to differentiate femoral hernia from varicose node of saphenous opening?
1. Ascending functional phlebography
2. -Auscultation (puff while coughing) and palpation of return blood waves during coughing
3. Node puncture
4. Thermography
5. Radiography

14. What is the main symptom of sliding hernia?
1. Easy reducibility
2. Innateness
3. -An organ of abdominal cavity partially covered with peritoneum serves as a wall of abdominal sac
4. Penetration between muscles and aponeurosis
5. All answers are correct

15. What organs take part in the development of sliding hernia?
1. Jejunum and ileum
2. Sigmoid and descending colon
3. -Blind gut and urinary bladder
4. Omentum
5. Epiploic appendices

16. What enables to differentiate inguinal-scrotal hernia from scrotal hydrocele?
1. Medical examination
2. -Diaphanoscopy
3. Radioscopy
4. Ultrasound
5. Percussion

17. What operation is used for treatment of umbilical hernias in children?
1. Sapezhko`s operation
2. –Lexer`s operation
3. Mayo operation
4. Martynov`s operation

5. Krymov`s operation

18. The superior part of Scarpa's triangle is bounded by:
1. Tailor`s muscle
2. Pectineal fascia
3. -Inguinal ligament
4. Lacunal ligament
5. Gimbernat ligament

19. What organs can serve as a wall of hernial sac during right sliding inguinal hernia?
1. Small intestine
2. Right kidney
3. Urinary bladder
4. Blind gut
5. Left ovary with fallopian tube
Choose the correct combination of answers:
a) 1, 2
b) 2, 5
c) -3, 4
d) 5, 4
e) All answers are correct

20. What can be recommended for a patient of 80 y.o. without gross somatic pathology who has frequent incarceration of inguinal-scrotal hernia?
1. Conservative treatment aimed at stool regulation
2. Emergency surgery – herniotomy
3. -Elective surgery after outpatient examination
4. Hospitalization, observation in the department of surgery
5. Wearing suspensory

21. What for should elderly patients with midline hernias have their stomachs examined before the surgery?
1. To determine the nature of the organ in hernial sac
2. To determine sizes of hernial orifice
3. To detect ulcer disease
4. -To eliminate the possibility of stomach tumour
5. To eliminate the possibility of gastrostasis

22. What factors promote the development of abdominal hernias?
1**.** Smoking
2. Sudden weight loss
3. Peculiarities of anatomical structure of anterior abdominal wall
4. Diseases raising intra-abdominal pressure
5. Hard physical activity
Choose the correct combination of answers:
a) 1, 2, 3
b) 2, 4, 5
c) -2, 3, 4, 5
d) 1, 4, 5
e) 1, 2

23. The patient, 70 y.o., has left indirect inguinal hernia with disposition to incarceration. He also has prostatic adenoma with acraturesis. What would you recommend?
1. Constant truss wearing

2. Emergency surgery after another incarceration
3. Operative treatment when hernia is fast enlarging
4. -Elective surgery after examination of urologist and correction of acraturesis
5. Simultaneous herniotomy and removal of adenoma

24. The patient, 40 y.o., in a year after right inguinal hernia surgery suffered again from hernia. What is your approach?
1. Medical supervision, incarcerated hernia surgery
2. To perform surgery if the hernia is enlarging
3. Medical supervision, surgery in case of inguinal-scrotal
4. -Elective surgery before complications arise or hernia enlarges
5. Truss wearing

25. Who has femoral hernias more often?
1. Men
2. -Women
3. Children
4. Teenagers
5. Elderly men

26. In what kind of hernias is hernial sac often multilocular with additional septa, recesses and cysts?
1. Inguinal
2. Femoral
3. Umbilical
4. Midline
5. -Post-operative ventral

27. Indicate kinds of hernias with no hernial sac:
1. Direct inguinal
2. Femoral
3. Embryonic umbilical
4. Sliding
5. False traumatic
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 2, 4
c) 2, 3, 4
d) -3, 4, 5
e) 1, 4, 5

28. During what types of hernias is hernial sac situated in spermatic cord?
1. Direct inguinal
2. **-Congenital and acquired indirect, direct, recurrent and inguinal**
3. Post-operative
4. Hernia of semilunar line
5. Inguinal hernias in women

29. List methods of accessory examination before the midline hernia surgery in elderly patients.
1. Abdominal ultrasound
2. Lung roentgenography
3. Esophagogastroduodenoscopy
4. Electroencephalography
5. Intravenous urography
Choose the correct combination of answers:

a) -1, 2, 3
b) 1, 2, 4
c) 2, 3, 4
d) 3, 4, 5
e) 1, 4, 5

30. The patient, overweight, with hypersthenic constitution was taken to hospital for elective operative treatment of post-operative ventral hernia. The hernia is of 25x30 cm, reducible. Indicate the methods of pre-operative examination of the patient:
1. Standard examination (electrocardiogram, blood group and Rh-factor, blood glucose)
2. Standard examination + spirometry
3. No other methods of examination are necessary
4. Roentgenoscopy of stomach + spirometry + standard examination
5. -Roentgenoscopy of stomach + spirometry + standard examination + truss wearing during reducible hernia

31. Factors that predispose to development of hernias are all the following except:
1. Weight loss
2. Gender of a patient
3. Previous surgeries
4. Diseases that increase abdominal pressure
5. Peculiarities of anatomical structure of anterior abdominal wall

32. What serves as a posterior wall of inguinal canal?
1. Inguinal ligament
2. Inguinal aponeurotic fold
3. Cooper`s ligament
4. -Transverse fascia
5. Rectus

33. What kind of hernia is characterized by the location of testicle in the hernial sac?
1. Indirect inguinal
2. Direct inguinal
3. Littre`s hernia
4. -Congenital
5. Supravesical

34. Weakness of which wall of inguinal canal is typical for indirect inguinal hernia?
1. Posterior
2. -Anterior
3. Superior
4. Inferior
5. Of all walls

35. Choose the method of plasty of femoral hernia:
1. Zhirar`s
2. Mayo`s
3. Napalkov`s
4. –Ruggi`s

5. Lexer`s

36. What symptom is not typical for indirect inguinal hernia?
1. It is oval shaped
2. Hernial contents often moves down into scrotum
3. It can be congenital
4. Is situated ectad the lower epigastric artery
5. -The hernia goes out from medial inguinal fossa

37. Hernial sac of congenital inguinal hernia is…
1. Parietal peritoneum
2. Bowel mesentery
3. -Vaginal process of peritoneum
4. Visceral peritoneum
5. Transverse fascia

38. What errors did the doctor make diagnosing "…patient`s clinical picture of direct congenital inguinal reducible inguinoscrotal hernia…"?
1. Direct hernia cannot be congenital
2. Direct hernia cannot move down into the scrotum
3. Direct hernia cannot be incarcerated
4. Reducible hernia cannot be congenital
5. Inguinal-scrotal hernia cannot be reducible
Choose the correct combination of answers:
a) 1, 3, 4
b) -1, 2
c) 1, 4, 5
d) 2, 3
e) There are no correct answers; the diagnosis is correct

39. What are typical symptoms of indirect inguinal hernia?
1. Hernial sac is situated in the spermatic cord
2. Hernial sac is situated entad the spermatic cord
3. Hernia can often be bilateral
4. Hernia can move down into the scrotum
5. Hernia can be congenital
Choose the correct combination of answers:
a) 1, 3
b) 2, 4
c) 2, 3
d) -1, 4, 5
e) 2, 3, 5

40. What methods of plastic repair of hernial orifice are used in femoral hernia?
1. Mayo`s
2. Ruggi-Parlavecchio`s
3. Bassini`s
4. Martynov`s
5. Postempsky`s
Choose the correct combination of answers:
a) -2, 3
b) 2, 4

c) 3, 4
d) 4, 5
e) 2, 5

41. Which of the following are the factors of external abdominal hernia development?
1. Elderly age of the patient
2. Progressing loss of weight
3. Peculiarities of anatomical organization of the abdominal wall
4. Diseases rising intra-abdominal pressure
5. Hard physical activities
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 3, 4
c) -4, 5
d) 1, 3
e) 1, 4

42. The patient, 60 y.o., has prostatic adenoma; direct inguinal hernia has been detected. The amount of residual urine comprises 100 ml. What would you recommend?
1. Herniotomy surgery
2. -First adenomectomy and then herniotomy
3. Only conservative treatment should be indicated
4. First herniotomy and then adenomectomy
5. All answers are correct

43. What is sliding hernia?
1. When hernial contents moves through lacunal ligament
2. When Meckel`s diverticulum comprises contents of hernial sac
3. -When urinary bladder serves as a wall of hernial sac
4. When vermiform appendix comprises contents of hernial sac
5. There are no correct answers

44. What implies the herniotomy with plasty of the inguinal canal (Bassini method)?
1. Plasty of posterior wall of inguinal canal
2. Spermatic cord is sutured with 2 ligatures with its vessels remain unsutured
3. Cremaster fibers are not sutured after dissection
4. Hernial orifice in direct hernia should be entirely sutured, in indirect they should be narrowed
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 2
c) 1, 2, 4
d) -1, 4
e) 1, 3, 4

45. Femoral triangle includes the following anatomical masses:
1. Poupart`s ligament
2. Lacunal ligament
3. Cooper`s ligament
4. Pectineal ligament
5. Muscular, vascular and lymphatic lacunes
Choose the correct combination of answers:
a) -1, 2, 3
b) 2, 3, 4, 5
c) 3, 4

d) 2, 3, 4
e) 1, 2, 3, 4, 5

46. What plasty of the inguinal canal is the most appropriate in direct inguinal hernia?
1. Martynov`s
2. Zhirar-Spasokukockiy`s
3. Kimbarovsky`s
4. Roux-Oppel`s
5. -Bassini-Postempsky`s

47. What methods of plasty of the inguinal canal are used in indirect inguinal hernia?
1. Sapezhko`s
2. Mayo`s
3. Bassini-Postempsky`s
4. Zhirar-Spasokukockiy`s
5. Ruggi-Parlavecchio`s
Choose the correct combination of answers:
a) 1, 3
b) 2, 4
c) -3, 4
d) 3, 5
e) 4

48. What is important in etiology of external abdominal muscles?
1. Weakness of muscular aponeurotic masses of abdominal wall
2. Natural openings in the abdominal wall
3. Number of childbirths in anamnesis
4. Hard physical activity
5. -All factors mentioned above

49. What anatomical mass does not participate in the formation of femoral ring?
1. Periosteum of pubic bone
2. -Femoral artery
3. Gimbernat ligament
4. Poupart`s ligament
5. Femoral vein

50. What are the main symptoms of congenital inguinal hernia?
1. Hernia is always indirect
2. Causes frequent calls to vesical tenesmus
3. It is disposed to frequent incarceration
4. Hernia is always direct
5. Impossibility to palpate testicle situated in the hernial sac
Choose the correct combination of answers:
a) 1, 2
b) 4, 5
c) 2, 4
d) -1, 5
e) 2, 3

51. In the patient of 26 y.o. hernial sac of 6x8 cm was detected during inguinal hernia surgery. Opening showed that strand of omentum and testicle comprised its contents. What type of hernia is it?
1. -Congenital inguinal hernia
2. Direct inguinal hernia

3. Indirect inguinal hernia
4. Littre`s hernia
5. Indirect inguinal hernia in combination with funiculocele

52. Hernia of anterior abdominal wall differs from eventration in the following symptoms:
1. Congenital or acquired defect in musculoaponeurotic structure of abdominal wall
2. Only hernial sac passes through hernial orifice
3. -Presence of hernial orifice, hernial sac and hernial contents
4. Eventration happens only in elderly people
5. Hernial contents are comprised only by intestinal loop

53. What types of hernia may develop in inguinofemoral region?
1. Direct inguinal
2. Indirect inguinal
3. Femoral
4. Obturator foramen
5. Hiatal
Choose the correct combination of answers:
a) -1, 2, 3
b) 1, 3, 4
c) 2, 3, 5
d) 1, 4, 5
e) All answers are correct.

54. Choose methods of plasty of inguinal canal in direct hernia:
1. Girard-Spasokukockiy`s
2. Ruggi-Parlavecchio`s
3. Bassini`s
4. Kimbarovsky`s
5. Postemsky`s
Choose the correct combination of answers:
a) 1, 3
b) 2, 3
c) 2, 3, 4
d) 3, 4, 5
e) -3, 5

55. What symptoms are typical for direct inguinal hernia?
1. Protrudes through medial inguinal fossa
2. Protrudes through lateral inguinal fossa
3. Hernial sac is situated in the spermatic cord
4. Hernial sac is situated entad the spermatic cord
5. Hernias can often be bilateral
6. Hernia can be congenital
Choose the correct combination of answers:
a) 1, 3, 5
b) -1, 4, 5
c) 1, 4, 6
d) 2, 4, 5
e) 2, 4, 6

56. What symptom is not typical for indirect inguinal hernia?
1. Hernia is oval shaped.
2. Outpouching may move down into the scrotum

3. Hernia may be congenital.
4. -Hernia may be bilateral
5. A retroperitoneal organ serves as a wall of hernial sac

57. What factors promote the development of post-operative hernias?
1. Wound abscess
2. Post-operative intestinal paralysis
3. Wound tamponade
4. Disorders of abdominal muscles innervation
5. Early ambulation after surgery
Choose the correct combination of answers:
a) 1, 2
b) 1, 3, 4
c) 3, 5
d) 1, 2, 3
e) -All answers are correct

58. What tests can be used for differentiation of femoral hernia from varicose node of saphenous opening?
1. Ascending functional phlebography
2. Auscultation (puff while coughing)
3. Palpation of return blood waves during coughing
4. Node puncture
5. Thermography
Choose the correct combination of answers:
a) 1, 2
b) -2, 3
c) 3, 4, 5
d) 3, 5
e) There are no correct answers

59. What is typical for post-operative ventral hernia?
1. Irreducibility
2. Wide hernial orifice
3. Dense edges of hernial orifice
4. Painfulness of hernia
5. Multilocular hernial sac
Choose the correct combination of answers:
a)1, 2, 3
b) 2, 3, 4
c) 3, 4, 5
d) -2, 3, 5
e) There are no correct answers

UNIT 4. COMPLICATIONS AFTER EXTERNAL ABDOMINAL HERNIAS. POSTOPERATIONAL VENTRAL HERNIAS

1. What is Richter`s incarceration?
1. Intestinal strangulation in the area of duodenum-jejunal crossing
2. Strangulation of twisted sigmoid colon
3. Strangulation of stomach in diaphragmatic hernia
4. -Parietal intestinal strangulation
5. Strangulation of Meckel`s diverticulum

2. The patient with myocardial infarction 12 hours ago had strangulation of inguinal hernia. The hernia

emerged 3 months ago. What would be your approach?
1. Reduction of hernia after administration of spasmolytics and narcotic analgesics
2. Tactics depend on the localization of the infraction
3. -Emergency surgery
4. Operation in case of peritonitis development
5. Operation in case of hernial sac phlegmon development

3. What are the symptoms of strangulated hernia?
1. Sizes of hernial orifice can be defined
2. Sharp pains in the area of hernia protrusion
3. Incarceration of hernia
4. Consistent hernial protrusion
5. Positive cough impulse
Choose the correct combination of answers:
a) 1, 2, 3
b) 2, 3, 5
c) -2, 3, 4
d) 1, 4, 5
e) 1, 3

4. The patient with strangulated inguinal hernia during the transportation to the surgical department had spontaneous reduction of hernia contents. What would be your following steps?
1. Emergency surgery
2. Do not hospitalize, perform elective surgery
3. Emergency laparoscopy
4. -Case monitoring
5. There are no correct answers

5. What is sliding hernia?
1. When hernial sac contents goes through lacunar ligament
2. When Meckel's diverticulum comprises contents of hernia sac
3. -When the urinary bladder serves as a part of the hernia sac.
4. When appendix comprises contents of hernia sac
5. There are no correct answers

6. Inguinal hernia strangulation surgery…
1. Is held under endotracheal anesthesia
2. Skin incision is made parallel to Poupart's ligament and a little bit higher than it
3. One of the first steps f the operation is hernial sac dissection, and then hernia sac is opened
4. One of the first steps of the operation is opening of the hernia sac, and then external abdominal ring is dissected
5. First of all median laparotomy is held
Choose the correct combinations of answers:
a) 1, 3
b) 2, 3
c) 1, 4
d) -2, 4
e) There are no correct answers

7. How is called the hernia with strangulation of only a part of colon wall?
1. Cloquet`s hernia
2. –Richter`s hernia
3. Littre`s hernia
4. Hesselbach`s hernia

5. Laugier`s hernia

8. What is the main sign of sliding hernia?
1. Drags in the lumbar region
2. Drags between muscles
3. -Retroperitoneal organ is wall of the hernia sac
4. Comes out from the lacunar ligament
5. Parietal peritoneum is a wall of hernia sac

9. Strangulated femoral hernia should be differentiated from:
1. Inguinal lymphadenitis
2. Femoral lymphadenitis
3. Tuberculous abscess cold sinter
4. Strangulated inguinal hernia
5. Thrombophlebitis of varicose node in the orifice of the great saphenous vein
Choose the correct combinations of answers:
a) 1, 2, 3
b) 2, 3, 4
c) 2, 4, 5
d) 1 2, 5
e) -All answers are correct

10. During the strangulated hernia surgery after the opening of the hernail sac there were no contents in it. The wall of the sac is edematous, hyperemic. It has 40 ml of inflammatory exudate. What type of strangulation is it?
1. Parietal
2. Littré`s hernia
3. -False incarceration
4. Retrograde strangulation
5. Richter`s hernia

11. What should be taken into consideration determining the viability of the strangulated intestinal loop?
1. Colour of the bowel
2. Presence of peristalsis
3. Pulsation of the mesentery vessels
4. Effusion in the abdominal cavity
5. Presence of constriction marks
Choose the correct combination of answers:
a) 2, 3
b) 2
c) 2, 4, 5
d) 1, 3, 5
e) -1, 2, 3

12. During the examination of a patient with a strangulated inguinal hernia (prescription of strangulation - 2 hours) spontaneous reduction of hernial contents occured. Your actions?
1. -Supervision of a patient in hospital
2. Emergency herniotomy
3. The patient may be let go home
4. Laparotomy with revision of the intestine and herniotomy
5. Emergency laparoscopy

13. What operation should be performed for the patient with phlegmon of the hernial sac in strangulated umbilical hernia?

1. Lexer`s operation
2. Mayo operation
3. Opening and drainage of phlegmon
4. –Grekov`s operation
5. Sapezhko`s operation

14. The investigation of the intestinal loop after removal of strangulation and its resuscitation showed that the gut was pink. Select two more intestinal viability signs:
1. The absence of constriction mark
2. Arterial pulsation in the mesentric intestinal region
3. The absence of gas in the intestinal lumen
4. Intestinal peristalsis
5. The absence of fibrin on the intestine serous covering
Choose the correct combination of answers:
a) 1, 2
b) 2, 3
c) -2, 4
d) 4, 5
e) 1, 5

15. The patient, 26 y.o.; the surgery for inguinal hernia detected the following: the size of the hernial sac is 6x8 cm, its opening revealed a strand of omentum and testis as its content. What type of hernia did the surgeon encounter?
1. -Congenital inguinal hernia
2. Direct inguinal hernia
3. Indirect inguinal hernia
4. Appendicocele
5. Indirect inguinal hernia with funiculocele

16. The hernia of the anterior abdominal wall differs from eventration in the following:
1. The presence of congenital or acquired defect in the muscular-aponeurotic structure of the abdominal wall
2. Only hernial sac goes out from hernial orifice
3. -The presence of hernial orifice, hernial sac and hernial contents
4. Eventration occurs only in elderly people
5. Hernial contents are comprised only by intestinal loops

17. What are the symptoms of external abdominal hernia strangulation?
1. Sharp pains in the area of protrusion
2. The protrusion is irreducible
3. The protrusion is painful and tensed
4. High tympanitis above the hernial protrusion
5. Positive cough impulse
Choose the correct combination of answers:
a) -1, 2, 3
b) 2, 3, 4
c) 1, 2, 5
d) 3, 4, 5
e) 1, 4, 5

18. Irreducibility of hernia depends on:
1. Commissures between organs protruding into hernial sac and the wall of the sac
2. Commissures between loops of intestine protruding into hernial sac
3. Commissures between hernial sac and surrounding tissues
4. Inequality of organs protruded into the hernial sac and sizes of hernial orifices

Choose the correct combination of answers:
a) 2, 3
b) -1
c) 1, 2
d) 3, 4
e) All answers are correct

19. What factors promote the development of postoperative hernia?
1. Wound abscess
2. Post-operative intestinal paralysis
3. Wound tamponade
4. Disorders of abdominal muscles innervation
5. Early ambulation after surgery
Choose the correct combination of answers:
a) 1, 2
b) 1, 3, 4
c) 3, 5
d) 1, 2, 3
e) -All answers are correct

20. What is indicated at the phlegmona of hernial sac?
1. Conservative treatment: hunger, antibacterial therapy
2. Phlegmon rupture
3. Phlegmon double lumen drainage with active aspiration
4. Intestinal intubation with Miller-Abbott tube
5. -Surgery: laparotomy, liquidation of intestinal obstruction, excision of hernial sac with necrotizing intestinal loops

21. What is typical for post-operational ventral hernia?
1. It is irreducible
2. Wide hernia sac
3. Dense borders of hernial orifice
4. Pains in the area of protrusion
5. The hernial sac is multi-cameral
Choose the correct combination of answers:
a)1, 2, 3
b) 2, 3, 4
c) 3, 4, 5
d) -2, 3, 5
e) There are no correct answers

22. During the operation on strangulated hernia two loops of small intestine were found after opening of hernial sac. What type of strangulation is it?
1. -Retrograde
2. Parietal
3. Formation of knots in the hernial sac
4. Strangulation of two intestinal loops
5. There are no correct answers

23. What incarceration is called Richter`s?
1. -Parietal
2. Of sigmoid colon in the sliding hernia
3. Abdominal in diaphragmatic hernia
4. Meckel`s diverticulum

5. Appendix

24. What is indicated for strangulated abdominal hernia regardless od patient`s condition?
1. Spasmolytics and warm bath
2. Supervision
3. Antibiotics and strict bed rest
4. Survey roentgenography of the abdominal cavity
5. -Emergency surgery

25. What is indicated for a patient with hernia strangulation and infraction?
1. Supervision, appliation of cold things on the abdomen
2. Reduction of hernia
3. Administration of spasmolytics
4. Tredelenburg position
5. -Emergency surgery

26. Strangulated femoral hernia should be differentiated from:
1. Strangulated inguinal hernia
2. Acute thrombophlebities of varicose node in the area of saphenous opening
3. Acute lymphadenitis
4. -All mentioned above
5. 2 and 3

27. Irreducibility of the hernia is the consequence of
1. -Commissures between organs protruding into hernial sac and the wall of the sac
2. Commissures between intestinal loops protruding into hernial sac
3. Cicatrization between hernial sac and surrounding tissues
4. Inequality of organs protruded into the hernial sac and sizes of hernial orifices
5. All mentioned above

28. What is the top-priority step at strangulated inguinal hernia?
1. Warm bath
2. Reduction of hernia
3. -Emergency surgery
4. Spasmolytics to relief the hernia reduction
5. Analgesics before reduction of hernia

29. What is not typical for strangulated hernia?
1. Sharp pains in the area of hernia
2. Sudden onset of the disease
3. -Positive cough impulse
4. Quickly developed diffuse peritonitis
5. Incarcerated hernia

30. What is an indication for emergancy surgery at spontaneous reduction of strangulated hernia?
1. Hernial protrusion
2. -Occurence of peritoneal signs
3. Temperature rise
4. Dysuric phenomena
5. Spontaneous reduction itself is an indication

31. What is the patient with incarcerated hernia indicated before the surgery?
1. Paranephric block
2. Cleansing enema

3. Spermatic cord block
4. -Shaving in the area of operation
5. Gastric lavage

32. Tympanic sound over the hernial protrusion can enable to suspect infringement of:
1. Greater omentum
2. Urinary bladder
3. Spermatic cord
4. -Intestinal loops
5. Vermiform appendix

33. What does the hernial sac phlegmon surgery begins from?
1. Phlegmon opening
2. -Median laparotomy
3. Extraction of hernial sac from surrounding tissues
4. Hernial sac puncture
5. Simultaneous operation from two approaches

34. How many cm shoul be left at the resection of adducting part of incarcerated hernia?
1. -30-40 cm
2. 20-25 cm
3. 10-20 cm
4. 5-10 cm
5. 2-3 cm

35. What is the sign of the strangulated intestine viability?
1. Absence of effusion in the abdominal cavity
2. Fluid in the intestinal lumen
3. The condition of efferent intestinal loop
4. The sizes of adductor intestinal loop
5. -Presence of intestinal peristalsis

36. What mostly is incarcerated at the incarcerated hernia?
1. Greater omentum
2. -Small intestine
3. Large intestine
4. Urinary bladder
5. Perivesical fat

37. Which of the following organs can serve as a hernial sac wall at sliding inguinal hernia at the right?
1. Small intestine
2. Right kidney
3. Urinary bladder
4. Blind gut
5. Left-ovary and uterine tube
Choose the correct combinations of answers:
a) 1, 2
b) 2, 5
c) -3, 4
d) 5, 4
e) All answers are correct

38. The patient, 60 y.o., had pains in the upper third of the right crus, temperature up to 38°C and tumor mass that can be palpated. She was admitted to hospital 24 hours after the onset of the disease.

Hypothetical diagnosis is strangulated femoral hernia. What diseases should be femoral hernia differentiated from?
1. Right ovarian cyst
2. Femoral lymphadenitis
3. Femoral artery aneurysm
4. Metastases from gastric carcinoma
5. Thrombophlebitis in the orifice of great saphenous vein
Choose the correct combination of answers:
a) 1, 2, 3
b) 2, 3, 4
c) 3, 4, 5
d) -2, 3, 5
e) 3, 4, 5

39. What type of acute intestinal obstruction causes retrograde strangulation of small intestine?
1. Commissural
2. Functional
3. Obstructive
4. Strangulated
5. -Complex (obstruction + strangulation)

40. Which of the following symptoms are typical for strangulated inguinal hernia?
1. Free gas in the abdominal cavity
2. Sudden pains in the area of protrusion
3. Incarcerated hernia
4. Phlegmon of hernial sac
5. Positive cough impulse
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 4, 5
c) 2, 4, 5
d) -2, 3, 4
e) 3, 4, 5

41. The patient, 70 y.o., has the strangulated inguinal hernia. The prescription of the strangulation is 10 hours. There are symptoms of intestinal obstruction, skin hyperemia above the hernial protrusion. What would be your approach?
1. Reduction of hernia
2. Reduction of hernia after medicines injection
3. Application of cold things on the hernial area, analgesics, antibiotics
4. -Emergency hospitalization
5. Referral for the consultation of the surgeon

42. The patient with strangulated inguinal-scrotal hernia was admitted to hospital in 3 days after the onset of the disease. Temperature is 39°C, hyperemia and edema of hernial sac. What complication is it?
1. Acute intestinal obstruction
2. Funiculitis
3. -Phlegmon of hernial sac
4. Acute orchitis
5. Hydrocele

43. What are typical symptoms of strangulation in the urinary bladder hernia?
1. Pains in the area of protrusion
2. Tenesmus

3. Retention of stool and gas
4. -Dysuria, hematuria
5. Dyspepsia

44. What complications after the hernia can be in a patient of 80 y.o. with left inguinal-scrotal hernia who is constantly wearing bandage?
1. Conversion of reducible hernia into an irreducible one
2. Hernia strangulation
3. Trophic ulcers on the skin
4. Trauma and atrophy of tissues of the anterior abdominal wall
5. Lymphostasis of the lower extremities

Choose the correct combination of answers:
a) 1, 3, 4, 5
b) -1, 2, 3, 4
c) 2, 3, 4, 5
d) 1, 4, 5
e) 1, 2, 3, 5

45. What is Richter`s incarceration of hernia?
1. Intestinal strangulation in the area of duodenum-jejunal sac
2. Strangulation of twisted sigmoid colon
3. Strangulation of stomach in diaphragmatic hernia
4. **-Any parietal intestinal strangulation**
5. Strangulation of Meckel`s diverticulum in inguinal hernia

46. Which of the following factors is a direct indication for the surgery at spontaneously reduced strangulated hernia
1. -Peritonitis symptoms
2. Period from the strangulation onset
3. Concomitant diseases
4. Gender and age of the patient
5. Incomplete examination of the patient

47. What is the primary step at strangulated inguinal hernia?
1. Spasmolytics before reduction of hernia
2. Analgesics before reduction of hernia
3. -Emergency surgery
4. Warm bath
5. Attempting the reduction of hernia under general anesthesia

48. What symptoms are the most common for strangulated hernia?
1. Pains in the area of protrusion
2. Incarcerated hernia
3. Constipation, gas retention
4. Tension of hernial sac
5. -All answers are correct

49. Why cannot strangulating ring be dissected before opening of the hernial sac?
1. Because there can be pus
2. **-Because viability of strangulated organs should be assessed**
3. Because hernia plasty is not convenient
4. Because the hernial sac contents can be affected iatrogenically

50. What characteristics of sliding hernia is the most important?
1. It is congenital anatomical anomaly
2. The hernia is disposed to strangulation
3. **-An organ can be a wall of hernial sac**
4. Common hernia cannot be distinguished from sliding hernia before the surgery
5. Hernia appears after an injury

UNIT 5. ACUTE PANCREATITIS AND ITS COMPLICATIONS

1. Shock and collapse in acute pancreatitis is caused by:
1. Pancreatogenous pancreatitis
2. Cholemia and compression of distal choledoch
3. **-Enzymatic toxemia**
4. Biliary hypertension
5. Intestine dynamic obstruction

2. What is characteristic of hemorrhagic pancreanecrosis?
1. Collapse
2. Recurrent vomiting
3. Positive Mayo-Robson`s sign
4. Positive Murphy`s sign
5. Weak intestinal peristalsis

Right variants:
a) 1, 3, 5
b) 1, 2, 3
c) 1, 2, 3, 4
d) 1, 2, 3, 5
e) -All variants are correct

3. Following medical measures are taken to overcome enzymatic toxemia, appearing in pancreanecrosis:
1. Intravenous injection of antienzymatic cyclophosphan and futraful.
2. Intraaortal injection of cyclophosphan and futraful
3. Artificial diuresis
4. External drainage of thoracic lymph duct
5. Procaine block of the round ligament of liver

Choose the best answer combination:
a) 1, 3, 4
b) 2, 4, 5
c) 1, 2, 3, 4
d) 1, 3, 4, 5
e) -All variants are correct

4. In diagnosing of pancreanecrosis the most informative examination is:
1. -Laparoscopy
2. Ultrasonography
3. Esophagogastroscopy
4. Urine investigation for amylase
5. Blood investigation for pancreatic enzymes

5. A 26-year-old patient became ill 12 hours ago. Hemorrhagic pancreanecrosis is diagnosed. What is indicated?

1. Emergency laparotomy
2. Laparascopic drain to the abdominal cavity
3. Medical catheterization of coeliac artery
4. Laparoscopic cholecystectomy in presence of bile hypertension
5. Intensive infusion therapy

Choose the best answer combination:

a) 1, 3, 5
b) 2, 3, 5
c) 1, 3, 4
d) 2, 3, 4
e) -2, 3, 4, 5

6. What concerns to postnecrotic complications of acute pancreatitis?

1. Chronic pancreatitis
2. Lithogenesis of major pancreatic duct
3. Omental bursa abscess
4. Pancreas cyst
5. Chronic cholecystitis

Right variants:

a) 1, 2, 5
b) 2, 4, 5
c) 1, 2, 3, 5
d) -1, 2, 3, 4
e) All variants are correct

7. A patient with indeterminate diagnosis of acute abdomen is subjected to emergency laparoscopy, which detected serous exudates in the abdominal cavity and multiple spots of pancreatonecrosis. Your diagnosis is:

1. Tuberculous peritonitis
2. -Fatty pancreatonecrosis
3. Crohn`s disease
4. Non-occlusive small bowel infarction
5. All variants are wrong

8. Diagnostic laparoscopy detected fatty pancreatonecrosis. What therapeutic approach will you choose?

1. Laparotomy, abdominal cavity sanitization and drainage
2. Laparotomy, abdominal cavity sanitization, procaine block of mesentery, injection of microirrigators
3. Laparotomy, cholecystostomy and subhepatic area drainage
4. -Abdominal cavity drainage with laparoscope, intensive infusion-medicamental therapy
5. All variants are wrong

9. Classification of acute pancreatitis includes following forms:

1. Pseudotumorous pancreatitis
2. Edematous pancreatitis
3. Fatty pancreatonecrosis

4. Infiltrative pancreatitis
5. Haemorrhagic pancreatonecrosis

Right variants:

a) All variants are correct

b) -2, 3, 4, 5

c) 1, 2, 3, 5

d) 3, 4, 5;

e) 2, 4, 5

10. Toxemia in pancreanecrosis is conditioned by effect of:

1. Kallidin
2. Histamine
3. Bradykinin
4. Kallekrein
5. Products of tissue distruction

Choose the right combination of answers:

a) 1 and 3

b) 2 and 3

c) 1, 4, 5

d) 1, 3, 4, 5

e) -All variants are correct

11. Main trends of pathogenetic therapy of acute pancreatitis are:

1. Suppression of pancreas excretory function
2. Elimination of hypovolemia
3. Inactivation of pancreatic enzymes
4. Nazogastral decompression of gastrointestinal tract
5. Injection of cytostatics

Right variants:

a) 1, 2, 3, 4

b) 1, 2, 3, 5

c) 1, 3, 4

d) -All variants are correct

e) All variants are incorrect

12. Symptoms of edematous form of acute pancreatitis are:

1. Repeated vomiting
2. Tension of abdominal muscles
3. Dullness in sloping areas of the abdomen
4. Collapse
5. Hectic temperature

Right variants:

a) All variants are correct

b) -1, 2, 3, 4

c) 1, 3, 5

d) 1, 5

e) All variants are incorrect

13. What are the most informative methods of acute pancreatitis diagnosing?
1. Plan radioscopy of the abdominal cavity
2. Celiacography
3. MRI
4. Laparoscopy
5. Ultrasonography

Right variants:
a) All variants are correct
b) 2, 3, 4
c) 2, 4, 5
d) -3, 4, 5
e) 1, 3, 5

14. A patient had pancreonecrosis a month ago, space-occupying moderately painful lesion with fluctuation in center is detected in upper parts of the abdomen. Abdomen is soft without peritoneal phenomena. Temperature and hemogram are normal. Diagnosis is:
1. Pancreas tumor
2. Omental bursa abscess
3. -Pancreatic pseudocyst
4. True cyst of the pancreas
5. Pseudotumorous pancreatitis

15. Characteristic complications of haemorrhagic pancreonecrosis are:
1. Suppuration of the pancreas
2. Transition to chronic pancreatitis
3. Supraperitoneal phlegmon
4. External and internal pancreatic fistula
5. Anterior left-sided paranephritis

Right variants:
a) -All variants are correct
b) 1, 3, 4
c) 1, 2, 3
d) 2, 3, 4
e) 2, 3, 5

16. Fatty pancreatonecrosis is detected in a patient. What is your medical approach?
1. Laparotomy with omental bursa drainage
2. Laparotomy with retroperitoneal fat and omental bursa drainage
3. -Intensive infusion therapy, including antienzymatic and cytostatic drugs
4. Corporocaudal pancreatectomy and drainage of omental bursa
5. All variants are incorrect

17. Clinical picture of pancreatonecrosis is characterized by everything mentionrd below, except:
1. Girdle pain in the abdomen
2. Rcurrent vomiting
3. -Arterial hypertension in the first hours of disease
4. Collapse
5. Tachycardia

18. Everything mentioned below can be complications of acute pancreatitis, except:
1. Omental bursa abscess
2. Hepatorenal insufficiency
3. Pancreas cyst
4. Peritonitis
5. -Compression of small bowel in the area of Tretiz's ligament with obstruction signs

19. What drugs are used in acute pancreatitis?
1. Gordox
2. Contrykal
3. 5-fluorouracil
4. Atropin
5. Morphine
Right variants:
a) All variants are correct
b) 1, 2, 3, 5
c) 1, 2, 4, 5
d) -1, 2, 3, 4
e) 1, 3, 4, 5

20. A patient had fatty pancreatonecrosis half a year ago. 15x20 tumor-like, dense, not painful neoplasm appeared in epigastrium and left hypochondrium. Body temperature didn't rise. Stomach roentgenoscopy showed that the stomach was shifted anteriad, duodenum C-loop is unfolded. What is the diagnosis?
1. Tumor of the transverse colon
2. Pancreas tumor
3. -Pancreatic pseudocyst
4. Left kidney cyst
5. Omentum bursa cyst

21. After alcohol intake a 35-year-old patient felt girdle pain in the upper part of the abdomen and recurrent vomiting. The examination detected severe condition. Pulse rate is 120 per minute. Arterial blood pressure is 90/90 mm Hg. Abdomen is sharply painful in upper part, dullness of percussion sound is observed in sloping areas. Intestine peristalsis is not heard. What is the supposed diagnosis?
1. Perforated stomach ulcer, peritonitis
2. Acute obstruction of small bowel
3. Intestine infarction
4. -Hemorrhagic pancreatonecrosis
5. Paralytic bowel obstruction

22. What supplementary investigations would you carry out in a patient with hemorrhagic pancreatonecrosis for the diagnosis specifying?
1. Plan roentgenoscopy of the abdominal cavity
2. Laparoscopy
3. Ultrasonic scanning of the abdominal cavity
4. Stomach roentgenoscopy
5. Urine investigation for diastasis
Choose the correct answer:

a) 1, 2, 5
b) 1, 3, 4, 5
c) -2, 3, 5
d) 2, 3, 4, 5
e) All variants are correct

23. What medical measures are used to treat enzymatic toxemia and endotoxemia developing in hemorrhagic pancreatonecrosis?
1. Intravenous injection of antienzymatic drugs.
2. Injection of cyclophosphan or phthoraturum
3. Artificial diuresis
4. Sessions of hemosorption or external drainage of the thoracic lymph duct drainage with following lymphsorption and lymph reinfusion
5. Procaine block of round ligament of liver

Choose the best combination of answers:
a) 1, 3, 5
b) 3, 4, 5
c) 1, 4, 5
d) -1, 2, 3, 4
e) All variants are correct

24. All the variants mentioned below can be complications of hemorrhagic pancreatonecrosis, except:
1. Omentum bursa abscess
2. Hepatorenal insufficiency
3. -Portal hypertension
4. Pancreas cyst
5. Retroperitoneal space phlegmon

25. Following clinical signs are characteristic of fatty pancreatonecrosis:
1. Recurrent vomiting with gastric material
2. Palpable infiltrate in the epigastrium area
3. Steatonecrosis plaques, detected with laparoscopy
4. Bartomier-Michelson`s sign
5. Mayo-Robson`s sign

Right variants:
a) 1, 2, 3, 4
b) -1, 2, 3, 5
c) 2, 3, 5
d) 1, 3, 4
e) All variants are correct

26. All forms concern to acute pancreatitis except:
1. Edematous pancreatitis
2. -Pseudotumorous pancreatitis
3. Fatty pancreatonecrosis
4. Hemorrhagic pancreatonecrosis
5. All variants are correct

27. In development of acute pancreatitis the main role belongs to:
1. Microflora
2. Plasmocytic infiltration
3. Microcirculatory disorders
4. -Autoenzymatic aggression
5. Venous stasis

28. Fatty pancreatonecrosis develops as a result of:
1. Proteolytic necrobiosis under influence of tripsin and other proteolytic enzymes.
2. Elastase influence on walls of venules and interlobular connective intersection
3. -Damaging effect on acinar cells and interstitial fatty tissue of lipolytic enzymes
4. Spontaneous reduction of autolytic processes and involution of small-focal pancreatonecrosis
5. Infection accompanying edematous pancreatitis

29. Haemorrhagic pancreatonecrosis depelopes as a result of:
1. Infection accompanying fatty pancreatonecrosis
2. Demarcation inflammatory bank around the foci of fatty necrosis
3. Spontaneous reduction of autolytic processes and involution of small-focal pancreatonecrosis
4. -Proteolytic necrosis of acinar cells and damage of vessel wall under the influence of proteolytic enzymes
5. Damaging effect on acinar cells and interstitial fatty tissue of lipolytic enzymes

30. Transversal pain resistance of the anterior abdominal wall in projection to the pancreas in acute pancreatitis is:
1. Mayo-Robson`s sign
2. –Körte`s symptom
3. Grey-Turner`s sign
4. Mondor`s syndrome
5. Voskresensky`s sign

31. Esophagogastroduodenoscopy in patients with acute pancreatitis can:
1. -Evaluate the state of major duodenal papilla
2. Approve the presence of acute pancreatitis
3. Specify localization of the process in the pancreas
4. Determine area of pancreas lesion
5. Detect a form of acute pancreatitis

32. Painfulness in the left costovertebral angle while palpation is characteristic of:
1. Voskresensky`s sign
2. -Mayo-Robson`s sign
3. Gr-nwald`s symptom
4. Mondor`s syndrome
5. Grey-Turner`s sign

33. Spots of cyanosis on the lateral sides of the stomach in acute pancreatitis are characteristic of:
1. Gr-nwald`s symptom
2. Mondor`s syndrome
3. -Grey-Turner`s sign

4. Kehr`s symptom
5. Voskresensky`s sign

34. Development of meteorism in patients with acute pancreatitis is conditioned by:
1. Compression of duodenum by the edematous head of pancreas
2. Recurrent intractable vomiting
3. -Enteroparesis
4. Deficiency of pancreatic hormones
5. Enzymatic insufficiency of the pancreas

35. Impossibility to detect pulsation of abdominal aorta in the epigastrium in acute pancreatitis is:
1. Mayo-Robson`s sign
2. Mondor`s syndrome
3. Kehr`s symptom
4. Cullen`s sign
5. –Voskresensky`s sign

36. Detection of serous exudates and steatonecrosis plaques while laparoscopy corresponds to:
1. Edematous pancreatitis
2. -Fatty pancreatonecrosis
3. Haemorrhagic pancreatonecrosis
4. Purulent pancreatitis
5. Such changes are not characteristic of acute pancreatitis

37. The principle measure in pathogenetic treatment of acute pancreatitis is:
1. -Suppression of secretory function of the pancreas
2. Hypovolemia liquidation
3. Inactivation of pancreatic enzymes
4. Nasogastric decompression of gastrointestinal tract
5. Injection of cytostatics

38. The most informative examination method in acute pancreatitis is:
1. Diagnostic pneumoperitoneum
2. Abdominal cavity plan roentgenoscopy
3. -Laparoscopy
4. Gastroduodenoscopy
5. Estimation of blood and urine amylase, ultrasonic scanning

39. What is indicated in combination of acute phlegmonous cholecystitis and fatty pancreatonecrosis?
1. Active conservative therapy
2. Laporascopic drainage of the abdominal cavity for peritoneal dialysis
3. Conservative therapy and following surgery after acute symptoms elimination
4. Dynamic observation accompanied by conservative therapy and surgery in case of general peritonitis
5. -Emergency surgery

40. What is not used to reduce throes in acute pancreatitis?
1. Vagosympathetic block

2. Peridural anesthesia
3. Paranephric block
4. Block of round ligament of liver
5. -Morphine

41. Exposure of haemmorhagic exudates into the abdominal cavity and foci of fat necrosis on the peritoneum points to:
1. Damage of the hollow organ
2. Liver rupture
3. -Acute pancreatitis
4. Perforated stomach ulcer
5. Mesenteric trombosis

42. The most common symptom of acute pancreatitis is:
1. Nausea and vomiting
2. Hyperthermia
3. Jaundice
4. Bloating
5. -Pains in the upper part of the abdomen

43. Postnecrotic complications of acute pancreatitis are:
1. Pancreatic shock
2. Acute hepatic insufficiency
3. -Omentum bursa abscess
4. Pancreatogenous pancreatitis
5. Haemmorhagic pancreatitis

44. What does not take part in pathogenesis of acute pancreatitis?
1. Enterokinase
2. Elastase
3. Phospholipase
4. Tripsin
5. -Streptokinase

45. The most informative method of pancreas cyst diagnosing is:
1. ERCP
2. Investigation of barium passage along the intestine
3. Biochemical investigation
4. -Ultrasonic scanning
5. Nothing of the mentioned above

46. The most common clinical-morphological form of acute pancreatitis is:
1. -Edematous pancreatitis
2. Fatty pancreatonecrosis
3. Haemorrhagic pancreatonecrosis
4. Purulent pancreatitis
5. Fatty pancreatonecrosis with enzymatic peritonitis

47. What kind of pains is characteristic of acute pancreatitis?
1. Dull
2. -Girdle
3. Cramping
4. knife-like
5. Aching

48. In a 30-year-old patient with destructive pancreatitis appeared hectic temperature, fever, tachycardia, shift of the leukogram to the left, infiltrate in the epigastrium on the 14th day of the disease. It can be conditioned by:
1. Cholangitis
2. Pneumonia
3. Pancreas cyst
4. Supraperetoneal phlegmon
5. -Suppurated pancreatic pseudocyst

49. What is indicated in suppurated pseudocyst of the pancreas?
1. Conservative antibioticotherapy
2. Conservative desintoxicating therapy
3. -Surgery
4. Observation
5. Continuation of earlier indicated therapy

50. Clinical picture of pancreatonecrosis is not characterized by:
1. Gridle pains in the stomach
2. Recurrent vomiting
3. -Pneumoperitoneum
4. Collapse
5. Tachycardia

51. What is indicated in fatty pancreatonecrosis:
1. Laparotomy, abdominal cavity drainage
2. Laparotomy with capsula glandularis excision
3. -Infusion therapy, antienzymatic and cytostatic drugs
4. Distal resection of the pancreas
5. All variants are correct

52. The main starting point for the development of acute pancreatitis is:
1. Infection
2. Spasm of the duodenum
3. Inflammation of the pancreas and biliary tracts
4. -Reflux of bile and duodenal contents into Wirsung's duct

53. The main, the least dangerous and accessible method of pancreas examination is:
1. Radiography of abdominal cavity organs
2. -Ultrasonic scanning of the pancreas

3. General blood test
4. Laparoscopy
5. Computer tomography

54. In acute pancreatitis laparoscopy allows to do everything mentioned below, except:
1. Approve diagnosis of acute pancreatitis; determine the character of pathologic process.
2. Aspirate the exudates from the abdominal cavity, drain abdominal cavity and minor omentum bursta, fulfill catheterization of round ligament of liver for drugs injection
3. Carry out cholecystectomy for bile ducts decompression
4. Avoid ungrounded laparotomy
5. -Carry out papillotomy

55. Fatty pancreatonecrosis developes as a result of:
1. Protheolytic necrobiosis of albuminous cells under the influence of proteolytic enzymes.
2. Action of elastase on the venule walls and interlobular connective tissue
3. Infections accompanying interstitial pancreatitis (edematous)
4. -Destructive effect on albuminous cells and interstitial fatty tissue of lipolytic enzymes
5. Spontanous reduction of auolytic processes

56. Haemorrhagic pancreatonecrosis developes as a result of:
1. Infection accompanying pancreas edema
2. Destructive effect of lipolytic enzymes on albuminous cells and interstitial tissue
3. -Protheolytic necrobiosis of albuminous cells and damage of the vessel wall by protheolytic enzymes.
4. Reverse development of autolytic processes
5. Forming of demarcation inflammatory process around the foci of fat necrosis

57. What is not characteristic of pain syndrome in acute pancreatitis?
1. Constant severe girdle pains, accompanying by vomiting
2. Palpation detects transversal painfulness, moderate tense in projection to the pancreas (Körte's symptom)
3. Pain appears after fatty, spicy, fried food and alcohol; long interval in taking meals.
4. Positive Mayo-Robson's symptom
5. -Pains increase at the hight of peristalsis

58. The most characteristic vomiting in acute pancreatitis is:
1. One-time
2. -Recurrent, not giving relief
3. One-time, giving relief
4. Vomiting, that reduces and passes after fluid intake
5. Coffee-grounds vomiting

59. Edema of the pancreas was detected in a patient during a surgery. The gallbladder is not intense, stones are absent. What are the ways to finish the surgery?
1. Suture the wound without other surgical interventions.
2. Cholecystostomy
3. -Drain the omentum bursa, inject antibiotics, actienzyme on procaine in the tissue, surrounding the pancreas, catheterize round ligament of the liver for injection of drugs after the surgery.
4. Cholecystectomy
5. Abdominization of the pancreas

60. Reasons of tail of pancreas necrosis after spleen removal are:
1. Anatomical organization
2. Trauma of the pancreas
3. -Ligation of caudal artery
4. Ligation of great pancreatic artery
5. Arterial thombosis

UNIT 6. CHOLELITHIASIS AND ITS COMPLICATIONS

1. Acute cholecystitis can develop due to:
1. Infected bile in the gallbladder
2. Stagnation of bile in the gall bladder
3. Gallstones
4. Cystic artery trombosis
5. Duodenogastric reflux
Right variants:
a) 1 and 3
b) -1, 2, 3, 4
c) 2, 4, 5
d) 3, 4, 5
e) 4 and 5

2. Everything mentioned below is characteristic of catarrhal cholecystitis, except:
1. Sickness and vomiting
2. Kehr's sign
3. Murphy's sign
4. -Right hypochondrium abdominal wall muscle tension and Shchiotkin-Blumberg sign.
5. Myussi–Georgievsky symptom

3. In acute destructive cholecystitis cholecystostomyis indicated in:
1. Concomitant acute edematous pancreatitis
2. Concomitant obstructive jaundice
3. Grave general condition of a patient
4. Concomitant cholangitis
5. -All variants are correct

4. A patient presented in clinic with phlegmonous cholecystitis. In following three days he had shivering, jaundice, temperature of 38^0C; symptoms of peritonitis are absent. What complication of fundamental illness has developed in a patient?
1. Large duodenal papilla stenosis
2. Gallbladder empyema
3. Pylephlebitis
4. Subhepatic abscess
5. -Purulent cholangitis

5. To solve the problem of urgent surgery in acute cholecystitis most important is:
1. Intensity of pains

2. Disease duration
3. Number of attacks in anamnesis
4. -Peritonitis
5. Gallstones

6. Cholecystectomy from the bottom is performed in one of the following cases:
1. In elderly patients
2. In symptoms of cholangitis
3. In contracted gallbladder
4. Impacted stone in the gallbladder neck
5. -Inflammatory infiltration in the area of gallbladder neck

7. An 81-year-old patient presented in surgery department. Acute phlegmonous cholecystitis was suspected during medical examination. What examination technique should be first used for the diagnosis specifying?
1. -Ultrasonic scanning of abdominal cavity
2. Infusion cholecyst-cholangiography
3. Laparoscopy
4. Retrograde pancreatocholangiography
5. Percutaneous transhepatic cholecystcholangiography

8. What surgery should be performed in an 81-year-old patient with acute phlegmonous cholecystitis and poor general condition?
1. Cholecystectomy
2. -Laparoscopic cholecystectomy under local anesthesia
3. Cholecystotomy
4. Laparoscopic drainage of subhepatic area
5. Cholecystolithomy

9. What procedure should be performed for noncomplicated cholelithiasis diagnosing?
1. Endoscopic retrograde cholangiopancreatography
2. Laparoscopy
3. -Ultrasonography
4. Percutaneous transhepatic cholangiography
5. Fractional duodenal probing

10. The main methods of obstructive jaundice diagnosing character and reasons are:
1. Plan radiography of the liver and subhepatic area
2. Infusion cholecystcholangiography
3. Percutaneous transhepatic cholecystcholangiography
4. Endoscopic retrograde pancreatocholangiography
5. Ultrasonography
Choose the correct combination of answers:
a) 1 and 5
b) 2 and 4
c) 1, 2, 4
d) 2, 3, 5
e) -3, 4, 5

11. What signs are characteristic of obturative purulent cholangitis?
1. Jaundice
2. Shivering
3. High level of alkaline phosphatase activity
4. High leukocytosis in blood analysis with shift to
5. Possible enlargement of liver size.

Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 2, 4, 5
c) 2, 3, 5
d) -All variants are correct
e) All variants are incorrect

12. Revision of extrahepatic bile ducts during the surgery should be performed in:
1. Palpable stone in common bile duct
2. Suspected duodenal papilla stenosis
3. Jaundice at the moment of surgery
4. Chronic pancreatitis
5. Jaundice in anamnesis

Choose the correct combination of answers:
a) 1, 2, 4
b) 1, 3, 4
c) 2, 3, 5
d) 3, 4, 5
e) -1, 2, 3, 5

13. Acute cholecystitis can be complicated by everything mentioned below except:
1. Obstructive jaundice
2. -Portal hypertension
3. Purulent cholangitis
4. Subhepatic abscess
5. Stone impaction in the large duodenal papilla

14. The examination of 67-year-old patient acute gangrenous cholecystitis and local peritonitis were detected. What is you medical approach?
1. Conservative therapy due to elderly age of a patient
2. Surgery in case of absence of conservative therapy effect
3. Tactical decision depends on term of disease
4. Delayed operation
5. -Emergency operative treatment

15. Destructive cholecystitis with peritonitis signs in right hypochondrium were detected in a 77-year-old patient with evident cardiac insufficiency. What treatment mode should be preferred?
1. Laparoscopic cholecystectomy
2. -Cholecystectomy surgery
3. Cholecystostomy surgery
4. Percutaneous transhepatic cholangiostomy

5. Only conservative therapy

16. Advantages of cholecystectomy surgey from the neck are:
1. Special conditions for bloodless gallbladder removal
2. Interrupted root of purulent bile in choledoch
3. Avoidance of stone migration from the gallbladder in choledoch
4. Avoidance of choledochotomy
5. Avoidance of intraoperational cholangiography

Give the correct answer:
a) -1, 2, 3
b) 1, 2, 4
c) 1, 2, 5
d) 2, 4, 5
e) 2, 3, 4

17. All the listed symptoms are characteristic of purulent cholangitis clinical picture:
1. Fever
2. Hectic temperature
3. -Enteroparesis
4. Moderate pains in the right hypochondrium
5. Jaundice

18. Laboratory data in obstructive jaundice due to choledoch obstruction by a stone is characterized by:
1. Bilirubinemia
2. Bilirubinuria
3. Decrease of alkaline phosphatase in blood
4. Absence of stercobilin in faeces
5. Sharp increase of serum transaminase activity

Choose the correct combination of answers:
a) 1, 2, 3
b) 2, 3, 4
c) -1, 2, 4
d) 3, 4, 5
e) 2, 3, 5

19. The best and the safest diagnosing technique of asymptomatic holedoholithiasis and cicatrical stenosis of large duodenal papilla is:
1. Oral cholecystography
2. Intravenous cholecystocholangiography
3. Laparoscopic cholecystocholangiography
4. -Endoscopic retrograde pancreatocholangiography
5. Percutaneous transhepatic cholangiography

20. Intraoperational cholangiography is indicated in following cases:
1. Small stones in the gallbladder and wide cystic duct
2. Suspected cicatrical stenosis of the major duodenal papilla
3. Dilatation of hepaticocholedoch
4. Obstructive jaundice in anamnesis

5. Obstructive jaundice at the moment of operation

Right variants:

a) 2, 3, 5

b) 1, 2, 3, 5

c) 3 and 5

d) 2, 3, 4, 5

e) -All variants are correct

21. A patient is operated on for cholelithiasis, complicated with choledocholithiasis and purulent cholangitis. What surgery extent should be preferred?

1. Cholecystectomy from the neck and drainage of subhepatic area by Spasokukotsky
2. Cholecystostomy
3. Cholecystectomy, choledoch drainage through cystic duct stump

4. -Cholecystectomy, choledochotomy, hepaticocholedoch drainage by Kehr

5. All variants are incorrect

22. What is indicated for a patient with acute phlegmonous cholecystitis if during 48 hours drug-infusion therapy is inefficient?

1. Laparoscopic examination for diagnosis specifying
2. Intensifying of conservative therapy

3. -Emergency surgery

4. Inclusion of antibiotics in conservative therapy
5. Percutaneous transhepatic choledoch drainage

23. Which of the following drainage types is not choledoch drainage?

1. Kehr's drainage
2. Vishnevsky drainage

3. -Spasokukotsky drainage

4. Halstead drainage
5. All variants are incorrect

24. The reason for dilation and hypertension in extrahepatic bile ducts in patients with calculous cholecystitis can be:

1. Cicatrical stenosis of the major duodenal stenosis
2. Indurative pancreatitis, compressing distal choledoch
3. Chronic duodenitis
4. Sclerosing cholangitis
5. Lithiasis of bile ducts

Choose the correct combination of answers:

a)1, 2, 4

b) 1, 3, 5

c) -1, 2, 5

d) 2, 3, 5

e) 2, 3, 4

25. Cholelithiasis can cause all the following complications except:

1. Acute pancreatits
2. Obstructive jaundice

3. -Duodenostasis
4. Obturation small intestinal obstruction
5. Purulent cholangitis

26. Followings signs are characteristic of biliary colic.
1. Sharp pain in the right hypochondrium
2. Irradiation pain in the right scapula
3. Shchiotkin-Blumberg sign in the right hypochondrium
4. Ortner's symptom
5. Increased temperature and leukocyte level in blood

Choose the correct combination of answers:
a) -1, 2, 4
b) 1, 3, 4
c) 3, 4
d) 4, 5
e) 1, 3

27. Courvoisier symptom is characteristic of following diseases:
1. Chronic calculous cholecystitis
2. Head of pancreas cancer
3. Chronic pancreatitis
4. Major duodenal papilla cancer
5. Tail of pancreas cancer

Right variants:
a) -2, 4
b) 3, 4
c) 2, 5
d) 1, 2, 5
e) 2, 3, 5

28. In case of acute cholecystitis development gallbladder infection is spread through:
1. Hematogenous path
2. Lymphogenous path
3. Enterogenous path
4. Contact path
5. Invasive path

Right variants:
a) 1, 2, 4
b) 2, 3, 4
c) -1, 2, 3
d) 2, 3, 5
e) 3, 4

29. Therapeutic approach in acute phlegmonous cholecystitis is firstly determined by:
1. -Spread of peritonitis
2. Presence of accompanying diseases
3. Patient’s age
4. Surgeon’s qualification

5. Presence of gallstones

30. Drainage of subhepatic area by Spasokukotsky after cholecystectomy is performed for:
1. Aspiration of abdominal cavity exudates
2. Control over hemostasis in the area of surgical intervention
3. Bile ducts decompression
4. Postoperational cholangitis prophylaxis
5. Control over bile outflow from the cystic duct stump

Right variants:
a) 2, 3, 5
b) 2, 4, 5
c) 3, 4, 5
d) 1, 3, 5
e) -1, 2, 5

31. Obstructive jaundice due to acute hepatic insufficiency and choledoch obturation by stone was indicated in a 53-years-old patient. The patient needs:
1. Emergency surgery, including external drainage of bile ducts
2. Emergency surgery and hemosorption postoperative period
3. Emergency surgery and following external drainage of thoracic lymph duct
4. Emergency surgery after hemosorption procedure
5. -Emergency endoscopic papillosphyncterotomy, desintoxication therapy, including hemosorption and another surgery after jaundice disappearance.

32. Choose the signs characteristic of Courvoisier syndrome:
1. Icteric color of skin and sclera
2. Nonpalpable shrunken gallbladder
3. Palpable inflamed and painful gallbladder
4. Palpable elastic and painless gallbladder
5. Enlarged liver

Right variants:
a) -1, 4
b) 1, 5
c) 2, 5
d) 3, 5
e) 1, 2

33. A day ago phlegmonous cholecystitis developed in a 69-year-old patient. Medical examination detected satisfactory condition, puls - 90 bpm, Abdomen is soft, painful gallbladder is palpable. Shchiotkin-Blumberg sign is negative. What is your medical approach?
1. -Emergency surgery
2. Only conservative therapy including antibioticotherapy
3. Conservative therapy. If the effect is absentduring 24 hours emergency surgery is indicated.
4. Cholecystostomy after preoperative preparation
5. Medical approach is determined by stones in the gallbladder and bile ducts

34. What therapy is indicated for a patient with biliary colic attack due to gallstones?
1. Urgent cholecystectomy
2. Conservative therapy

3. Antifermental therapy
4. -Emergencyy surgery after pain attack reduction
5. Laporoscopic cholecystostomy

35. Everything mentioned below is applied for detecting the reason and diagnosing of obstructive jaundice, except:
1. Cytologic liver enzymes
2. -Infusion cholangiography
3. Laparoscopy
4. Endoscopic retrograde cholangiopancreatography
5. Percutaneous transhepatic cholangiography

36. Acute cholecystitis begins with:
1. Increase of temperature
2. Vomiting
3. -Pains in the right hypochondrium
4. Diarrhea
5. Heaviness in the epigastric area

37. Attack of biliary colic occurs:
1. -Suddenly and sharply
2. After prodromal period
3. Gradually, little by little
4. After long starving
5. After supercooling

38. Normal bilirubin index:
1. 0,10 - 0,68 mmol / l
2. -8,55 - 20,52 mmol / l
3. 2,50 - 8.33 mmol / l
4. 3,64 - 6,76 mmol / l
5. 7,62 - 12,88 mmol / l

39. What is contraindicated in acute and chronic cholecystitis:
1. Papaveretum
2. -Morphine hydrochloride
3. No-Spa
4. Atropini sulfas
5. Spasmalgon, baralgin, spazgan

40. Normally the width of choledoch equals:
1. Less than 0.5 cm
2. -0,6 - 1,0 cm
3. 1,1 - 1,5cm
4. 1,6 - 2,0 cm
5. Moe than 2,0cm

41. Everything mentioned below concerns to extrahepatic bile ducts examination technique, except:
1. Choledoch palpation
2. Choledoscopy
3. Intraoperational cholangiography
4. Choledoch probing

5. -Intravenous cholangiography

42. A patient with jaundice and accompanying choledocholithiasis needs:
1. Emergency surgery
2. Conservative therapy
3. -Urgent surgery after preoperative preparation
4. Coeliac artery catheterization
5. Plasmapheresis

43. What can be applied in acute calculous cholecystitis?
1. Emergency surgery
2. Urgent surgery
3. Conservative therapy and following elective surgery
4. Only conservative surgery
5. -Everything mentioned above

44. Courvoisier's symptom is not characteristic of:
1. -Acute calculous cholecystitis
2. Head of pancreas cancer
3. Indurative pancreatitis
4. Major duodenal papilla tumor
5. Choledoch tumor

45. What is not characteristic of obstructive jaundice due to choledocholithiasis?
1. Hyperthermia
2. Increased conjugated bilirubin of blood
3. Increased alkaline phosphatase
4. -Sharp increase of transaminasa in plasm
5. Absence of stercobilin in feces

46. What is not used for specifying of jaundice character and the reasons of its appearance:
1. Computer tomography
2. -Intravenous cholecystocholangiography
3. Percutaneous transhepatic cholangiography
4. Endoscopic retrograde panchreatocholangiography
5. Ultrasonic scanning

47. What is not characteristic of acute obturative cholangitis clinical picture?
1. Jaundice
2. Increase of temperature
3. -Decrease of liver size
4. Leukocytosis with shift to the left
5. Liver enlargement

48. What is not characteristic of acute cholangitis clinical picture?
1. High temperature
2. Pains in the right hypochondrium
3. Jaundice
4. Leukocytosis
5. -Unstable liquid stool

49. Intermittened jaundice is caused by:
1. Impacted stone of the choledoch terminal part
2. Choledoch tumor

3. Cystic duct stone
4. -Valve choledoch stone
5. Choledoh stricture

50. In cholelithiasis emergency surgery is indicated in:
1. Cystic duct occlusion
2. Cholecystopancreatitis
3. -Perforative cholecystitis
4. Obstructive jaundice
5. Hepatic colic

51. Choledocholithiasis complication is:
1. Gallbladder hydrops
2. Gallbladder empyema
3. -Jaundice, cholangitis
4. Chronic active hepatitis
5. Perforative cholecystitis, peritonitis

52. Elective cholecystectomy in cholelithiasis is indicated in:
1. -All cases
2. Latent form of disease
3. Clinical signs of disease and labor ability decrease
4. Patients older than 55 y.o.
5. Patients younger than 20 y.o.

53. Method of choice in treating of chronic calculous cholecystitis is?
1. Concrement dissolution by litholytic drugs
2. Microcholecystostomy
3. Remote wave lithotripsy
4. -Cholecystectomy
5. Complex conservative therapy

54. A 57-year-old patient presented with moderate pains in the right hypochondrium, irradiating into scapula. Anamnesis shows chronic calculous cholecystitis. Clinical blood analysis shows no changes. Jaundice is absent. Palpation detects enlarged, moderately painful gallbladder. Temperature is normal. What is the diagnosis
1. Gallbladder empyema
2. Head of pancreas cancer
3. -Hydrops of gallbladder
4. Acute perforated cholecystitis
5. Liver echinococcus

55. What is the most common reason for obstructive jaundice development?
1. Corrosive strictures of extrahepatic bile ducts
2. -Choledocholithiasis
3. Head of pancreas cancer
4. Liver echinococcus
5. Tumor metastases into the liver

56. A 76-year-old patient presented into hospital seven days after the disease onset with complains of pain in the right hypochondrium, weakness, repeated vomiting, and increase of temperature to 38° C. Medical examination detected moderately severe state. The patient is pale, enlarged and painful gallbladder is palpable, abdominal cavity muscles in the right hypochondrium are tense. The patient is suffering from essentia hypertension and pancreatic diabetes. What medical approach is preferable?

1. Emergency surgery - cholecystectomy
2. Emegency laporoscopic cholesystectomy
3. Complex conservative therapy
4. -Microcholecystostomy under ultrasonic scanning control
5. Distant wave lithotripsy

57. What combination of clinical symptoms corresponds to Courvoisier syndrome?
1. -Enlarged painless gallbladder and jaundice
2. Enlarged liver, ascites, delated veins of anterior abdominal cavity
3. Jaundice, palpable painful gallbladder, local peritoneal phenomena
4. Absence of stool, colicky abdominal pains. Appearance of palpable neoplasm in the abdominal cavity.
5. Expressed jaundice, enlarged tuberous liver, cachexia

58. What examination is most informative for calculous cholecystitis diagnosing?
1. Peroral cholecystocholangiography
2. Laparoscopy
3. Plan film of abdominal cavity
4. -Ultrasonic scanning
5. Endoscopic retrograde cholangiopancreatography

59. Combination of what symptoms is characteristic of cholangitis?
1. Jaundice
2. Fever
3. Anaemia
4. Leukocytosis
5. Ascites
Right variants:
a) 1, 2, 3
b) -1, 2, 4
c) 3, 4, 5
d) 2, 5
e) 2, 3, 5

60. Give the symptom which is not characteristic of hydrops of gallbladder
1. Enlarged gallbladder
2. Pains in the right hypochondrium
3. -Jaundice
4. Roentgologically-nonfunctioning gallbladder
5 Absence of peritoneal symptoms

61. The most informative method of chronic calculous cholecystitis diagnosing is:
1. Cholecystography
2. Cholecystocholangiography
3. -Ultrasonic scanning
4. Splenoportography
5. Computer tomography

62. Ortner's symptom is:
1. Sharp pain while pressing the xiphoid process
2. -Painfulness while tapotement the right costal margin by hand edge
3. Increased pain sensitivity while palpation to the right of cervical vertebra spinous process
4. Pain while palpation to the right of the navel
5. Pain in the loin

UNIT 7. OBSTRUCTIVE JAUNDICE. FOCAL LIVER LESIONS

1. What is not characteristic of the jaundice caused by choledocholithiasis:
1. -Urobilinuria
2. High alkaline phosphatase
3. Normal or low blood protein
4. High blood bilirubin
5. Normal or moderately high transaminase

2. The stone transfer from the cholecyst to the choledoch doesn't cause:
1. Biliary colic
2. Jaundice
3. Purulent cholangitis
4. Cholangiolithiasis
5. -Budd-Chiari syndrome

3. The patient with jaundice caused by cholecholithiasis needs:
1. Urgent surgery
2. Conservative treatment
3. -Urgent surgery after the preoperative preparation
4. Catheterization of the celiac arteries
5. Plasmapheresis

4. Courvoisier's symptom is not characteristic of:
1. -Acute calculous cholecystitis
2. Cancer of the head of pancreas
3. Indurative pancreatitis
4. Tuours of the large duodenal papilla
5. Tumours of choledoch

5. What symptoms are not characteristic of obstructive jaundice conditioned by cholangiolithiasis:
1. Hyperthermia
2. High conjugated blood bilirubin
3. High alkaline phosphatase
4. -Sharp increase in plasma transaminase level
5. Absence of stercobilin in feces

6. What methods are not used to detect the character and causes of jaundice:
1. Computer tomography
2. -Intravenal cholecystocholangiography

3. Percutaneous transhepatic cholangiography
4. X-ray endoscopic examination of pancreatobiliary zone
5. Ultrasonic scanning

7. Intermittent jaundice is called:
1. Impacted stone of the choledoch terminal portion
2. Choledoch tumour
3. Cystic duct stone
4. **-Valvular duct stone**
5. Choledoch structure

8. Courvoisier's symptom is not observed in the cancer of:
1. Head of pancreas
2. Supraduodenal part of the choledoch
3. Retroduodenal part the common bile duct
4. Large duodenal papilla
5. **-Cholecyst**

9. What combination of clinical symptoms cooresponds to Courvoisier's symptom:
1. **-Enlarge painless cholecyst, jaundice**
2. Enlarged liver, ascites, anteroventral vein dilatation
3. Jaundice, palpable painful cholecyst, local peritoneal phenomena
4. Absence of stool, cramp-like pain, palpable lump in the abdominal cavity
5. Evident jaundice, tuberous liver, cachexia

10. The combination of symptoms characteristic of cholangitis is:
1. Jaundice;
2. Shiver;
3. Anaemia;
4. Leukocytosis;
5. Ascites.

Right variants:
a) 1, 2, 3
b) -1, 2, 4
c) 3, 4, 5
d) 2, 5
e) 2, 3, 5

11. The retrograde cholangiopancreatography of the patient with obstructive jaundice detected extensive stenosis of the choledoch opening. The preferable intervention:
1. Transduodenal papillosphincteroplasty
2. **-Supraduodenal choledochoduodenostomy**
3. Endoscopic papillosphincterostomy
4. Hepaticojejunostomy
5. Mikulitch surgery

12. The reasons for obstructive jaundice can be all the enumerated except:

1. -Concrement in the area of gallbladder neck
2. Enlarged head of pancreas
3. Concrement in the proximal part of the choledoch
4. Papillitis
5. Stenosis of the duodenal papilla

13. The patient, hospitalized with sharp pains in the right hypochondrium, nausea, vomiting, skin icteritiousness. The urgent duodenoscopy detected the impacted stone of the large duodenal papilla. What measures should be taken:
1. -Endoscopic papillosphincterotomy
2. Duodenotomy, concrement removal
3. Microcholecystostomy under ultrasonic control
4. Kher's drainage in choledoch
5. Macrocholecystostomy

14. The ultrasonic scanning detected a liver abscess. There are evident signs of intoxication. What is the optimal way of antibiotic introduction subsequent to multimodality therapy:
1. In the inferior vena cava
2. Intraductally
3. -Abdominal perfusion
4. In the subclavian vein
5. Intraabdominlly

15. What examination is necessary in the difficult clinical differential diagnosing of the fluid liver lump:
1. Laparoscopy
2. Cavography
3. Liver scintigraphy
4. -Ultrasonic scanning with possible diagnostic probe
5. Aortography

16. The liver abscess of any genesis is usually detected by X-ray examination of pleural and abdominal cavities. Name the practically significant roentgenologic symptoms of the abscess clinical signs.
1. High-riding right cupula of diaphragm;
2. Increased retrogastral area;
3. Evident pneumatosis coli;
4. Kloiber's bowls in the right hypochondrium;
5. Organic mobility of cupula of diaphragm;
6. Exudate into the pleural cavity;
7. Stomach shift in the area of lesser curvature;
8. Calcification in liver;
9. Fluid level in stomach;
10. Flatness of vascular pattern in the lower lung lobe.

Right variants:
a) 1, 2, 6, 9, 10
b) -1, 5, 6, 7
c) 3, 6, 8, 9
d) 4, 6, 9.10

e) 5, 6, 9

17. Choose the necessary syndrome combination, characteristic of liver abscesses of different localization:
1.Asthenovegetative syndrome;
2. Pleuro-pulmonary syndrome;
3. Renal syndrome;
4. Stenocardial syndrome;
5. Arrhythmic syndrome;
6. Septic intoxication syndrome;
7. Stagnant syndrome;
8. Hypertonic syndrome;
9. Anaemic syndrome;
10. Haemorrhagic.
Right variants:
a) -2, 3, 6
b) 3, 4, 5, 9
c) 2, 9, 10
d) 2, 3, 6, 10
e) 7, 8, 10

18. 25-20% of abscesses are accompanied by complications as:
1. Peritonitis;
2. Bowel;
3. Obstruction;
4. Intraperitoneal bleeding;
5. Subdiaphragmatic abscess;
6. Gastrointestinal bleeding;
7. Pleural empyema;
8. Lung abscess;
9. Hepatobronchial fistula;
10. Pericarditis;
11. Cholangitis;
12. Obstructive jaundice;
13. External intestinal fistula.
Right variants:
a) 6, 7, 9, 10
b) 2, 4, 6, 7, 8, 9, 10
c) -1, 3, 4, 6, 7, 8, 9, 10, 11
d) 5, 6, 7, 8, 9, 10, 11, 12
e) 1, 2, 3, 4, 8, 9, 10

19. What are the most correct variants of liver cancer radical surgery treatment?
1. Anatomic liver resection;
2. Atypical liver resection;
3. Liver transplantation;
4. Omentohepatopexy;
5. Hepatic artery filling;

6. Cava filter;
7. Portal vein ligation;
8. Ligation of right and left hepatic arteries;
9. Choledoch drainage;
10. Bihepaticoenteroanastomosis.

Right variants:

a) 1, 3, 5
b) 2, 4, 5, 6
c) 3, 5, 7, 8
d) -1, 3
e) 3, 6, 9, 10

20. Laboratory indicators don't have there own diagnosing significance. Choose one of the indicators, which can have an additional importance in cholangiocellular cancer:

1. Seromucoid
2. Alpha-fetoprotein
3. C-reactive protein
4. AST/ALT ratio
5. -There are no such indicators

21. What pathology can be the reason of extrahepatic portal hypertension:

1. Portal vein atresia
2. Cavernous transformation of portal vein
3. Portal vein phebosclerosis
4. Thrombosis of the portal vein, caused by inflammatory diseases
5. -Block of hepatic capillaries of portal system

22. Choose the rare symptom of portal hypertension:

1. Collateral circulation
2. Splenomegaly
3. Haemorrhagic manifestations
4. Ascites
5. -Jaundice

23. What examination is the most informative in the detection of portal blood circulation block level:

1. Esophagogastroduodenoscopy
2. Laparoscopy
3. Ultrasonic liver scanning
4. -Celiacography
5. Endoscopic retrograde pancreatography

24. The surgery showed the cause of the obstructive jaundice – metastases of the stomach cancer into the liver porta. The approach is:

1. Hepaticoenterostomy
2. Laporotomy only
3. Bouginage of the narrow area and ducts bouginage
4. Transhepatic drainage of hepatic tracts

5. -External hepaticostomy

25. Normal pressure in the common bile duct is:
1. 10-40 mmH2O
2. **-60-150 mmH2O**
3. 200-220 mmH2O
4. 250-300 mmH2O
5. 300-350 mmH2O

26. Normally the diameter of the common bile duct is:
1. 3-4 mmH2O
2. **-6-10 mmH2O**
3. 12-14 mmH2O
4. 15-20 mmH2O
5. 20-25 mmH2O

27. Obstructive jaundice is not arisen in:
1. Choledoch stricture
2. Common hepatic duct stricture
3. **-Cystic duct stricture**
4. Vater's papilla stricture
5. Choledocholithiasis

28. What are the optimal terms for the removal of drainage out of the choledoch in noncomplicated postoperative period:
1. after 4-5 days
2. **-after 8-12 days**
3. after 15-18 days
4. after 19-20 days
5. after 21-28 days

29. What examination should be carried out before the drainage removal:
1. Internal cholangiography
2. Gastroduodenoscopy
3. Retrograde endoscopic cholangiography
4. **-Transdrainage fistulography**
5. Laparoscopy

30. What are the most informative examination method in obstructive jaundice:
1. Intravenous cholecystcholangiography
2. Duodenal probing
3. Gastroduodenoscopy
4. **-Endoscopic retrograde cholangiopancreatography**
5. Laparoscopy

31. What methods are not used to specify the causes of an obstructive jaundice:
1. **-Intravenous cholecystcholangiography**

2. Ultrasonic scanning
3. Retrograde endoscopic cholangiography
4. Computer tomography
5. Percutaneous transhepatic cholangiography

32. What is the most probable cause of jaundice, having appeared after the acute episodes of pain in the right hypochondrium:
1. Tumour of head of pancreas
2. Infectious hepatitis
3. Vater's papilla stricture
4. -Choledocholithiasis

33. Courvoisier's symptom is not characteristic of:
1. Vater's papilla cancer
2. Cancer of head of pancreas
3. -Liver cancer

34. Choledocholithiasis can lead to the following complications:
1. Empyema of the cholecyst
2. Gangrene of the cholecyst
3. Budd-Chiari syndrome
4. -Cholangitis, jaundice
5. Anaemia

35. Obstructive jaundice in the cholelithiasis can arise in:
1. -Common bile duct obstruction
2. Cystic duct obstruction
3. -Common hepatic duct obstruction
4. In all the causes, mentioned above

36. Gas in the bile ducts can be detected in:
1. Infectious hepatitis
2. -Choledochoduodenal fistula
3. Bile peritonitis
4. Acute pancreatitis

37. What is not characteristic of liver cirrhosis and portal hypertension:
1. Esophageal and gastric varicose veins dilatation
2. Anteroventral veins dilatation
3. -Superficial veins dilatation of the right lower limb
4. Hemorrhoid
5. Ascites

38. What is not characteristic of:
1. Shiver
2. Pain in the right hypochondrium
3. Leukocytosis

4. Enlarged liver
5. -Courvoisier's symptom

39. The complication of choledocholithiasis is not:
1. Cholangitis
2. Jaundice
3. -Hydrops of gallbladder

40. Cholelithiasis can cause everything except:
1. Obstructive jaundice
2. Purulent cholangitis
3. Acute cholecystopancreatitis
4. -Liver cirrhosis
5. Cistoduodenal fistula

41. In what cases is choledochotomy indicated in cholecystectomy:
1. -In hydrops of gallbladder
2. In purulent cholangits
3. In choledocholithiasis

42. The clinical representations of purulent cholangitis appeared in a patient with choledocholithiasis. The patient needs:
1. -Surgery
2. Conservative therapy
3. Plasmapheresis
4. Catheterization of the celiac artery
5. Antibacterial therapy and an elective operation

43. What method of examination is informative in the observation of the patients with the obstructive jaundice:
1. Transduodenal retrograde cholangiowirsungography
2. Percutaneous transhepatic cholangiography
3. Laporascopic cholecystcholangiography
4. -All the variants are right
5. None of the variants are right

44. What surgical methods should be applied nowadays in the patients with acute calculous cholecystitis, complicated with an obstructive jaundice? The obstructive jaundice is conditioned by an impacted concrement of the large duodenal papilla.
1. Cholecystectomy, laparotomy and cholecystectomy.
2. -Endoscopic transduodenal papillosphincterotomy, papillolithotomy. Laparoscopic cholecystectomy.
3. Laparotomy. Cholecystectomy, Finsterer choledochoduodenal anastomosis.

UNIT 8. ACUTE INTESTINAL OBSTRUCTION

1. During the surgery you have removed obstruction of small intestine due to abdominal cavity adhesions. Impacted bowel loop is cyanotic with weak peristalsis. What are your following actions?
1. Bowel resection

2. Injection of anticholinesterase drugs, enhancing intestinal motility
3. Root of mesentery block by novocaine solution
4. Impacted bowel rewarming
5. Nasointestinal intubation

Give the right variant:

a) Only 1
b) 2 and 3
c) 2 and 4
d) 4 and 5
e) -3 and 4

2. Contents of the afferent limb in case of intestine torsion:

1. Can't be removed due to threat of dehydration
2. Is removed together with nonviable intestinal loop
3. Is removed through nasointestinal tube
4. Is decanted through gastric tube
5. Is decanted into efferent limb of small intestine

Choose right answer combination:

a) Only 1
b) -2, 3, 4
c) Only 5
d) 2 and 5
e) 2, 4, 5

3. What in the first place should be used for differential diagnosing of acute intestinal obstruction and perforated stomach ulcer?

1. Pneumogastrography
2. Stomach roentgenoscopy
3. -Plan radioscopy
4. Gastroscopy
5. Laparoscopy

4. A 70-year-old patient had sigmoid volvulus 24 hours ago. While surgery its necrosis and sharp swelling of the colon were detected. The optimal variant of surgical intervention is:

1. Double-barreled sigmoidostomy
2. Sigmoid colectomy with end-to-end anastomosis
3. Sigmoid colectomy with side-to side anastomosis
4. -Sigmoid colectomy with end colostomy
5. All variants are incorrect

5. What are the reasons for paralytic ileus?

1. Peritonitis
2. Lead poisoning
3. Pancreatonecrosis
4. Retroperitoneal hematoma
5. Mesenterial blood circulation disorder

Choose right answer combination:

a) 1, 2, 3, 4

b) 2, 3, 4, 5
c) -1, 3, 4, 5
d) All variants are correct
e) All variants are incorrect

6. Dehydratation of an organism develops fastest in:
1. -Small intestine torsion
2. Sigmoid colon torsion
3. Ileocecal intussusception
4. Obturative large intestinal obstruction
5. Paresis of the small intestine

7. Splashing sound symptom in acute bowel obstruction is explained by:
1. Exudate in the abdominal cavity
2. -Collection of fluid and gas in afferent intestinal loop
3. Collection of fluid and gas in efferent intestinal loop
4. Fluid and gas in abdominal cavity
5. All answers are incorrect

8. Clinical signs of strangulation bowel obstruction are:
1. Constant pains in abdominal area
2. Single vomiting
3. Recurrent vomiting
4. Cramp-like pains in the stomach
5. Positive splashing sound

Right variant:
a) 1 and 2
b) 1, 4, 5
c) 2, 3, 5
d) -3, 4, 5
e) 2, 3, 4

9. What roentgenologic signs are characteristic of acute intestinal obstruction?
1. Kloyber's cups
2. Free gas under the right cupula of diaphragm
3. Kerckring crypts
4. Wahl-Symptom
5. Tsege - Manteuffel symptom

Right variants:
a) -1, 3, 4, 5
b) 1, 2 and 4
c) 1, 2 and 5
d) 2 and 4
e) 3 and 5

10. Therapeutic measures in obturation intestinal obstruction consist in:
1. Spasmolytic injection
2. Siphon enema application

3. Water-electrolytic disorder correction
4. Narcotic anesthetics injection
5. Injection of drugs, increasing intestinal motility

Give the right answer combination:

a) 1, 2, 4
b) 1, 3, 5
c) -1, 2, 3
d) 2, 3, 4
e) 2, 3, 5

11. What clinical signs are characteristic of ileocolic intussusception with intestinal obstruction phenomena:

1. Blood-tinged discharge from the rectum
2. Scybalous stool
3. Tumor-like lump in the right iliac area
4. Схватко colicky abdominal pains
5. Atony of rectum sphincter

Right variants:

a) -1, 3, 4
b) 2, 3, 4
c) 3, 4, 5
d) 2, 4, 5
e) 1, 4, 5

12. What diagnostic measures should be first taken in suspected acute intestinal obstruction?

1. Celiac artery angiography
2. Gastroduodenoscopy
3. Abdomen auscultation
4. Plan radioscopy of abdominal cavity
5. Digital investigation of the rectum

Choose the right answer combination:

a) 1, 2, 3
b) -3, 4, 5
c) 1, 3, 4
d) 1, 3, 5
e) 2, 3, 4

13. Surgery in acute intestinal obstruction is indicated in:

1. Kloyber's cups after conservative therapy
2. Increase of abdominal pains
3. Appearance of peritonitis signs
4. Evident hypovolemia
5. Evident hypokalemia

Choose the right answer combination:

a) 1 and 2
b) 1 and 3
c) -1, 2 and 3
d) 3 and 4

e) 3, 4, 5

14. Which of the following measures is contraindicated in preparation to the surgery of a patient with mechanical intestinal obstruction?

1. Aspiration of gastric contents
2. Infusion therapy
3. Spasmolytic therapy
4. **-Injection of drugs, increasing intestinal peristalsis**
5. Siphon enema application

15. What surgery can be performed in a patient with blind gut cancer, complicated with acute intestinal obstruction?

1. Right hemicolectomyc with ileotransverse anastomosis
2. Right hemicolectomyc with temporary enterostomy
3. Collateral ileotransversoanastomosis
4. Temporary transversostomy
5. Temporary ileostomy

Choose the right answer combination:

a) 1, 2, 3
b) 2, 3, 4
c) 3, 4, 5
d) -2 and 5
e) 2, 4, 5

16. What concerns to strangulated intestinal obstruction?

1. Volvulus
2. Intestinal lumen obturation with a gallstone
3. Node formation
4. External bowel compression with a tumor
5. Compression of the small intestine loop in the strangulated hernia

Choose the right answer combination:

a) 1 and 2
b) 1 and 4
c) 2, 3, 4
d) 3, 4, 5
e) -1, 3, 5

17. Colicky abdominal pains are observed in following acute diseases of abdominal organs:

1. Bowel obstruction conditioned by lumen obturation of transverse colon with a tumor
2. Small intestine paralysis due to aorta surgery
3. Volvulus of small bowel
4. Fatty pancreatitis
5. Blind small bowel invagination
6. Small bowel infarction due to superior mesenteric artery embolism

Choose the right answer combination:

a) 2 and 5
b) 3 and 4
c) -1, 3, 5

d) 1, 2, 4, 5, 6
e) In all listed diseases

18. What is not characteristic of small bowel volvulus?
1. -Tsege - Manteuffel symptom
2. Abdominal asymmetry
3. «Splashing sound»
4. Recurrent vomiting
5. Colicky abdominal pains

19. What are the symptoms of low obturation intestinal obstruction?
1. Early recurrent vomiting
2. Stool and gases retention
3. Wahl-Symptom
4. Evident abdominal distension
5. Tsege - Manteuffel symptom

Choose the right answer combination:
a) 1, 2, 3
b) -2, 4, 5
c) 3, 4, 5
d) 1, 4, 5
e) 2, 3, 4

20. What is the method for early acute intestinal obstruction diagnosis?
1. -Plan radioscopy of the abdominal cavity
2. Laparoscopy
3. Irrigoscopy
4. Ultrasonography of the abdominal cavity
5. Colonoscopy

21. A 75-year-old patient with late period of acute intestinal obstruction due to sigmoid colon cancer presented to the hospital. The following medical approach is the most rational one:
1. Examination and surgery within 48-72 hours
2. Acute conservative therapy
3. Infusion therapy and repeated siphon enemas
4. -Preparation to a surgery during 2-3 hours with following Hartmann's operation.
5. Emergency surgery with sigmoid colon resection and end-to-end anastomosis.

22. Large intestine mechanical obstruction most often is caused by:
1. Foreign bodies
2. Bile stones
4. -Malignant tumors
5. Abdominal adhesions
6. Helminths

23. Small bowel volvulus concerns to one of the following types of intestinal obstruction:
1. Obturative
2. -Strangulated

3. Mixed-obturative combined with strangulated
4. Spastic
5. Dynamic

24. Following clinical signs are characteristic of small bowel obstruction:
1. Recurrent vomiting
2. Severe constant pains in mesogastric area
3. Colicky abdominal pains
4. Positive "splashing sound" symptom
5. Positive Schiemann's symptom

Choose the right answer combination:
a) -1, 3, 4
b) 2, 3, 4
c) 2, 4, 5
d) 1, 3, 4, 5
e) 2, 3, 4, 5

25. Examination of a patient with acute intestinal obstruction showed that Tsege – Manteuffel and Hochenegg's symptoms are positive. What kind of intestinal obstruction these signs are characteristic of?
1. Ileocecal intussusception
2. Obturation of ascending colon with a tumor
3. Small bowel volvulus
4. -Sigmoid volvolus
5. Obturation of rectosigmoid area with a tumor

26. What should be indicated for infusion therapy in a patient with acute small bowel obstruction?
1. Protein hydrolysate
2. Ringer-Locke's solution
3. Glucose-potassium solution
4. Intravenous infusion of 10% solution of sodium-chloride
5. Mannitol

Right variants:
a) All listed preparations
b) 1, 2, 4, 5
c) -1, 2, 3, 4
d) 2, 3, 4
e) 1, 2, 3

27. What type of intestinal obstruction cause fast development of intestinal necrosis?
1. Extraintestinal compression
2. Small bowel volvulus
3. Jejunum lumen obturation with a bile stone
4. Node formation
5. Bowel impairment in hernial orifice

Choose the right answer combination:
a) 1, 2, 3
b) 2, 3, 4
c) 3, 4, 5

d) -2, 4, 5
e) 1, 4, 5

28. Colicky abdominal pains, nausea, double vomiting, abdominal distension and gas retention appeared in a 45-year-old patient after physical activity. What disease is this complex of symptoms characteristic of?
1. Perforated stomach ulcer
2. -Acute intestinal obstruction
3. Acute pancreatitis
4. Acute appendicitis
5. Acute cholecystitis

29. Obturation intestinal obstruction most often develops if a tumor is located in:
1. Blind gut
2. Hepatic area of the colon
3. Splenic area of the colon
4. Middle-third of the transverse colon
5. -Sigmoid colon

30. At the primary stage of large intestinal obturation obstruction the following therapeutic approach is reasonable:
1. Emergency surgery, allowing to prevent intestinal necrosis and perforation
2. Surgery within 48-72 hours after examination and detection of the obstruction reasons
3. Emergency surgery - double barrel colostomy or enterostomy
4. -Conservative measures. In absence of the effect emergency surgery should be performed
5. All the listed variants are correct

31. Factors, promoting the development of strangulated intestinal obstruction are:
1. Long narrow mesentery
2. Commissural process in the abdominal cavity
3. Comissuring of Meckel's diverticulum with mesentery
4. Alcohol intake
5. Intake of roasted food
Choose the right answer combination:
a) -1, 2, 3
b) 1, 4, 5
c) 2, 3, 4
d) 2, 4, 5
e) All variants are correct

32. What is developed in the early period of acute small bowel obstruction?
1. Hyperkalemia
2. Dehydration
3. Hematocrit reduction
4. Hematocrit increase
5. hypokalemia
Right variants:
a) 1, 2, 3
b) 1, 3, 5

c) -2, 4, 5
d) 2, 3, 5
e) 1, 4, 5

33. Following symptoms are pathognomic for obturation intestinal obstruction:
1. Constant abdominal pains
2. Colicky abdominal pains
3. Coffee-grounds vomiting
4. Abdominal distension
5. Recession of epigastric area

Choose the right answer combination:
a) -2, 4
b) 1, 4
c) 1, 3, 5
d) 2, 3, 5
e) 2, 3, 4

34. What are the deciding examination techniques for acute intestinal obstruction diagnosing?
1. Plan roentgenoscopy of abdominal cavity
2. Examination of barium passage along the gastrointestinal tract
3. Esophagogastroduodenoscopy
4. Laparoscopy
5. Biochemical blood analysis

Choose the right answer combination:
a) 1, 2, 3
b) 2, 4, 5
c) -1 and 2
d) 2 and 3
e) 1, 4, 5

35. Choose the type of acute intestinal obstruction symptom of which is blood-tinged discharge from the anus:
1. Paralytic
2. Spastic
3. Intestinal infarction
4. Volvulus of small bowel
5. -Invagination

36. Effect of conservative therapy is most probable in following types of acute intestinal obstruction:
1. Volvulus of small bowel
2. Node formation between the loop of small and sigmoid bowel
3. Spastic intestinal obstruction
4. Traumatic intestinal paresis
5. Coprostasis

Choose the right answer combination:
a) 1, 3, 4
b) 1, 3, 5
c) 2, 4, 5

d) -3, 4, 5
e) Only 1 and 2

37. A 50-year-old patient with blind gut cancer suffers from acute intestinal obstruction. Urgent surgery detected, that regional lymph nodes are not enlarged, remote metastases are absent. What measures are reasonable?
1. -Right-sided hemicolectomy
2. Cecostomy
3. Blind gut resection
4. Hartmann's surgery
5. Mikulich's surgery

38. Everything mentioned below is characteristic of large bowel obstruction, except:
1. Gradual increase of intoxication symptomes
2. Abdominal distension
3. «Kloyber's cups»
4. Stool retention
5. -Rapid dehydration

39. What helps to differentiate acute intestinal obstruction from acute pancreatitis?
1. Clinical blood analysis
2. Level of blood histamine
3. Electrolytic blood analysis
4. Urine amylase analysis
5. Plan radiography of abdominal cavity
Right variants:
a) 1 and 5
b) 1 and 4
c) -4 and 5
d) 2 and 4
e) 2, 3, 5

40. A 76-old patient suffering from chronic colitis appealed for a medical aid. He suffers from bursting pain and absence of stool for 7 days. Rectal examination detected dense fecal masses. What measures should be taken?
1. Urgent surgery
2. Injection of a drug, increasing intestinal peristalsis
3. Spasmolytics injection
4. Siphon enema
5. Laxative intake
Right variants:
a) Only 1
b) 2 and 5
c) Only 2
d) -Only 4
e) 3 and 5

41. What examination technique can confirm acute intestinal obstruction?

1. -Plan radiography of abdominal cavity
2. Intravenous cholangiography
3. Laparoscopy
4. Gastroduodenoscopy
5. Ultrasonic scanning of abdominal cavity

42. The most often reason for small bowel mechanical obstruction is:
1. Foreign bodies in the intestinal tract
2. Bile stones
3. Intestinal tumors
4. -Adhesions of abdominal cavity
5. Helminths in the intestinal tract

43. Clinical picture of acute obturation large bowel obstruction is characterized by:
1. Colicky abdominal pains
2. Abdominal distension
3. Boat-shape abdomen
4. Constant abdominal pains
5. Stool and gases retention
Choose the right answer combination:
a) 1, 3, 5
b) -1, 2, 5
c) 1 and 3
d) 4 and 5
e) 2, 4, 5

44. Severe small bowel obstruction is characterized by following signs:
1. Colicky abdominal pains
2. «Splashing sound»
3. Recurrent vomiting
4. Tsege - Manteuffel symptom
5. «Kloyber's cups», detected during the abdominal cavity radioscopy
Choose the right answer combination:
a) 1, 2, 3
b) 1, 2, 3, 4
c) -1, 2, 3, 5
d) 2, 3, 4
e) 3 and 5

45. What proves the effectiveness of conservative measures in treatment of acute intestinal obstruction?
1. Prolongation of interval between episodes of pain
2. Defecation and passage of gases
3. Reduction of abdominal distension
4. Weakening of peristalsis
5. Pain disappearance
Choose the right answer combination:
a) 1, 3, 5
b) -2, 3, 5

c) 1, 3, 4
d) 3, 4, 5
e) 1, 4, 5

46. What treatment should be applied in dynamic intestinal obstruction?
1. -Only conservative
2. Only operative
3. Operative if the effect of the conservative one is absent
4. Laparoscopic ileostomy
5. Intubation of large bowel with colonoscope

47. Dehydration in acute intestinal obstruction develops due to:
1.Vomiting
2. Diuresis increase
3. Liquid sequestration in the intestinal lumen
4. Liquid sequestration in the retroperitoneal space
5. Perspiration increase
Choose the right answer combination:
a) 1, 2
b) 3, 4
c) -1, 3
d) 2, 5
e) 4, 5

48. Following surgeries are performed in acuteintestinal obstruction due to sigmoid colon volvulus:
1. Noble's surgery
2. Sigmoid colon resection with end-to-end anastomosis
3. Hartmann's surgery
4. Gagen-Torn's mesosigmoplication
5. Bowel detorsion
Choose the right answer combination:
a) 1, 2, 3
b) -3, 4, 5
c) 3, 4
d) 1, 2, 4, 5
e) 2, 3, 4, 5

49. While examining a 70-year-old patient you have detected abdominal distension, increased resonating peristalsis and "splashing sound". What disease is this clinical picture characteristic of?
1. Compensated ulcerative stenosis
2. Biliary colic
3. -Acute intestinal obstruction
4. Intestinal infarction
5. Peritonitis

50. In nonviable loop of small bowel following measures are taken:
1. Afferent limb resection 20 cm off necrosis
2. Bowel resection within necrosis borders

3. Bypass
4. Bowel exteriorization
5. -Resection of the efferent limb 15-20 cm off necrosis

51. What is indicated in tumor perforation of ascending colon with metastases into the liver?
1. Right-sided hemicolectomy with ileotransverse anastomosis
2. -Right-sided hemicolectomy, terminal ileostomy
3. Perforation suturing, ileotransverse anastomosis
4. Right-sided hemicolectomy, colostomy and ileostomy
5. Cecostomy

52. Everything mentioned below is characteristic of low large bowel obstruction, except:
1. Gradual symptoms intensifying
2. Abdominal distension
3. «Kloyber's cups», stool retention
4. -Rapid (during 24 hours) dehydration

53. Blood circulation in intestine mesentery is not disturbed in:
1. Volvulus
2. -Obturation
3. Node formation
4. Invagination
5. Entrapment

54. Blood-tinged discharge from the rectum can be observed in the following type of intestinal obstruction:
1. Paralytic
2. Spastic
3. -Invaginated
4. Comissural
5. Strangulated

55. The quickest intestinal necrosis development occures in:
1. Obturation of the ileum with a tumor
2. Obturation of the large bowel with a tumor
3. Obturation of the jejunum lumen with a bile stone
4. -Node formation
5. Obturation of the jejunum large bowel lumen by impacted feces

56. What does not influence the choice of therapeutic approach in acute intestinal obstruction?
1. Type of obstruction
2. Stage of obstructionсти
3. -Presence of peritoneal symptomes
4. Intensity of pains
5. Radiological data

57. What should be first performed if acute intestinal obstruction is suspected?
1. -Plan radiography of the abdominal cavity
2. Examination of barium passage along the intestine
3. Esophagogastroduodenoscopy
4. Laparoscopy
5. Biochemical blood analysis

58. Loud peristaltic noises in the early phase of a disease are characteristic of:
1. Paralytic intestinal obstruction

2. Perforated stomach ulcer
3. -Mechanical bowel obstruction
4. Gangrenous cholecystitis
5. Mesenterial thrombosis

59. The most often invagination localization is:
1. Blind gut
2. -Ileocecal segment
3. Ilio-iliac segment
4. Sigmoid colon
5. Rectosigmoid area

UNIT 9. ACUTE COMPLICATIONS AFTER GASTRIC AND DUODENAL ULCER

1. Explain the reason for muscle tension in the right iliac region, which appear in perforated duodenal ulcer:
1. Reflex bonds through the spinal nerves
2. Accumulations of air in the abdominal cavity
3. -Flowing of acid gastric material through the right canal
4. Developing diffuse peritonitis
5. Viscerovisceral bonds with the appendix

2. Pathogenesis of gastric ulcer is influenced by:
1. Reduced gastric motility
2. Duodenal reflux
3. Stenosis of celiac trunk
4. Disturbance of protective properties of the mucous membrane
5. Reflux esophagitis
Choose the correct combination:
a) 1, 2, 3
b) 2, 4, 5
c) -1, 2, 4
d) 1, 3, 4
e) All answers are correct

3. What group of medications is not used for treatment of duodenal ulcer?
1. Histamine antagonist
2. H2 antagonists
3. -Nonsteroidal antiinflammatory drugs
4. Antacids
5. Sedatives

4. 2/3 of the gastric volume must be resected in operations for duodenal ulcer due to:
1. Peculiarities of stomach blood supply
2. The need for preserving volume of gastric stump sufficient for normal digestion
3. -The need for removing of gastrogenic and acidogenic stomach area
4. It is optimal for a reliable gastroenterostomy
5. All answers are correct

5. Choose from the following complications of peptic ulcer the ones that are always an indication for emergency surgery.
1. Perforation

2. Penetration
3. Decompensated pyloric stenosis
4. Malignization
5. Profuse gastrointestinal bleeding

Choose the correct answer:

a) 1, 4, 5
b) 1, 3, 5
c) -1, 5
d) 1
e) All answers are correct

6. Isolated selective proximal vagotomy is indicated for:

1. Antral ulcer
2. Duodenal ulcer with subcompensated pyloric stenosis
3. Perforated duodenal
4. -Duodenal ulcer without stenosis
5. Gastroduodenal bleeding

7. What complication of gastric ulcer is characterized by involuntary position of the patient with legs bringing to the stomach and «wooden belly»?

1. Ulcer penetration into gastrohepatic omentum
2. Concealed perforation
3. -Perforation into the free abdominal cavity
4. Penetration into the pancreas
5. Decompensated pyloric stenosis occurring with severe water and electrolyte disturbances

8. What is the most common complication after anterior wall duodenal ulcer?

1. -Perforation
2. Bleeding
3. Penetration into head of pancreas
4. Perforation and penetration into head of pancreas
5. All answers are correct

9. The patient, 56 y.o., with no concomitant diseases was operated 4 hours after onset of disease. During the operation perforated gastric ulcer was detected. What will be your approach?

1. Suture of ulcer
2. -Resection of 2/3 of stomach
3. Resection of ¾ of stomach and of greater and smaller omenta
4. Suture of ulcer and trunkular vagotomy
5. Antrectomy

10. What are the symptoms of perforated gastric ulcer?

1. Knife-like pain
2. Wooden belly
3. Recurrent vomiting
4. Disappearance of hepatic dullness
5. Upper colicky abdominal pains

Choose the correct answer:

a) 2, 3
b) 1, 3, 4
c) -1, 2, 4
d) 4, 5

e) 1, 5

11. The patient, 65 y. o., having been suffering from peptic ulcer for 4 years, was diagnosed with an perforated duodenal ulcer. Disease duration is 15 hours. What operation is preferable in this case?
1. -Closure of perforation
2. Stem vagotomy with Finney pyloroplasty.
3. Stomach resection
4. Gasfroenterostomy
5. Antrectomy with duodenal ulcer

12. The patient, 32 y. o., with concealed perforation of duodenal ulcer, was taken to hospital in a day from the onset of the disease. What should be indicated for him?
1. -Emergency surgery
2. Only conservative treatment
3. Surgery if conservative treatment turns out to be ineffective
4. Taylor's method of treatment
5. Laparoscopic drainage of abdominal cavity

13. What symptoms are typical for bleeding duodenal ulcer?
1. Exacerbation of pains in the abdominal area
2. Coffee-grounds vomiting
3. Abatement of pains
4. Bradycardia
5. Melena

Choose the correct combination of answers:
a) 1, 3, 5
b) 1, 2, 5
c) 2, 3, 4
d) 3, 4, 5
e) -2, 3, 5

14. Patients with peptic ulcer have the highest risk of gastrointestinal bleeding in the following cases:
1. -Occurrence of gastroduodenal bleedings in medical history
2. Pyloric stenosis
3. Perforation of ulcer
4. Malignation
5. In all cases mentioned above

15. What is indicated for patients with perforated stomach ulcer in case of a patient's refusal to undergo an operation:
1. Gastric lavage with cold water
2. Prolonged nasogastric aspiration
3. Intestinal stimulation
4. Antibacterial therapy
5. Tredelenburg position

Choose the correct answer:
a) 2, 3, 4, 5
b) -2, 4
c) 1, 4
d) 1, 2, 5
e) 2, 3, 5

16. What complication of peptic duodenal ulcer is characterized by the disappearance of pains in the epigastrium and formation of melena?

1. Pyloroduodenal stenosis
2. Ulcer perforation
3. -Ulcer bleeding
4. Ulcer malignation
5. Penetration of ulcer into pancreas

17. Indicate the factors that determine the choice of surgery for perforated gastric ulcer:
1. Presence of peritonitis
2. Time passed after the perforation of ulcer
3. Qualification of the surgeon
4. General condition and age of the patient
5. Ulcer size
Choose the correct answer:
a) 1, 2, 3, 5
b) 1, 3, 4, 5
c) 1, 2, 4
d) 1, 2, 3, 4
e) -All answers are correct

18. Which of the following is not the symptom of perforated ulcer?
1. Knife-like abdominal pain
2. "Wooden belly"
3. -Vomiting without a relief
4. Disappearance of liver dullness
5. Positive Blumberg sign

19. What medicine from mentioned below is not used for the treatment of gastrointestinal bleedings?
1. Vikasolum
2. Cimetidine
3. E-Aminocaprioc acid
4. -Fibrinolysin
5. Vikalin

20. The patient, 38 y.o., was in hospital with symptoms of gastrointestinal bleeding. On the 2nd day he had relapse of bleeding. Emergency gastroduodenoscopy showed duodenal ulcer with the diameter of 1,5 cm. there is a large thrombosed vessel from which reddish blood is running. Haemoglobin is 80g/L. What will you do?
1. -Emergency operation
2. Conservative treatment
3. Dynamic fibrogastroduodenoscopy
4. Embolization of gastric and gastroduodenal arteries
5. Blackmore probe introduction

21. What special methods are to be applied in differentiation of acute appendicitis from coverted perforated duodenal ulcer?
1. Gastroduodenoscopy
2. Abdominal radiography
3. Abdominal ultrasonography
4. Laparoscopy
5. X-ray of the stomach with barium sulphate
Choose the correct answer:
a) 1, 2, 3
b) 2, 3, 5

c) -1, 2, 4
d) 2, 4
e) 2, 5

22. The patient, 32 y. o., 4 hours ago knife-like pain started in the abdomen. During abdomen percussion lack of liver dullness was detected. What disease is characterized by these symptoms?
1. Hemorrhagic pancreonecrosis
2. Gangrenous cholecystitis
3. Perforated appendicitis
4. Bowel infarction
5. -All answers are wrong

23. What causes disappearance of liver dullness in perforated gastric ulcer?
1. Flatulence
2. High position of diaphragm
3. Interposition of intestinal loops between the liver and diaphragm
4. -The presence of free gas in the abdomen
5. The presence of fluid in the subdiaphragmatic space

24. The patient, 43 y.o., with a bleeding gastric ulcer is preferably indicated the following operation:
1. -Resection of the stomach
2. Excision of ulcer with stem vagotomy
3. "Pure" proximal vagotomy
4. Ligation of branches of the left gastric artery
5. Gastrectomy

25. What are the main methods of diagnosing of suspected gastric ulcer perforation?
1. Abdominal X-ray with barium mixture
2. Survey abdominal X-ray
3. Emergency gastroduodenoscopy
4. An ultrasound scanning of the abdominal cavity
5. Laparoscopy
Choose the correct answer:
a) 1, 3, 5
b) -2, 3, 5
c) 1, 3
d) 2, 5
e) All answers are correct

26. Clinical finding of perforated duodenal ulcer during the first 6 hours of the disease onset is characterized by the following signs, except:
1. Absence of vomiting
2. Wooden belly
3. Knife-like abdominal pain
4. Disappearance of liver dullness
5. -Frequent urging to stool

27. Which one of the following is not the complication after duodenal ulcer?
1. Penetration of ulcer into liver-duodenal ligament
2. -Ulcer malignancy
3. Ulcer perforation into retroperitoneal space
4. Gastroduodenal bleeding
5. Pyloroduodenal stenosis

28. The patient hospitalized with gastroduodenal bleeding is indicated the following urgent measures:
1. Aspiration of gastric contents
2. Abdominal X-ray
3. Gastroduodenoscopy
4. Laparascopy
5. Retesting of hemoglobin and haematocrit
Choose the correct combination:
a) 1, 2, 3, 4
b) -1, 3, 5
c) 3, 4, 5
d) 1, 3, 4, 5
e) 3, 4, 5

29. Surgical treatment of a patient with duodenal ulcer is indicated in the following cases:
1. For patients with frequent relapses
2. The disease is complicated by profuse bleeding
3. When pyloroduodenal stenosis emerges
4. When perforation of ulcer emerges
5. Ulcer penetrates into the head of the pancreas followed by frequent exacerbations
Choose the correct answer:
a) 1, 2
b) 1, 4
c) 2, 3
d) 3, 4
e) -All answers are correct.

30. The patient, 40 y. o., 5 hours ago had gastric ulcer perforation. The most appropriate surgical intervention is:
1. -Classical 2/3 resection of the stomach
2. Antrectomy
3. Truncal vagotomy и suture of ulcer
4. Truncal vagotomy and pyloroplasty
5. Gastrectomy

31. Which of the following is not an indication to surgical treatment of duodenal ulcer?
1. Prolonged disability and failure of conservative therapy
2. Profuse bleeding from the ulcer
3. Pyloric stenosis
4. -The presence of multiple flat ulcers in the bulb of duodenum detected during gastroduodenoscopy
5. Ulcer penetration

32. What is the most common complication after duodenal ulcer penetrating into head of pancreas?
1. Malignization
2. Perforation
3. -Acute pancreatitis
4. Stenosis of cardias portion of the stomach
5. Reflux esophagitis

33. Relative indications for surgical treatment of ulcer disease are set when:
1. Decompensated pyloric stenosis
2. Relapse of ulcer bleeding after its endoscopic arrest
3. -Low post-bulbar ulcers
4. Malignant degeneration of ulcer

5. Atypical ulcer perforation

34. Indications for surgical treatment of ulcer disease are not considered relative when::
1. -Cell atypia is detected
2. Systematic annual seasonal exacerbations of ulcer disease, complicated by bleeding
3. Ulcer disease was earlier complicated by perforation and became disposed to frequent exacerbations after suturing
4. The patient has frequent annual exacerbations with almost uninterrupted clinical course
5. The patient has giant callous penetrating ulcer

35. The highest acid values are in the ulcer of:
1. Fundus of stomach,
2. Antrum
3. -Pyloric canal
4. Body of stomach
5. Cardias portion of the stomach

36. What is indicated for bleeding ulcer of the body of stomach and small degree of operational risk is shown:
1. Wedge excision of bleeding ulcer with pyloroplasty and stem vagotomy
2. -Resection of the stomach with bleeding ulcer
3. Wedge-shaped excision of bleeding ulcer with selective proximal vagotomy
4. Suturing of bleeding ulcer with pyloroplasty and stem vagotomy
5. Excision of ulcer

37. What is the most informative method of perforated ulcers diagnosing?
1. Esophagogastroduodenoscopy
2. Ultrasound
3. Laparocentesis
4. -Laporoscopy
5. Survey X-ray

38. The most common complication after the ulcer of duodenal anterior wall is:
1. -Perforation
2. Bleedings
3. Penetration into the head of pancreas
4. Malignization
5. No correct answers

39. Very rare complication after duodenal ulcer is:
1. Perforation
2. -Malignization
3. Bleedings
4. Penetration
5. Cicatricial deformity of the intestine

40. Significant radiological evidence of perforation of gastroduodenal ulcer is:
1. High position of the diaphragm

2. -The presence of free gas in the abdomen
3. Pneumatization of the intestine
4. Kloiber's cups
5. Enlarged bubble of gas in the stomach

41. Regurgitation with frothy bright red blood increasing with cough is typical for:
1. Bleeding gastric ulcer
2. Tumors of the cardia
3. Mallory-Weiss syndrome
4. -Pulmonary hemorrhage
5. Osler-Weber-Rendu Syndrome

42. What is typical for perforated gastroduodenal ulcer?
1. -Sudden onset with sharp pains in the epigastrum
2. The gradual increase of pain
3. Cramping sharp pain
4. Abundant rcurrent vomiting
5. Rapidly increasing weakness, dizziness

43. What is not common for perforated gastric ulcer during the first 6 hours?
1. Sharp abdominal pains
2. Wooden belly
3. Disappearance of liver dullness
4. -Abdominal distension
5. "Falx" of gases under the cupula of diaphragm

44. What should be the first examination with suspected perforated gastric ulcer?
1. Abdominal X-ray with barium mixture
2. -Survey abdominal X-ray
3. Emergency gastroduodenoscopy
4. Angiography
5. Laparoscopy

45. What enables to determine the source of gastroduodenal bleeding?
1. Abdominal X-ray
2. Laparoscopy
3. Levin tube
4. -Gastroscopy
5. Retesting of hemoglobin and haematocrit

46. Disappearance of pains and onset of melena in duodenal ulcer is typical for:
1. Pyloroduodenal stenosis
2. Ulcer perforation
3. Ulcer malignation
4. -Bleedings
5. Penetrations into pancreas

47. Mallory–Weiss syndrome is:

1. Varicose esophageal and cardiac veins complicated by bleeding
2. Bleeding in of Meckel diverticulum ulcer
3. Bleeding from the mucous membrane on the basis of hemorrhagic angiomatosis (Osler-Rendu disease)
4. -Cracks in the cardiac part of the stomach with bleeding
5. Hemorrhagic erosive gastroduodenitis

48. Theoretically Meulengracht's diet is based on the following:
1. Sparing of the mucous coat of stomach
2. Suppression of gastric acid secretion
3. High-calorie food
4. -All answers are correct
5. There are no correct answers

49. What are the most common complication of penetrating gastric ulcer?
1. The development of pyloric stenosis
2. Malignization of ulcer
3. Development of interorgan fistula
4. -Profuse bleeding
5. Perforation

50. What defines the character of operative surgery in perforated gastric ulcer?
1. Age of the patient
2. Localization of perforated foramen
3. The degree of peritonitis intensity
4. The period from perforation
5. -All mentioned above

51. Which symptom of acute appendicitis can stimulate concealed perforation of duodenal ulcer during the first hours of the disease onset?
1. Blumberg's sign
2. Rovsing's symptom
3. -Kocher-Volkovich's sign
4. Voskresensky's symptom
5. Promtov's sign

52. Conservative therapy of perforated ulcer is permissible only in the following case:
1. The patient has no ulcerative anamnesis
2. For senile patients
3. -If there are no conditions for an emergency surgery
4. For extremely high degree of operational risk
5. For combination of gastric and duodenal ulcers

53. Forced position of the patient with legs bringing to his stomach and wooden belly is typical for:
1. Hemorrhagic pancreatic necrosis
2. Volvulus
3. -Perforated ulcer
4. Renal colic
5. Mesenteric thrombosis

54. What is indicated in an hour after the perforation of callous gastric ulcer?
1. True antrectomy
2. -Classical resection of 2/3 of the stomach
3. Suturing of perforated ulcer
4. Stem vagotomy with pyloroplasty
5. Any of these operations

55. What is not typical for bleeding duodenal ulcer?
1. Coffee ground vomiting
2. -Abdominal pain intensification
3. Decline in hemoglobin
4. Melena
5. Blood volume reduction

56. What is indicated in the relapse of ulcerative gastroduodenal bleeding?
1. -Emergency surgery
2. Urgent surgery
3. Repeated endoscopic hemostatic therapy
4. Intensive conservative hemostatic therapy

57. What is recommended under the threat of recurrence of ulcerative gastroduodenal bleeding?
1. Extremely conservative therapy
2. Emergency surgery
3. -Urgent surgery
4. Systematic endoscopic control
5. Surgical treatment is routinely

58. Operation of choice for perforated gastric ulcer in purulent peritonitis is:
1. Resection of the stomach
2. Excision of ulcer with stem vagotomy and pyloroplasty
3. -Closure of perforation
4. Selective proximal vagotomy with closure of perforation
5. Antrectomy

UNIT10. CHRONIC COMPLICATIONS OF STOMACH AND DUODENAL ULCER

1. Give the signs pointing that stomach ulcer regenerates in cancer:
1. Constant abdominal pains
2. Pains in epigastrium 10 minutes after meals
3. Heartburn
4. Anemia
5. Gastric juice anacidity
Right variants:
a) 1, 3,4.
b) 2, 3, 4.
c) 3, 4, 5.
d) -1, 4, 5.
e) Only 1 and 5.

2. The most typical complication of the front wall of duodenum is/are:
1. Malignization
2. Perforation
3. Bleeding
4. Penetration in the head of pancreas or hepatoduodenal ligament

Right variants:
a) 1, 2
b) -2, 3
c) 1, 4

3. Operative treatment is indicated for patients with duodenal ulcer in cases, when:
1. Frequent recidivation of the disease
2. The disease is complicated by voluminous bleeding
3. Pyloroduodenal stenosis
4. Ulcer perforation
5. Ulcer penetration into the head of pancreas, causing often exacerbations and signs of pancreatitis.

Choose the best combination of answers:
a) Only 1 and 2
b) Only 1 and 4
c) Only 2 and 3
d) Only 3 and 4
e) -All answers are correct

4. Compensated stage of pyloroduodenal stanosis of ulcerous origin is characterized by:
1. Splashing sound on an empty stomach
2. Vomiting in the morning
3. Barium retention in stomach for more than 12 hours
4. Hypovolemic state
5. Severe emaciation

Right variants:
a) 1, 2, 3
b) 1, 3, 4
c) 1, 4, 5
d) -All variants are incorrect
e) All variants are correct

5. Optimal method in therapy of a 28-old patient with duodenal ulcer complicated by sub-compensated duodenal stenosis is:
1. Subtotal stomach resection
2. Selective proximal vagotomy
3. -Selective proximal vagotomy combined with drain surgery
4. Truncal vagotomy
5. Posterior gastroenteroanastamosis

6. Perforated stomach ulcer is characterized by:
1. Shchiotkin-Blumberg positive sign beginning from the first hours of disease
2. Repeated vomiting.

3. Wooden belly.
4. Disappearance of liver dullness
5. «Splashing sound».

Right variants:

a) 1, 2, 4

b) -1, 3, 4

c) 2, 3, 5

d) 1, 3, 5

e) 2, 4, 5

7. 5 hours ago a perforation of stomach ulcer occurred in a 40-year-old patient, 40 years old. Optimal surgical intervention is:

1. -Classical resection of two-thirds of the stomach

2. Antrumectomy

3. Stem vagotomy and perforation suture

4. Stem vagotomy and Finney piloroplasty

5. Pure Heineke-Mikulich piloroplasty

8. The signs of chronic stomach ulcer malignisation are:

1. Loss of appetite
2. Constant pains in epigastrium
3. Achylia
4. Anaemia.
5. Increase of erythrocyte sedimentation rate

Right variants:

a) 1, 2, 4

b) 1, 3, 5

c) 2, 3, 4

d) -All variants are correct

e) All variants are incorrect

9. A patient came in hospital with decompensated pylorus stenosis, expressed by water-electrolytic disorders and convulsive. What should be indicated?

1. Emergency stomach resection

2. Emergency gastrostomy.

3. Gastroduodenostomy after a 4-hour preparation

4. -Stomach resection after 24-hour preparation

5. All variants are correct

10. During the surgery 24 hours after the disease onset a 0.5 cm perforation with thick edges was detected on the patient's front duodenal wall. The abdominal cavity contained 2 l. of purulent exudates with bile admixture. What surgery should be indicated?

1. Stomach resection

2. Truncal vagotomy with piloroplasty

3. -Ulcer suturing and abdominal cavity drainage

4. Ulcer excision with selective proximal vagotomy

5. Selective proximal vagotomy with antrumectomy

11. A 30-year-old patient came to clinic with complaints of weakness, vertigo, vomiting, tarry stool. Stomach aches are absent. What is your preliminary diagnosis?

1. Perforated ulcer (atypical)
2. Pancreatonecrosis
3. Pyloric stenosis
4. Bowel infarction
5. **-Gastrointestinal bleeding**

12. What methods are used to specify the diagnosis of gastrointestinal bleeding:

1. Plan radioscopy of abdominal cavity organs
2. Stomach radioscopy
3. Laparoscopy
4. Gastroduodenoscopy
5. Clinical blood analysis

Right variants:

a) 1, 3, 5
b) 2, 3, 5
c) 3, 4
d) 2, 3
e) -4, 5

13. Give characteristics of decompensated pyloric stenosis:

1. Vomiting previous day food
2. Abdominal wall muscle tension
3. «Splashing sound» in the empty stomach
4. Barium retardation in the stomach for more than 24 hours

Right variants:

a) 1, 2, 4
b) -1, 3, 4, 5
c) 1, 2, 4, 5
d) 1, 2, 3, 4
e) All variants are correct

14. The symptoms of stomach perforated ulcer are:

1. Knife-like pain
2. Wooden belly
3. Recurrent vomiting
4. Disappearance of hepatic dullness
5. Colicky pains in the upper part of abdomen

Right variants:

a) 2, 3
b) 1, 3, 4
c) -1, 2, 4
d) 4, 5
e) 1, 5

15. A 65-year-old patient has been suffering from ulcerous disease for 4 years. 15-hour duodenal perforated ulcer was detected. What surgery should be preferred?

1. -Perforation suturing
2. Stem vagotomy with Finney piloroplasty
3. Stomach resection
4. Gastroenteroanastomosis
5. Antrumectomy

16. Muscle tension and Shchotkin-Blumberg sign in epigastric area was detected in a patient with sharp pains in the abdomen. Hepatic dullness is decreased, pulse is 60 ictus per minute. What methods should be used to specify the diagnosis?
1. Urgent gastroduodenoscopy
2. Stomach radioscopy
3. Laparoscopy
4. Angiography
5. Plan radioscopy of abdominal cavity

Right variants:
a) 1, 2, 3
b) 2, 3, 4
c) 2, 5
d) -3, 5
e) All variants are correct

17. According to acquired data you have decided to operate a patient on for gastrointestinal bleeding. What factors determine the choice of the operative intervention?
1. Degree of hemorrhage
2. Time from the beginning of abdominal pains
3. Patient's age
4. Severe accompanying diseases
5. Stage of diastasuria

Right variants:
a) -1, 2, 3
b) 1, 4, 5
c) 2, 3, 4
d) 2, 5
e) 1, 3

18. A patient with decompensated pyloric ulcerous stenosis, evident water-electrolytic disorders and convulsive syndrome came to hospital. What measures should be indicated?
1. Emergency stomach resection
2. Emergency gastrostomy
3. Gastroduodenostomy after a four-hour preparation
4. -Elective stomach resection after compensation of water-electrolytic disorders
5. All answers are correct

19. What complication of duodenal ulcer is characterized by melena and disappearance of pains in epigastrium?
1. Piloroduodenal stenosis
2. Ulcer perforation
3. Ulcer malignisation
4. -Ulcerous bleeding
5. Penetration of ulcer into the pancreas

20. What method of diagnosing is the most informative one in detection of therapeutic approach of a patient with gastrorrhagia?
1. Stomach radioscopy
2. Plan radioscopy of abdominal cavity
3. -Gastroduodenoscopy
4. Laparoscopy
5. Celiac angiography

21. Give the factors, determining the choice of a surgery in stomach perforated ulcers:
1. Presence of peritonitis
2. Time from the moment of ulcer perforation
3. Qualification of a surgeon
4. General state and age of a patient
5. Ulcer size

Right variants:
a) 1, 2, 3, 5
b) -1, 3, 4, 5
c) 1, 2, 4
d) 1, 2, 3, 4
e) All answers are correct

22. Following clinical signs are characteristic of duodenal perforated ulcer:
1. Coffee-grounds vomiting
2. Absence of hepatic dullness
3. Wooden belly
6. Knife-like pain
7. «Splashing sound» symptom

Right variants:
a) -2, 3, 4
b) 3, 4, 5
c) 1, 3, 4
d) 2, 3, 5
e) 1, 4, 5

23. What is indicated in case of flat refusal of a patient with perforated ulcer from surgery?
1. Gastric lavage with cold water
2. Long-term nasogastric aspiration
3. Intestine stimulation
4. Antibacterial therapy
5. Trendelenburg position

Right variants:
a) 2, 3, 4, 5
b) -2, 4
c) 1, 4
d) 1, 2, 5
e) 2, 3, 5

24. What surgery is indicated for malignant ulcer of gastric antrum?
1. Truncal vagotomy with piloroplasty and ulcer excision
2. Hofmeister-Finsterer resection of two-thirds of the stomach
3. -Subtotal stomach resection with greater and lesser omentums
4. Antrumectomy
5. Gastric sleeve resection

25. Criteria for adequate preoperative preparation of a patient with decompensated pylorus ulcerous syndrome are:
1. Level of diuresis
2. Indicators of circulating blood volume
3. Hematocrit level
4. Indicators of acid-base state
5. Indicators of blood electrolytes

Right variants:

a) 3, 5
b) 2, 4, 5
c) 2, 3, 4, 5
d) -All variants are correct
e) All variants are incorrect

26. Optimal variant of surgery in treatment of duodenal ulcer, complicated by subcompensated pyloric stenosis is/are:
1. Anterior gastroenterostomy
2. Gastroduodenoanastomosis
3. Selective proximal vagotomy
4. -Selective proximal vagotomy combined with Finney piloroplasty
5. Hofmeister-Finsterer distal gastric resection

27. A patient, 30 years old, presents to hospital with complaints of weakness, dizziness, vomiting, tarry stool. Stomach pains don't disturb. The preliminary diagnosis is:
1. Perforated gastric ulcer (atypical)
2. Pancreatonecrosis
3. Pyloric stenosis
4. Intestinal infarction
5. -Gastrointestinal bleeding

28. The plan film of abdominal cavity of a patient with severe pains detected the presence of air and liquid under the cupula of diaphragm. The diagnosis is:
1. Acute pancreatitis
2. Acute cholecystitis
3. -Perforated ulcer of stomach and duodenum
4. Acute intestinal obstruction
5. Acute appendicitis

29. Optimal method of elective surgery in patients with noncomplicated duodenal ulcer is:
1. -Selective proximal vagotomy
2. Gastroenteroanastomosis
3. Bilrot-1 stomach resection
4. Proximal stomach resection
5. Stem vagotomy with pyloroplasty

30. The most rare complication of mediagastric stomach ulcer is:
1. Perforation
2. Penetration
3. Bleeding
4. -Disorders in evacuation of gastric contents
5. Malignisation

31. What of the following complications is the rarest in duodenal ulcer?
1. Perforation
2. -Malignisation
3. Bleeding
4. Stenosis
5. Penetration

32. A 27-year-old patient has been suffering from gastric ulcer for 7 years. Three times the patient was treated in hospital with temporary effect. A year ago he had gastrointestinal bleeding. The gastroscopy detects 3 mm cicatrizing ulcer in the duodenal cap. What is your therapeutic approach?

1. Inpatient drug treatment
2. Spa treatment
3. Clinical supervision
4. Out-patient treatment
5. -Operative treatment

33. Give the wrong point of view on probable reasons of anastomosis peptic ulcer after Bilroth-II gastric resection:
1. -Evident jejuna symptom
2. Zollinger-Ellison syndrome
3. The left part of antral stomach in palliative stomach resection of antral stomach durins stomach resection with absence of food passage through the duodenum
4. 1/3 of the stomach economic gastrectomy
5. Hyperparathyroidism

34. A patient has been suffering from heartburn and pains in right hypochondrium for 10 years. In recent weeks he has daily stagnant contents vomiting. 24 hours after barium hydroxide lime intake roentgenoscopy detects its major part in the stomach. What diagnosis is most probable?
1. Cardiospasm
2. Gastroduodenitis
3. Compensated pyloric stenosis
4. -Decompensated pyloric stenosis
5. Duodenal ulcer penetrating into the pancreas

35. Following measures are necessary for complex therapy of patients with decompensated pyloric stenosis:
1. Glucose-potassium mixture transfusion
2. Injection of sodium bicarbonate solution
3. Diuretics injection
4. Hemotransfusion
5. Daily gastric lavage
6. Saline injection

Right variants:
a) -1, 5, 6
b) 1, 2, 5
c) 1, 2, 6
d) 2, 3, 4
e) All variants are correct

36. A 40-year-old patient with preliminary diagnosis of acute cholecystitis was urgently operated 5 hours after the beginning of stomach pains. During the operation 1 cm hole with infiltrated edges was detected on the antral part of the stomach. The gall bladder is not altered. The abdominal cavity contains 500 ml. of serous exudate with gastric material. What is optimal surgical intervention in this situation?
1. Vagotomy with drain surgery
2. Suturing of perforated hole
3. -Classical Hofmeister-Finsterer gastrostomy
4. Finney piloroplasty

37. Give clinical situations, in which stomach resection is reasonable:
1. Acute duodenal ulcer
2. Compensated pyloric stenosis
3. Decompensated pyloric stenosis
4. 24-hour stomach perforation
5. Chronic ulcer of lesser curvature of stomach

Right variants:
a) -3, 5
b) 4, 5
c) 1, 3, 5
d) 2, 3, 4
e) All variants are correct

38. Lateral jack-knife position and wooden belly is characteristic of:
1. Ulcer penetration into lesser omentum
2. Coverted perforation
3. -Free perforation
4. Ulcer perforation into the pancreas
5. Decompensated pyloric stenosis, gastric tetany

39. Stomach ulcer perforation occurred in a 26-year-old patient 3 hours ago. The patient refused surgery. What are your actions?
1. Emergency surgery despite the patient's refusal
2. Spasokukotsky method therapy
3. Laparostomy
4. -Taylor's method therapy
5. Symptomatic therapy

40. When choosing a type of surgery in perforated ulcer a doctor first of all should follow:
1. Time from the beginning of perforation
2. Patient's age
3. Duration of ulcerous anamnesis
4. Localization of perforated ulcer
5. Size of perforated ulcer
Right variants:
a) 1, 3, 5
b) 2, 3, 5
c) 1, 3, 5
d) -1, 2, 3, 4

41. A 26-year-old patient with gastrointestinal bleeding presented to hospital. Emergency gastroduodenoscopy detected chronic gastroduodenal ulcer with a thrombosed vessel and danger of recidivation of bleeding. What is your approach?
1. -Emergency surgery
2. Conservative therapy
3. Arrest of bleeding by embolization of gastric vessels
4. Surgery in case of recidivation of bleeding
5. Ulcer application of biological adhesive

42. The factors influencing the severity of a state of a patient with ulcerous pyloroduodenal stenosis are:
1. Hypokalemia
2. Hyponatremia
3. Hypovolemia
4. Hypocalcemia
5. Hypoglycemia
Right variants:
a) 1, 2
b) 2, 4
c) 3, 5
d) -1, 2, 3

e) 2, 3, 5

43. What surgery can be performed in duodenal ulcer, complicated by pyloroduodenal stenosis?
1. Selective proximal vagotomy with drain gastric surgery
2. Antrumectomy with selective vagotomy
3. Subtotal stomach resection
4. Classical resection of 2/3 of the stomach
5. Selective proximal vagotomy (isolated)

Right variants:
a) 1, 2, 3
b) -1, 2, 4
c) 2, 3
d) 3, 5
e) Only 3

44. Which of duodenal ulcer complications, listed below, is incorrect?
1. Ulcer penetration into hepatoduodenal ligament
2. -Malignization
3. Ulcer perforation into retroperitoneal space
4. Gastrointestinal bleeding
5. Pyloroduodenal stenosis

45. The optimal method of therapy in callous gastric ulcer is:
1. -Stomach resection
2. Trancular vagotomy with ulcer excision
3. Selective vagotomy and Finney pyloroplasty
4. Gastrectomy
5. Selective proximal vagotomy

46. Give clinical situations, in which selective proximal vagotomy is reasonable:
1. Perforated ulcer of stomach body
2. Acute ulcer of forestomach
3. Compensated pyloric stenosis
4. Voluminous bleeding from duodenal ulcer
5. Chronic duodenal ulcer with frequent exacerbations

Right variants:
a) 1, 4
b) -3, 5
c) 2, 4
d) 1, 3, 4
e) 2, 3, 5

47. What is indicated to a patient with decompensated pyloric stenosis for preoperative preparation:
1. Blood transfusion
2. Injection of concentrated glucose solutions
3. Injection of Locke-Ringer's solution
4. Injection of potassium ions
5. Injection of osmotic diuretics

Right variants:
a) 1, 4, 5
b) -2, 3, 4
c) 1, 2, 3
d) 1, 3, 4
e) 3, 4, 5

48. What surgery is most reasonable if a 43-year-old patient has bleeding gastric ulcer.
1. -Stomach resection
2. Ulcer excision with trunkular vagotomy
3. Proximal vagotomy
4. Ligation of the left gastric artery branch
5. Gastrectomy

49. Ulcer perforation occurred in a 65-year-old patient 14 hours ago. What is reasonable to perform?
1. Stomach resection
2. Ulcer excision with trunkular vagotomy
3. Selective proximal vagotomy and suturing of a perforated hole
4. -Suturing of a perforated hole
5. Gastrectomy

50. The main diagnosing techniques in case of suspected ulcer perforation are:
1. Stomach radioscopy with barium
2. Plan radioscopy of abdominal cavity
3. Emergency gastroduodenoscopy
4. Ultrasonic scanning of abdominal cavity
5. Laparoscopy

Right variants:
a) 1, 3, 5
b) -2, 3, 4
c) 1, 2
d) 2, 5
e) All variants are correct

51. Clinical picture of decompensated pyloroduodenal stenosis is characterized by:
1. «Splashing sound» on the empty stomach
2. Weight loss
3. Retention of barium in stomach
4. Hypovolemic state
5. Intractable vomiting

Right variants:
a) 1, 2, 3
b) 1, 2, 4
c) 2, 3, 4
d) 2, 4, 5
e) -All variants are correct

52. Clinical picture of duodenal perforated ulcer in first 6 hours of the disease is characterized by all symptoms mentioned below, except:
1. Absence of vomiting
2. Wooden belly
3. Knife-like pain in the stomach
4. Absence of hepatic dullness
5. -Frequent call to stool

53. Give pathophysiologic shifts, characteristic of decompensated pyloric stenosis:
1. Hypervolemia
2. Anaemia
3. Metabolic alcalosis
4. Hypovolemia

5. Respiratory acidosis
6. Hypokalemia

Right variants:

a) 1, 2
b) 1, 2, 3
c) 2, 4
d) -3, 4, 5

54. Give pathophysiologic shifts, characteristic of decompensated pyloris stenosis:

1. Hypervolemia
2. Anaemia
3. Metabolic alcalosis
4. Hypovolemia
7. Respiratory acidosis
8. Hypokalemia
9. Hyperkalemia

Right variants:

a) 1, 3, 6
b) 2, 3, 6
c) 4, 5, 7
d) -3, 4, 6
e) 2, 3, 4, 7

55. What complications of ulcer are absolute indications for operation?

1. Compensated stenosis
2. Sub- and decompensated stenosis
3. Frequent exacerbations of peptic ulcer
4. Profuse bleeding
5. Ulcer malignization
6. Perforated ulcer

Right variants:

a) 1, 3, 4, 5
b) 4, 6
c) All variants are correct
d) -2, 4, 5, 6

56. Atipical perforated gastroduodenal ulcer is:

1. Free perforation
2. Penetration into the lesser omentum
3. Perforation into omental bursa
4. Perforation into retroperitoneal space

Right variants:

a) 1, 4
b) 2, 3
c) -3, 4

57. What vagotomy type should be combined with stomach drain surgery?

1. Stem vagotomy
2. Selective vagotomy
3. Selective proximal

Right variants:

a) 1, 3
b) 1, 2, 3
c) -1, 2

58. The first type of stomach ulcer according to Johnson classification of peptic ulcers is:
1. Ulcers, localizing 3 cm above the stomach
2. Ulcers, localizing 3 cm below the stomach
3. Ulcer of duodenal and gastric ulcer

Right variants:
a) 1, 3
b) 2, 3
c) -1

59. What is the difference between proximal and selective vagotomy?
1. Latarget's nerves cross
2. Latarget's nerves preservation
3. Both vagal trunks are crossed

Right variants:
a) 1, 3
b) 2, 3
c) -2

UNIT 11. BLUNT TRAUMA OF ABDOMEN

1. In case of blunt abdominal trauma the rupture of hollow organ most easily occurs and is more extensive if one is:
1. empty;
2. -filled;
3. mobile;
4. deflated;
5. atonic.

2. The most informative special diagnostic method for liver rupture is:
1. irrigoscopy;
2. gastroscopy;
3. plain X-ray film of abdomen;
4. -laparoscopy;
5. barium meal passage.

3. The "tilting doll" symptom can can be seen in case of rapture of:
1. stomach;
2. -liver;
3. pancreas;
4. Kidneys;
5. small bowel.

4. In case of blunt trauma of abdomen with bladder rupture the most informative diagnostic method is:
1. plain X-ray film of abdomen;
2. laparoscopy;
3. -contrast cystography;
4. irrigoscopy;
5. urinanalysis.

5. Ultrasonic scan as a screening method is important for visualization of:
1. -subcapsular and central hematomas of parenchymatous organs;
2. intestines rupture;
3. rupture of the bladder;

4. stomach rupture;
5. rupture of duodenum.

6. Classical symptoms of hemobilia are:
1. Attacks of pain in the right hypochondrium;
2. An intermittent jaundice;
3. Intestinal bleedings;
4. Shjotkin-Blumberg sign;
5. The "tilting doll" symptom.
Right variants:
1. -1, 2, 3;
2. 1, 4, 5;
3. 4, 5;
4. 3, 4, 5;
5. 3, 5.

7. It is usually used for hemobilia diagnosis:
1. laparocentesis;
2. laparoscopy;
3. plain X-ray film of abdomen;
4. US scan;
5. -angiography.

8. The laparoscopy is not indicated for diagnosis of:
1. peritonitis;
2. intra-abdominal bleeding;
3. trauma of pancreas;
4. –rapture of diaphragm;
5. retroperitoneal hematoma.

9. Treatment subcapsular and central hematomas of liver includes:
1. Dynamic supervision;
2. percutaneous puncture under ultrasonic control;
3. Roentgen-endovascular hemostasis;
4. surgical resection;
5. hematoma draining.
Right variants:
1. -1, 2, 3;
2. 1, 4, 5;
3. 2, 4, 5;
4. 5;
5. 4, 5.

10. The “tilting doll” symptom is characteristic for:
1. -intra-abdominal bleeding;
2. rupture of hollow organ;
3. peritonitis;
4. retroperitoneal hematoma;
5. trauma of pancreas.

11. The “tilting doll” symptom is characterised by:
1. returning in former position in attempt to turn the patient from side on back;
2. patient sits down from recumbent position;
3. patient rises from sitting position;

4. patient lays down from sitting position;
5. patient sits down from lateral position.

Right variants:

1. -1, 2;
2. 3, 5;
3. 3, 4, 5;
4. 4, 5;
5. 4.

12. To the 24 years-old male patient, 5 hours after a blunt abdominal trauma, the diagnostic laparotomy was performed. The subcapsular tense hematoma 12 x15 sm on a phrenic surface of the right lobe of the liver spreading to a visceral surface was found. What should be done:

1. puncture of the hematoma;
2. cutting capsula and a hematoma draining;
3. -placing haemostatic sutures or diathermocoagulation of injured liver parenchyma;
4. only a subhepatic space drainage;
5. take no actions.

13. 30 years-old female, 5 days after left lobe of the liver wound suturing suddenly presented with severe pains in right hypochondrium irradiated in a back, a nausea, bloody vomiting, in 2 hours – a melena. Arterial BP decreased to 100/60 mm Hg, the reason of a gastrointestinal bleeding is most likely to be:

1. erosive gastritis;
2. acute (stress) stomach ulcer;
3. chronic ulcer of the duodenum;
4.-hemobilia;
5. portal hypertension.

14. Hemostasis for the liver trauma do not include:

1. haemostatic sponge;
2. suture ligation;
3. ligation of hepatic artery and its branches;
4. resection of a liver;
5. -transhepatic drainage.

15. Liver trauma complications do not include:

1. posttraumatic hepatitis;
2. liver abscesses;
3. subphrenic abscess;
4. -Mallory-Weiss syndrome;
5. acute hepatic and renal insufficiency.

16. Following are the reasons for postoperative peritonitis after liver wounds suture ligation except:

1. liver tissue necrosis around wound after its suturing;
2. -coagulation of the affected liver tissue;
3. gauze tamponade of wound of liver;
4. destructive cholecystitis.

17. These methods are used for specification of intrahepatic hematoma location:

1. hepatoscintigraphy;
2. –plain abdominal X-ray;
3. CT;
4. US;
5. celiacohepatography.

18. The method of transnasal intestinal intubation for small intestine injury management provides:
1. Preventing bleedings;
2. Anastomosis leak prophylaxis;
3. Dehiscence of intestinal wall suture prophylaxis;
4. Promotes peristalsis restoration;
5. Provides stomach emptying.
Right variants:
1. 1, 2, 3;
2. 4, 5;
3. 3, 4, 5;
4. 1, 4, 5;
5. -2, 3, 4.

19. Diagnosis of stomach injuries includes:
1. Painful abdomen on palpation;
2. Positive Shjotkin- Blumberg sign;
3. Absence of abdominal wall tenderness;
4. Absence of hepatic dullness;
5. Peristalsis depression.
Right variants:
1. 2, 3, 4;
2. -1, 2, 4, 5;
3. 1, 3, 4, 5;
4. 3, 4, 5;
5. 2, 3, 4, 5.

20. Clinical presentations of retroperitoneal part of duodenum are:
1. Swelling and crepitation in lumbar area;
2. Peritonitis;
3. Positive Pasternatsky sign;
4. Right hypochondrium and lumbar pain;
5. Crepitation at rectal examination.
Right variants:
1. 1, 2, 3;
2. 1, 2, 4, 5;
3. -1, 3, 4, 5;
4. 1, 2, 4, 5;
5. 1, 2, 3, 4, 5.

21. Intraoperative diagnostics of rupture of retroperitoneal part of duodenum is based on presence in retroperitoneal space of:
1. Blood (red colour);
2. Bile (yellow colour);
3. Food mass;
4. Air bubbles;
5. Pancreatic juice.
Right variants:
1. 1, 2, 3;
2. 2, 3, 4;
3. 3, 4, 5;
4. 1, 3, 5;
5. -1, 2, 4.

22. Injury of intestine diagnostics includes:

1. Pain in site of perforation;
2. Positive Shjotkin-Blumberg sign;
3. Abdominal wall tenderness;
4.Shortening of hepatic dullness;
5. Pain at palpation of anterior wall of rectum.
Right variants:
1. 1, 4, 5;
2. 1, 3, 4;
3. -2, 3, 4, 5;
4. 1, 2, 3, 5;
5. 1, 2, 4, 5.

23. Diagnostic laparocentesis with rummaging catheter is not informative for:
1. intrabdominal bleeding;
2. intestine rupture;
3. -a pancreas trauma;
4. peritonitis;
5. gallbladder rupture.

24. The blood reinfusion in case of massive intrabdominal bleeding is not possible in ruptures of:
1. liver;
2. -stomach;
3. spleen;
4. bladder;
5. gallbladder.

25. Before blood reinfusion from abdominal cavity after parenchymatous organs rupture, it is necessary to:
1. specify haemoglobin level in the collected blood;
2. count pulse and measure arterial pressure;
3. define bilirubin level in the collected blood;
4. -exclude infectiousness and hemolysis of collected blood;
5. execute all above;

26. Semiology of intraabdomenal bleeding includes:
1. distention of abdomen which does not take part in breath;
2. tenderness of abdomen and its scaphoid form;
3. Painful abdomen without muscle tenderness (Kulenkampf's sing)
4. doubtful signs of peritoneal irritation;
5. "tilting doll" symptom.
Right variants:
1. 1, 2, 4;
2. 2, 5;
3. -1, 3, 4, 5;
4. 2, 3, 4, 5;
5. 2, 4, 5.

27. Trauma of which organ do not lead to intraabdominal bleeding:
1. liver;
2. -pancreas;
3. spleen;
4. mesenterium
5. pelvis veins.

28. Trauma of what organ causes peritonitis:
1. liver;
2. spleen;
3. retroperitoneal part of duodenum;
4. sigmoid;
5. mesenterium.
Right variants:
1. -4;
2. 3, 5;
3. 1, 4, 5;
4. 1, 4;
5. 1, 3, 4.

29. Liver trauma clinical presentation includes:
1. Pale skin;
2. Abdominal wall does not participate in the action of breath;
3. Scaphoid abdomen;
4. Pain on palpation, especially in right hypochondrium;
5. Bradycardia and low arterial pressure.
Right variants:
1. 1, 3, 4;
2. 2, 3, 5;
3. 3, 4, 5;
4. -1, 2, 4, 5;
5. 1, 3, 5.

30. During laparoscopy in case of liver rupture in an abdominal cavity only bile is present:
1. yes;
2. -no.

31. Plain abdominal film for rupture of hollow organ shows sickle-shape free gas collection under diaphragm:
1. -yes;
2. no.

32. In case of blunt abdominal trauma with bladder rupture the most informative investigation is:
1. plain abdominal film;
2. laparoscopy;
3. -contrast cystography;
4. irrigoscopy;
5. urinanalysis.

33. Laparoscopy is used to specify localisation and character of injury of the:
1. liver;
2. diaphragm;
3. small intestines;
4. spleen;
5. bladder.
Right variants:
1. 1, 2, 4;
2. 1, 2, 3;
3. -1, 4, 5;
4. 1, 2, 4, 5;
5. 1, 2, 5.

34. Loop ileostomy for colon injury is performed in case of:
1. circular wall rupture;
2. mesocolon rupture;
3. peritonitis;
4. retroperitoneal hematoma;
5. wall crushing.
Right variants:
1. -3, 4;
2. 1, 3, 5;
3. 1, 2, 3;
4. 4, 5;
5. 2, 4, 5.

35. Clinical symptoms of rupture of GIT organs do not include:
1. Shjotkin-Blumberg sign;
2. An abdominal distention and peristalsis depression;
3. Dullness of percussion sound over sloping places of abdomen;
4. Shortening or disappearance of hepatic dullness;
5. –Painful abdomen without muscle tenderness (Kulenkampf`s sing).

36. Investigations for liver trauma include:
1. laparoscopy;
2. laparocentesis;
3. scintigraphy;
4. angiography;
5. irrigography.
Right variants:
1. 1, 2, 4;
2. 2, 3, 5;
3. -1, 2, 3, 4;
4. 1, 4, 5;
5. 1, 2, 4, 5.

37. Ultrasonic scan for blunt abdominal trauma is informative in case of:
1. Subcapsular hematomas;
2. Central (intraorganic) hematomas;
3. Free liquid in abdominal cavity;
4. Small intestines traumas;
5. Traumas of duodenum.
Right variants:
1. 1, 4;
2. -1, 2, 3;
3. 1, 2, 5;
4. 3, 4, 5;
5. 1, 2, 4, 5.

38. Treatment of the superior retroperitoneal hematoma includes:
1. Opening, emptying and drainage of hematoma;
2. -№1+ administration of nutritional tube below Trejtz ligament;
3. №1 + gastroenteroanastomosis;
4. Refusal of hematoma drainage with gastroenteroanastomosis;
5. Refusal of hematoma drainage.

39. During diagnostic laparoscopy presence of wound in sigmoid 0,8x on 0,2 sm in size was found, there were slept colon and no intestinal content leaking through a wound. Choose an adequate variant of surgical tactics:
1. Wounds laparoscopic suturing, divulsion of anus with colon intubation above wound level;
2. –Laparotomy, wound suturing, abdominal cavity revision, divulsion of anus;
3. Laparotomy, resection of sigmoid by Hartman with artificial anus formation;
4. Deducing of wounded part of colon on abdominal wall (Like stoma);
5. Laparotomy, wound suturing.

40. Methods of heamostasis for liver trauma are not:
1. criodistruction;
2. non-contact to laser and plasma coagulation;
3. closing by "TachoKomb";
4. -transhepatic drainage;
5. resection of the liver with vessels ligation.

UNIT 12. CHEST TRAUMA

1. The minor hemothorax is a presence of blood in pleural cavity up to:
1. -level of 7-8 edges
2. level of 5-6 edges
3. level of 2-3 edges

2. The moderate hemothorax is a presence of blood inpleural cavity up to:
1. level of 1-2 edges
2. -level of 5-6 edges
3. level of 7-8 edges

3. The major hemothorax is a presence of blood in pleural cavity up to:
1. -level of 1-2 edges
2. level of 4-5 edges
3. level of 6-7 edges

17 years-old patient arrived in hospital complaining of sudden sharp pain in the left half of the chest, shortness of breath. Your presumable diagnosis is:
1. -spontaneous pheumothorax
2. internal bleeding
3. myocardial infarction

4. The most frequent reason for spontaneous pheumothorax is:
1. -bullous lung disease
2. rupture of a cyst
3. pneumonia

5. Management of spontaneous pheumothorax at hospital admission is:
1. -puncture of pleural cavity
2. drainage of pleural cavity
3. thoracotomy

6. 25 years-old patient, has arrived in hospital with the knife wound of the right thorax side. What signs will testify that wound is penetrating:
1. bleeding from the wound
2. -presence of subcutaneous emphysema
3. pain in place of the wound

7. In case of blunt chest trauma most often happening:
1. –ribs fractures
2. clavicle fractures
3. scapula fractures
4. sternum fractures

8. 56 years-old patient, was admitted in clinic 7 days after blunt chest trauma with complaints of pain in the chest, evening fevers. What complication after a trauma has arisen at the patient:
1. pneumonia
2. lung rapture
3. peritonitis
4. –clotted hemothorax

9. First aid for open pheumothorax is consist of:
1. pain relief
2. wound site infection prophylaxis
3. –transferring an open pheumothorax into closed

10. The patient, 26 years, has arrived in hospital with the knife wound of the chest. At observation– condition is severe, extreme shortness of breath, tachycardia, there is lacerated, moderately bleeding wound on the anterior lateral side of chest wall. During inspiration wound edges dehisce, during exhalation-collapse. What complication takes place:
1. -valval pheumothorax
2. intrapleural bleeding
3. large bronchus injuring

11. First aid for valval pheumothorax should be it transformation:
1. into closed pheumothorax
2. –into open pheumothorax
3. application of aseptic bandage

12. Clotted hemothorax management includes:
1. conservative therapy
2. pleural cavity puncture with lavage
3. -operative treatment

13. The patient, 66 years, has arrived in hospital 2 weeks after blunt chest trauma with dyspnea 24-26 in a minute with pain of left half of the chest . There are no respiration sounds in lower part of the chest on auscultation, and there is dullness on percussion. What complication takes place:
1. left sided interlobar pneumonia
2. rupture of the diaphragm

3. -clotted hemothorax

14. The patient, 65 years old, has arrived in clinic with pain in the left half of the chest. In the anamnesis: 3 weeks ago the car accident took place. There most likely to be:
1. clotted hemothorax
2. -diaphragm rupture
3. pneumothorax

15. 65 years old patient admitted with fracture of 5-6-7 ribs on the left midaxillary and midclavicular lines. With expressed dyspnea 28-30 in minute, there are not present signs of hemo- and pneumothorax. What complication is there:
1. leftsided pneumonia
2. pain shock
3. -floating thorax

16. The patient, 30 years old, arrived in clinic with the knife chest wound in a heart projection. A patient's condition is serious but stable: pulse 92 BPM, a BP of 110/60 mmHg. What investigations should be done for diagnosing wound of the heart:
1. pleural cavity puncture
2. electrocardiogram (ECG)
3. –chest roentgenography in a direct lateral and left lateral projection

17. The patient, 62 years old, arrived in clinic after car accident in a critical condition with a brain concussion, blunt chest trauma without ribs fractures. Chest X-ray shows a right-sided pneumothorax, a pneumomediastinum. What complication takes place:
1. lung rupture
2. rupture of mediastinal pleura
3.lung contusion
4. -large bronchus rupture

18. The patient, 42 years, arrived with blunt chest trauma with fracture of 3 ribs from left side. X-ray shows massive hemothorax. On puncture from pleural cavity dark not clotted blood is evacuated. What is the tactic:
1. thoracotomy should be performed
2. -thoracocentesis with hemothorax drainage
3. antibacterial therapy

19. The patient, 67 years, arrived in hospital after falling from 4- meters height. On X-ray – a total right sided pneumothorax without ribs fractures. On thoracocentesis and a drainage of pleural cavity there was air escape and lung did not spread. What complication came:
1. lung rupture
2. diaphragm rupture
3. –large bronchus rupture

20. 19 years old patient, admitted with knife wound of right side of the chest in critical condition with an unstable hemodynamic and low hematological values. Thoracocentesis removed about 1 liter of fresh blood. What is the surgeon tactic:

1. drain pleural cavity
2. do primary wound toilet
3. -thoracotomy with hemostasis

21. The patient, 21 years, admitted in hospital with diagnosis of spontaneous pneumothorax. There was thoracocentes is performed with two days passive, and three days active aspiration hemothorax drainage. The lung partially stretched, however, 1/3 collapsed. What further actions should be:
1. continue active aspiration
2. make chemical pleurodesis
3. –do surgery for pneumostasis

22. The patient, 28 years old, arrived in hospital with the knife wound in a heart projection in extremely critical condition. A BP of 60/10 mm. Hg, pulse 140 In minute Thready pulse of weak filling and pressure. What is the tactics:
1. substitution therapy
2. chest X-ray
3. –emergency surgery with substitution therapy on operating table

23. The patient, 17 years, admitted in hospital with moderate chest pain without signs of impairment of respiratory and cardiovascular system. On chest roentgenogram there is minor apical pneumothorax. What treatment is recommended:
1. pneumocentesis
2. thoracocentesis
3. -conservative therapy

24. 36 years old female patient, during tracheal intubation for elective surgery and connection to ALV (artificial lung ventilation) device presented acute respiratory insufficiency, there was air crepitation on a neck. What complication arose during an intubation?
1. -gullet damage
2. trachea damage
3. throat damage

25. The patient, 68 years old, admitted in hospital with the expressed under subcutaneous emphysema of trunk and face. On chest X-ray –subcutaneous gas , pneumothorax signs is negative. The reason of subcutaneous emphysema?
1. rupture of large bronchus
2. –pleural rupture by adhesion in the obliterated pleural cavity
3. abscess disruption in pleural cavity

26. The patient, 48 years, was treated in regional hospital for fracture of 2 ribs on the right side, complicated by minor hemothorax. Punctures of a pleural cavity were not performed. The condition of the patient was satisfactory. However, last days the patient had a fever up to 38-38,5oC. What complication arose?
1. pneumonia
2. ribs osteomyelitis
3. -suppuration of hemothorax with empyema formation

27. What operation is indicated for patients with formed fibrothorax after chest trauma complicated by hemothorax:
1. puncture of pleural cavity
2. thoracocentesis with active aspiration
3. conservative anti-inflammatory therapy
4. -thoracotomy with lung decortication

28. The patient, 36 years, admitted with complaints of intensive epigastric pain, left side chest pain, a coffee-ground vomiting. In anamnesis – 3 weeks ago discharged from other hospital where was treated for brain concussion after car accident. What pathological condition this patient has?
1. stomach peptic ulcer complicated by hemorrhage
2. lover lobe left sided pleuropneumonia
3. -diaphragm rupture from the left with stomach strangulation

29. The patient, 67 years old, admitted in hospital with complaints of left side chest pain. In anamnesis - 2 hours ago fell from ladder and hit left half of body. On chest roentgenogram there is fracture of 7-8 ribs on midaxillar line without signs of hemo- and pneumothorax. What serious complication this trauma could cause?
1. Diaphragm rupture
2. lung contusion
3. heart contusion
4. –spleen rupture

30. The patient, 72 years old, admitted with complaints of general weakness, dizziness. In anamnesis: worked in a garden, has fallen from a tree. A condition serious but stable, moderate pallor of skin, pulse 105 BPM. A BP of 105/60 mmHg. Chest X-ray – fracture of 8-9 ribs at midclavicular line. CBC: Hb - 75 g/l, RBC – 2,3x 10/12. What complication has arisen after blunt chest trauma?
1. hemothorax
2. pneumothorax
3. lung contusion
4. -rupture of a spleen

31. The contusion or bruise of a lung of I degree due to blunt chest trauma is characterized by:
1. - rupture of blood capillaries with subpleural hemorrhages formation on lung periphery
2. hemorrhage inside alveoli and lung parenchyma
3. total pneumothorax

32. The patient, 32 years old, admitted an hour after car accident with presentation of traumatic shock. On observation – patient's condition is critical, conscious, coughs with foamy blood. There are no signs of ribs fractures and pneumothorax. What causes pneumorrhagia?
1. rupture of large bronchus
2. I degree lung contusion
3. -II-III of degree lung contusion
4. hemothorax

33. The patient, 32 years old, admitted with complaints of pain in the side of wound of the left half of chest. On admition - condition is satisfactory. Pulse 80 BPM. BP - 120/75 mmHg In heart projection is wound

0,5-0,8 cm without signs of bleeding. Patient is hospitalised in surgical ward. In 1 hour his condition has sharply deteriorated: BP 60/20 mm Hg, thready pulse 140 BPM, skin covered with cold clammy sweat. What complication happened?

1. pheumothorax
2. intrapleural bleeding
3. –cardiac tamponade

UNIT 13. PERITONITIS

1. Normally, an adult's abdominal cavity contains serous fluid of:
1. -20 ml
2. 80 ml
3. 120 ml
4. 200 ml
5. 220 ml

2. Hemorrhagic exudate in the abdominal cavity is not observed in:
1. Acute pancreatitis
2. -Acute cholecystitis
3. Mesenteric vessels trombosis
4. Mesenteric vessels embolism
5. Intestinal obstruction

3. Onset of acute peritonitis is accompanied by abdominal pains in:
1. 50% of patients
2. 50-75% of patients
3. 75-90% of patients
4. -100% of patients

4. Onset of acute peritonitis is accompanied by tension of abdominal muscles in:
1. 15-25% of patients
2. 35-50% of patients
3. -85-90% of patients
4. 100% of patients

5. Free gas in abdominal cavity in perforation of hollow organs occurs in:
1. 20-40% of patients
2. -60-75% of patients
3. 100% of patients

6. In what acute peritonitises peristaltic intestinal murmurs are observed?
1. Colibacillary peritonitis
2. Abdominal typhoid peritonitis
3. -Pneumococcal peritonitis
4. Mixed infection

7. A 14-year-old girl has been suffering from acute bronchitis during 3 days, after what she felt acute pains in the abdomen. She had vomiting, diarrhea, lips cyanosis, 110 bpm pulse, abdominal wall muscle tension, pain in the whole abdomen. Leucocytosis was $38x10^9$/l, ESR was 24 ml/h. Pneumococcal peritonitis was diagnosed. What is your therapeutic approach?

1. Emergency surgery
2. -Antibiotic therapy
3. Disintoxication therapy

8. A 46-year-old patient had appendectomy on acute gangrenous appendicitis. 5 days later he felt dull underbelly pains, tenesmus, pains during defecation, insignificant whites in urination. Temperature increased to 37,8 - 38,5^{o}C. What is your supposed diagnosis?

1. Acute proctitis
2. Acute hemorrhoids
3. Diffuse peritonitis
4. -Douglass abscess
5. Acute cystitis

9. The most often reason of peritonitis is:
1. -Acute appendicitis
2. Perforated ulcer
3. Salpingitis
4. Small bowel strangulation
5. Stomach cancer

10. Reactive stage of peritonitis lasts:
1. 4 - 6 hours
2. -24 hours
3. 48 hours
4. 72 hours
5. More than 72 hours

11. In primary peritonitis the peritoneum infection occurs:
1. In stomach ulcer perforation
2. In vermiform appendix perforation
3. In ansexitis
4. -By hematogenic way
5. In the intestinal wound

12. Following sign are not characteristic of peritonitis:
1. Abdominal wall muscles tension
2. -Courvoisier's symptom
3. Rapid pulse
4. Flatus retention
5. Vomiting

13. Following sign are not characteristic of peritonitis:
1. Tachycardia
2. Dry tongue
3. Anterior abdominal wall muscles tension
4. Absence of intestinal peristalsis
5. -Diarrhea

14. The main peritonitis symptom is:
1. Vomiting
2. Stomach pains
3. Melena
4. Stool and gases retention
5. -Anterior abdominal wall muscles tension

15. Peritonitis can be the result of all following diseases except:
1. Diverticulum of Meckel perforation
2. Crohn's disease
3. -Large duodenal papilla stenosis
4. Richter hernia strangulation
5. Acute intestinal obstruction

16. Symptoms that don't correspond to subdiaphragmatic abscess are:
1. Pain while breathing in the right part of the chest and in the upper abdomen.
2. Painfulness when pressing the lower ribs
3. Hectic temperature
4. -Kloyber's cups
5. Expansion of hepatic dullness boundaries

17. All symptoms mentioned below can take place in subdiaphragmatic abscess except:
1. Reduction of respiratory lung excursion
2. High-riding cupula of diaphragm
3. Consensual exudates in the pleural cavity
4. Pains irradiated in supraclavicular area
5. -Diarrhea

18. The best variant of subdiaphragmatic abscess treatment is:
1. Conservative therapy
2. Extraperitoneal opening and drainage
3. Laparotomy, opening and cavity tamponade
4. -Ultrasound guided puncture of an abscess with a thick needle
5. Everything mentioned is correct

19. The best method of subdiaphragmatic abscess opening is:
1. Thoracolaparotomy
2. Lumbotomy
3. Two-stage transpleural approach
4. Laparotomy by Fedorov
5. -Extrapleural extraperitoneal method

20. What is indicated in Douglas abscess?
1. Puncture via abdominal wall
2. Therapeutic enema
3. Opening via abdominal wall
4. -Puncture, opening and drainage via the rectum
5. Conservative therapy

21. Midline laparotomy should be performed in:
1. -Diffuse peritonitis
2. Local diffuse peritonitis
3. Douglas abscess
4. Appendicular infiltrate

5. Acute appendicitis

22. Bile-coloured fluid in the abdominal cavity is observed in all cases except:
1. Ruptured gallbladder
2. -Rupture of a suppurated hepatic hydatid
3. Lasting obstructive jaundice
4. Duodenal ulcer perforation
5. Spontaneous bile peritonitis

23. Blood-coloured fluid in the abdominal cavity is observed in all cases except:
1. -Tuberculosis peritonitis
2. Extrauterine pregnancy disorders
3. Mesenterial thrombosis
4. Acute pancreatitis
5. Twisted ovarian cyst

24. Fibrinous overlay on the peritoneum is impossible in following type of peritonitis:
1. -Serous
2. Fibrinous
3. Purulent
4. Putrid
5. Fecal

25. All the symptoms are characteristic of the late peritonitis stage, except:
1. Bloating
2. Pypovolemia
3. Intestinal murmur disappearance
4. Hypoproteinemia
5. -Increased peristalsis

26. How is peritonitis diagnosed before the surgery?
1. Roentgenologically
2. Anamnestically
3. By laboratory definition of signs of the inflammatory reaction воспалительной реакции
4. -According to clinical signs
5. By the level of gastric juice secretion

27. A 70-year-old patient with circulatory deficiency of the II-III stage has symptoms of a five-day diffuse peritonitis. What is the therapeutic approach?
1. Emergency surgery after 24-hour preparation
2. Emergency surgery after cardiac drugs injection
3. Emergency surgery after a short-term 2-3-hour infusion therapy
4. Surgery after total liquidation of blood volume and protein electrolyte components deficit
5. -Emergency surgery immediately after making a diagnosis and correction of circulatory deficiency during the surgery.

28. What is the optimal way of antibiotic injection in patients with diffused peritonitis in a postoperative period?
1. Subcutaneously
2. Intramuscularly
3. Intravenously

4. Intra-arterially
5. Intraperitoneally

Choose the correct answer combination:

a) 1, 2, 3, 4
b) 2, 3, 4
c) 1, 3, 4, 5
d) 1, 4, 5
e) -2, 3, 4, 5

29. The leading symptom of peritonitis is:

1. Vomiting
2. Abdominal pains
3. Blood in stool
4. Stool and gases retention
5. -Abdominal wall muscles tension

30. Give the correct criteria, approving midline laparotomy approach in diffuse purulent peritonitis:

1. Total revision of the abdominal cavity
2. Optimal sanation of the abdominal cavity
3. Minimal trauma of the abdominal wall
4. Minimal blood loss
5. Minimal degree of a wound infection

Right variants:

a) -1, 2
b) 1, 2, 3
c) 3, 4, 5
d) Only 1
e) Only 2

31. Point the necessary measures, performed during the surgery on widespread fibronous-purulent peritonitis:

1. Removal or localization of peritonitis source
2. Abdominal cavity sanation
3. Intestinal decompression
4. Abdominal cavity drainage
5. -All variants are correct

32. What for is nasointestinal intubation is performed in treatment of widespread purulent peritonitis?

1. Follow-up of fluid loss through the gastrointestinal tract
2. Intestinal lavage
3. Feeding of a patient through a probe
4. Medicines injection
5. Intestinal obstruction prevention

Choose the correct answer combination:

a) Only 1
b) 3, 4
c) -2, 3, 4, 5
d) 1, 3, 4, 5
e) Only 5

33. Everything mentioned below is characteristic of a hollow organ free perforation except:

1. Acute beginning of pains
2. "Wooden belly"

3. Collapse
4. -Polyuria
5. Tachycardia

34. What symptoms belong to the primary stage of peritonitis?
1. Painfulness of the pelvic peritoneum in rectal investigation
2. Tendency to tachycardia
3. Evident water-electrolytic disorders
4. Anterior wall abdominal muscles tension
5. Tendency to leucocytosis increase
Choose the correct answer combination:
a) -2, 4, 5
b) 1, 4, 5
c) 2, 5
d) 3, 4, 5
e) 1, 5

35. Pathognomonic symptom of a free hollow organ perforation is:
1. High leucocytosis
2. Absence of intestinal murmur
3. -Pneumoperitoneum
4. Positive symptoms of peritoneum irritation
5. Dullness of percussion sound in sloping areas of the abdominal cavity

36. During a surgery on acute intestinal obstruction and peritonitis a tumour of the ascending colon, without commissures with surrounding tissues and bowel perforation in the area of a tumor was detected. Determine the volume of surgery:
1. -Right hemicolectomy
2. Perforation suturing, ileotransversostomy
3. Perforation suturing, terminal ileostomy
4. Perforation suturing only
5. Cecostomy only

37. How is widespread peritonitis diagnosed before a surgery?
1. By roentgenologic methods
2. By ultrasonic scanning
3. By laboratory definition of inflammatory reaction signs
4. -Clinically
5. Anamnestically

38. Give the reason of use of metronidazole derivatives as a compulsory component of widespread peritonitis antibacterial therapy
1. -Elimination of anaerobic microflora
2. Elimination of fungous microflora
3. Elimination of aerobic microflora
4. Prophylaxis of helminthic invasion
5. Prophylaxis of generalized candidiasis

39. Give possible routes of antibacterial drugs introduction in therapy of general purulent peritonitis:
1. Intravenous
2. Endolymphatic
3. Intra-arterial
4. In the abdominal cavity
5. In the gastrointestinal tract

Choose the correct answer combination:
a) 1, 2, 4
b) 1, 2, 3, 4
c) -1, 2, 3, 4, 5
d) Only 1
e) 1 and 4

40. In what type of peritonitis fibrinous overlays on the parietal and visceral peritoneum are observed.
1. Serous
2. Purulent
3. Fecal
4. Putrefactive
5. Fibrinous
Choose the correct answer combination:
a) -2, 3, 4, 5
b) 2, 3, 4
c) 3 and 4
d) Only 5
e) All variants are correct

41. In suspected Douglas abscess all the listed diagnosing techniques are indicated except:
1. Rectal investigation
2. -Proctosigmoidoscopy
3. Ultrasonography
4. Computer tomography
5. Vaginal investigation

42. If subdiaphragmatic abscess is suspected following diagnosing techniques are indicated:
1. -Laparoscopy
2. Ultrasonography
3. Fluoroscopy of chest
4. Abdominal cavity radiography
5. Computer tomography

43. Which of the following diseases can be the reason of pseudo-peritoneal syndrome?
1. Dissecting aneurysm of the abdominal aorta
2. Retroperitoneal hematoma
3. Pneumothorax
4. Nephrolithiasis
5. Pelvic veins thrombosis
Right variants:
a) 1 and 2
b) 1, 2, 3
c) Only 1
d) -All variants are correct
e) 1, 2, 3, 4

44. Everything mentioned below is characteristic of subdiaphragmatic abscess expect:
1. Reduction of pulmonary respiratory excursion
2. High-riding cupula of diaphragm
3. Concomitant pleuritis
4. Basal pulmonary collapse
5. -Hemoptysis

45. Agents, provoking peritonitis are:
1. Urine in rupture of urinary bladder
2. Stomach contents in ulcer perforation
3. Blood in abdominal traumas
4. Bile in gallbladder perforation
5. Air in the abdominal cavity after laparoscopic examination
Right variants:
a) -1, 2, 3, 4
b) 2, 3, 4, 5
c) 1, 2, 4, 5
d) 1, 2, 3, 5
e) 1, 3, 4, 5

46. Peritonitis develops in following forms of acute appendicitis:
1. Appendicular colic
2. Catharal appendicitis
3. Phlegmonous appendicitis
4. Gangrenous appendicitis
5. Perforative appendicitis
Right variants:
a) 1, 2, 4
b) 2, 3, 4, 5
c) 1, 2, 3, 5
d) 1, 3, 4, 5
d) -3, 4, 5

47. According to exudates character peritonitis are subdivided into:
1. Serous
2. Fibronous
3. Purulent
4. Hemorrhagic
5. Fecal
Right variants:
a) -1, 2, 3, 4
b) 1, 2, 3, 4, 5
c) 1, 3, 4, 5
d) 1, 2, 5
e) 2, 3, 4, 5

48. Peritinitis complications are:
1. Subdiaphragmatic abscess
2. Subhepatic abscess
3. Intraintestinal abscess
4. Pelvic abscess
5. Gastric contents in the right lateral canal in perforated ulcer
Right variants:
a) 1, 2, 3, 5
b) -1, 2, 3, 4
c) 1, 2, 4, 5
d) 2, 3, 4, 5
e) 1, 3, 4, 5

49. There are following stages in classical peritonitis course:
1. Early

2. Late
3. Reactive
4. Toxic
5. Terminal

Right variants:

a) 1, 2, 3, 4, 5
b) 1, 3, 4, 5
c) -3, 4, 5
d) 2, 3, 4
e) 2, 3, 4, 5

50. Following signs are characteristic of terminal stage of peritonitis

1. Adynamy
2. Hyperthermia
3. Tachycardia
4. Drop in blood pressure
5. Resonating intestinal obstruction

Right variants:

a) 1, 2, 3, 4, 5
b) 1, 3, 4, 5
c) 1, 2, 4, 5
d) -1, 2, 3, 4
e) 2, 3, 4, 5

51. What is concerned to localized peritonitis?

1. Subdiaphragmatic abscess
2. Subhepatic abscess
3. Intraintestinal abscess
4. Primary peritonitis
5. Vesicorectal area abscess

Right variants:

a) 1, 2, 3, 4
b) 1, 3, 4, 5
c) 1, 2, 3, 4, 5
d) 2, 4, 5
e) -1, 2, 3, 5

52. Complex therapy of purulent peritonitis includes:

1. Surgery
2. Disintoxication
3. Correction of metabolic disorders
4. Adequate antibiotic therapy
5. Fight against enteroparesis

Right variants:

a) 1, 2, 3, 4
b) 1, 2, 4, 5
c) 2, 3, 4, 5
d) -1, 2, 3, 4, 5
e) 1, 3, 4, 5

53. Positive sign in course of acute peritonitis is:

1. Leucocytes reduction
2. Reduced leukocyte index of intoxication
3. Increase in total blood protein level

4. Reduction of residual nitrogen
5. Elevated C-reactive protein
Right variants:
a) 1, 2, 4, 5
b) 1, 3, 4, 5
c) -1, 2, 3, 4
d) 2, 3, 4, 5
e) 1, 2, 3, 4, 5

54. Diagnostic criteria of anaerobic peritonitis are:
1. Rapid progress of a disease
2. Severe septic intoxication
3. Evident enteroparesis
4. A lot of greenish-brown exudates
5. Stinking putrefactive odor of the abdominal cavity exudates
Right variants:
a) 1, 2, 3, 4
b) 1, 2, 3, 4, 5
c) 2, 3, 4, 5
d) -1, 2, 3, 4, 5
e) 1, 2, 3, 5

55. Staying of drains in the abdominal cavity for a long time can cause:
1. Bedsores
2. Bleeding
3. Additional infection
4. Commissure formation
5. Intestinal colic development
Right variants:
a) 1, 2, 4, 5
b) 1, 3, 4, 5
c) 1, 2, 3, 4, 5
d) 2, 3, 4, 5
e) -1, 2, 3, 4

56. Prophylaxis and therapy of postoperative enteroparesis in peritonitis are:
1. Procaine block of the root of mesentery
2. Small bowel intubation with a long probe
3. Enterosorption
4. Transcutaneous electrical stimulation of the intestine
5. Enteral tube feeding
Right variants:
a) 1, 2, 5
b) 1, 3, 4, 5
c) -1, 2, 3, 4, 5
d) 2, 3, 4, 5
e) 1, 2, 3

57. What is characteristic of reactive stage of purulent peritonitis?
1. Acute pain in the stomach during palpation
2. Positive Blumberg's sign
3. Steady bloating
4. Tachycardia
5. Absence of the intestinal peristalsis

Right variants:
a) 1, 2, 4, 5
b) 2, 3, 4, 5
c) 1, 3, 4, 5
d) 1, 2, 3, 5
e) -1, 2, 3, 4

58. In peritonitis detoxication methods are:
1. Lymphosorption
2. Hemosorption
3. Enterosorption
4. Plasmapheresis
5. Early antibiotic therapy
Right variants:
a) 1, 2, 3, 4
b) 1, 2, 3, 5
c) 1, 3, 4, 5
d) -2, 3, 4
e) 1, 2, 4, 5

59. Relaparotomy in general purulent peritonitis has following goals:
1. Repeated abdominal cavity revision
2. Repeated lavage
3. Removal of pus under visual control
4. Control over intestinal suture hermeticity
5. Normalization of urinary bladder function
Right variants:
a) -1, 2, 3, 4
b) 1, 2, 4, 5
c) 1, 2, 3, 4, 5
d) 2, 3, 4, 5
e) 1, 2, 3, 5

60. Favourable result of treatment of patients with peritonitis depends on:
1. Early surgical intervention
2. Adequate surgical help
3. Intravenous antibacterial therapy
4. Normalization of volume of blood circulation
5. Methods of extracorporeal detoxication
Right variants:
a) -1, 2, 3, 4, 5
b) 1, 3, 4, 5
c) 1, 2, 3, 5
d) 2, 3, 4, 5
e) 1, 2, 3, 4

61. Laparostomy in diffuse peritonitis is used for:
1. Repeated sanations of the abdominal cavity
2. Change of drainages
3. Removal of pus and fibrinous overlays
4. Correlation of the revealed pathologic changes in the abdominal cavity
5. Machine stomach and intestinal suturing
Right variants:
a) 2, 3, 4, 5

b) 1, 2, 3, 5
c) -1, 2, 3, 4
d) 1, 3, 4, 5
e) 1, 2, 4, 5

62. The signs of diffuse peritonitis are:
1. Bloating
2. Absence of peristaltic intestinal murmur
3. Painfulness of all stomach departments in palpation
4. Steady tension of anterior abdominal wall muscles
5. Blumberg's sign

Right variants:
a) 2, 3, 4, 5
b) 1, 2, 3
c) 1, 3, 4, 5
d) 1, 2, 3, 4
e) -1, 2, 3, 4, 5

UNIT 14. DISEASES OF AORTA AND ITS BRANCHES

1. Radiologic signs of aneurysm of aorta thoracica include:
1. Dilatation of vascular fascicle to the right
2. Bulging of the right wall of ascending aorta
3. Shift of the contrasted oesophagus
4. **-Everything mentioned**

2. Clinical signs of abdominal aorta aneurysm are:
1. Palpable pulsatile lump in the abdominal cavity
2. Systolic murmur over the lump in auscultation
3. Stomach pains
4. **-Everything mentioned**

3. What signs are characteristic of Leriche's syndrome:
1. Pulselessness in the femoral artery
2. Impotence
3. Intermittent claudication or critical ischemia
4. Angiographically detected occlusive process in the bifurcation area of abdominal aorta
5. **-Everything mentioned**

4. What signs are not characteristic of aortic arch syndrome:
1. Sexual dysfunction with erection and ejaculation disorder
2. Pulselessness in the lower limbs
3. Stomach pains after eating
4. Weakness and rapid fatigability of lower limbs
5. Claudicatio intermitens
6. **-Everything mentioned**

5. Selective vessel involvement in nonspecific aorta-arteritis concerns:
1. Arch of aorta vessels
2. Abdominal aorta vessels
3. Renal artery
4. Coronary artery
5. **-Everything mentioned**

6. What are the methods of X-ray aorta and its branches examination in the puncture of arterial bed and introduction of the contrast water soluble substance in it:

1. -By Seldinger
2. By Tsenzerling
3. -By Dos-Santos
4. By Burgher
5. By Vinivarter

7. What are the clinical forms of nonspecific aorta-arteritis:

1. -Vasorenal hypertension syndrome
2. Abstinent syndrome
3. Autoallergic syndrome
4. -Inflammation syndrome
5. Abduction syndrome
6. Anemic syndrome

8. Critical ischemia of lower limbs is characterized by:

1. Intermittent claudication at a distance over 500 meters
2. -Pains at rest
3. Intermittent claudication at a distance over 100 meters
4. Lower limbs chilling

9. What are other names of nonspecific aorta-arteritis:

1. -Takayasu's disease
2. Leriche's disease
3. -Pulseless disease
4. “Milk leg”
5. Gregoire disease

10. Name the disease with celiac trunk, superior mesenteric artery and renal arteries involvement:

1. -Deaneray syndrome
2. Gregoire disease
3. -Middle aortic syndrome
4. Leriche's syndrome
5. Aortic arch branches lesion syndrome
6. Takayasu's disease

11. For the aorta bifurcation prosthetics are used the synthetic prosthesis made of:

1. -Ftorlon-lavsan
2. Caprone
3. Ethylene-glycol
4. Polyvinylpyrrolidone
5. -Polytetrafluorethylene

12. In prosthetics or shunting of aorta bifurcation are used such surgical approaches as:

1. -Total laparotomy
2. -Retroperitoneal by Robe
3. Inferomedian laparotomy
4. Upper midline laparotomy
5. transversal naval access

13. What symptoms are not characteristic of Leriche's disease

1. Sexual dysfunction
2. -Enlarged thighs and crus volume

3. Spermatogenesis and spermatohystogenesis disorder
4. Weakness and rapid fatigability of lower limbs
5. Muscle atrophy of lower limbs
6. -Blue spotted plantar feet surface

14. What clinical signs are characteristic of Leriche's disease:
1. Cryptopodia
2. -Pulselessness of both femoral arteries
3. Varicose veins dilatation of lower limbs
4. -High intermittent claudication and impotence
5. Knee joints deformation

15. The patients with recent reconstructive surgery of aorta and its branches has its reocclusion in a year. What measures should be taken to make a decision about a repeated operation:
1. -Dopplerography and duplex scanning
2. Ooscillography
3. Reovasography
4. -Aortoarteriography
5. Termography
6. Capillaroscopy

16. What shouldn't be expected in arterial aneurism?
1. -Absence of disease progress
2. Compression of neighbor organs
3. Pain resulted from acute rupture
4. Arterial thromboembolism
5. Rupture
6. -Spontaneous recovery

17. The possible methods in surgical therapy of Leriche's disease are:
1. Lumbar sympathectomy
2. -Bifurcational aorto-phemoral prosthetics
3. Periarterial sympathectomy
4. -Bifurcational aorto-phemoral shunting
5. Endarterectomy out of aorta
6. Thrombectomy by Fogarty catheter

18. What is not characteristic of atherosclerotic occlusion of popliteal artery opposed to Leriche's disease:
1. -High intermittent claudication
2. Low skin temperature of extremities
3. Atrophy of skin of distal extremity parts
4. -Impotence
5. Positive Panchencov's test

19. The patient, 48 years old, with Leriche's disease, renal artery stenosis and vasorenal hypertension. What is the treatment mode:
1. Conservative therapy
2. Surgery - bifurcational aorto-femoral shunting
3. -Surgery - bifurcational aorto-femoral shunting, renal artery plasty
4. Nephrectomy
5. Periarterial sympathectomy
6. -Balloon angioplasty of renal artery and stenosis areas of aorta and iliac artery bifurcation

What contrast substances can be used for subtraction aortoarteriography:

1. -Urografin
2. Barium sulfate
3. -Iohexol
4. Iodolipolum

The basic symptoms of clinical representation of thoracic aorta aneurism include:

1. -Chest pains
2. Pulselessness in the femoral arteries
3. -Systolic murmur over aorta
4. Impotence
5. Head aches
6. Everything mentioned above
7. Nothing mentioned above

Differential diagnosing of thoracic aorta aneurism should be carried out in:

1. -Mediastinum tumors and cysts
2. -Lung cancer
3. Thorax outlet syndrome
4. Raynaud's disease
5. Deaneray syndrome
6. Takayasu's disease

The contraindications for the surgical therapy of the patients with thoracic aorta aneurisms are:

1. -Recently diagnosed cardiac infarction
2. Lung emphysema
3. Obliterating diseases of lower limbs extremities
4. -Acute cerebral circulation disorders
5. Essential hypertension

The first stage of dissecting aorta aneurysm has:

1. -Acute disease course
2. Asymptomatic disease course
3. -Subacute disease course
4. Oligosymptomatic disease course
5. Progressive disease course

All the symptoms play an important role in clinical representation of abdominal aorta aneurism, except:

1. Stomach aches
2. Hyperpulsation in stomach
3. Systolic murmur over aneurism
4. -Weight loss, constipation
5. -Chilling and paling of lower extremities

The form of thoracic aorta aneurism can be:

1. -Diffuse
2. Lateral
3. Parietal
4. Total
5. Partial
6. Segmental

The leading symptoms in clinical representation of dissecting aorta aneurysm are:

1. -Evident sternal pain
2. High arterial pressure
3. Arterial pressure drop
4. Aortic stenosis
5. Aortic insufficiency

The leading role in the dissecting aorta aneurysm diagnosing is played by:
1. Thoratic X-ray examination
2. Ultrasonic scanning
3. -Computer tomography
4. Echocardiography
5. Aortography
6. Everything mentioned above

The indications for operation in the dissecting aorta aneurysm are:
1. Evident pain syndrome
2. Hypotension
3. Elderly age
4. -100% lethality in the patients with this pathology without surgery

Specific complication of the immediate postoperative period in dissecting thoracic aorta aneurysm is:
1. Hypostatic pneumonia
2. Acute trombophlebitis of the deep veins of lower extremities
3. -Spinal disorders
4. Parks-Weber-Rubashov syndrome

Abdominal aorta aneurism is aorta dilatation
1. By 2 cm
2. In 2.5
3. -Not less than in 2
4. Not less than in 3

Abdominal aorta aneurism larger than 5 cm is the reason of death in course of 5 years caused by a rupture in:
1. 20% of patients
2. -50% of patients
3. 70% of patients
4. 90% of patients

In the clinical representation of an abdominal aorta aneurism all the symptoms play important roles except:
1. Dull stomach pain
2. Hyperpulsation in stomach
3. Systolic murmur over aneurism
4. -Weight loss, constipation
5. Tumour-like lump in the abdominal cavity

The most often accompanying pathology in abdominal aorta aneurisms is:
1. Postinfarction cardiosclerosis
2. -Ischemia
3. Arterial hypertension
4. Lower extremities arterial atherosclerosis
5. Everything mentioned

In aorta coarctation the pulsation in lower extremities is:
1. Preserved
2. Weakened
3. Absent
4. **-Weakened or absent**

According to localization the abdominal aorta occlusions are:
1. Moderate
2. Mediate
3. Intermediary
4. **-Low, middle, high**
5. Total

Criterion for the indications of the surgical therapy in the abdominal aorta occlusion is intermittent walking claudication at the distance:
1. Less than 1 km
2. Over 200 m
3. **-Less than 200m**
4. not more then 25m

Visceral branches lesion in abdominal aorta atherosclerosis is better detected in the:
1. Frontal view aortography
2. **-Lateral view aortography**
3. Oblique view aortography
4. Valid picture is impossible in aortography

The X-ray contrast examination of aorta in Leriche's disease should detect the area of:
1. Abdominal aorta to external iliac arteries
2. Abdominal aorta to femoral artery bifurcation
3. Abdominal aorta including renal arteries to popliteal artery
4. **-Abdominal aorta, renal arteries, femoral arteries, popliteal arteries and shin arteries**

Indication for the surgical therapy in atherosclerotic aorta and iliac arteries lesion are:
1. Intermittent claudication at a distance over 500m
2. Chilling and pailing of extremities
3. Pulseless femoral arteries
4. **-Intermittent claudication at a distance less than 200 m when there are no vital parts contraindications**
5. Intermittent claudication at a distance less than 500 m

The patient has aorta lesion with severe accompanying pathology. What is the preferable reconstruction variant, if the extremity should be saved?
1. Aorta-femoral shunting
2. Profundoplasty
3. Femoral-popliteal shunting
4. Sympathectomy
5. Extraanatomical shunting
6. **-Depends on a character of lesion**

The most often reconstruction variant in the abdominal aorta lesion is:
1. **-Aorta-femoral shunting**
2. Aorta-femoral prosthetics
3. Extraanatomical shunting
4. Endarterectomy out of aorta

5. Thrombectomy out of aorta

The operation of choice in abdominal aorta occlusion is:
1. -Resection and prosthetics
2. Shunting
3. Endarterectomy
4. Extraanatomical shunting
5. Thrombectomy

Extracranial arteries lesion is most often determined by:
1. -Atherosclerosis
2. Nonspecific aorta-arteritis
3. Extravasal compression
4. Syphilis
5. Everything mentioned

In noninvasive diagnosing of extracranial arteries the leading role is played by:
1. Ophthalmodynamometry
2. Eye plethysmography
3. Sphygmography
4. Electroencephalography
5. -Ultrasonic dopplerography

Afterhistory of surgical treatment of aortic arch branches atherosclerosis are:
1. -Better than in nonspecific aorta-arteriris
2. Worse than in nonspecific aorta-arteriris
3. Similar to in nonspecific aorta-arteriris
4. fterhistoties of both diseases can't be compared

Chronich abdominal ischemia syndrome include:
1. Thoracic pains
2. Postprandial pains in the right hypochondrium
3. -Postprandial anginal stomach pains, intestine dysfunction and weight loss
4. Cramp-like stomach pains, stool and gas retention, bloating
5. Intestine dysfunction, fecal blood, weight loss

The indication for surgical therapy in chronic abdominal ischemia syndrome is:
1. Progressive weight loss
2. Postprandial stomach pains
3. Angiographic picture of visceral arteries lesion
4. -Stomach pains, weight loss, stenoses and occlusions of visceral arteries
5. Everything mentioned

Characteristic features of vasorenal hypertension are:
1. Episodic increase of arterial pressure to 180/90 mm of mercury
2. Periodic increase of arterial pressure to 200/100 mm of mercury with positive effect of conservative therapy
3. -Persistent evident hypertension with no or little effect of conservative therapy (nonspecific)
4. Arterial hypertension to 200/100 mm of mercury in the upper extremities
5. Everything mentioned

What other name does non-specific aorta-arteritis have:
1. Buerger's disease
2. Vinivarter's disease

3. -Takayasu's disease
4. Leriche's disease
5. Raynaud's disease
6. Gregoire disease

The preferable method of branchiocephal vessels revasculization in nonspecific aorta-arteritis is:
1. Balloon angioplasty
2. Stenting
3. Rotary deobliteration
4. Endarterectomy
5. -Prosthetics and shunting

Contraindication for the surgical therapy of vascular lesions in nonspecific aorta-arteritis is:
1. Young age of patients
2. Extensive vessels lesions
3. Occlusive vascular processes
4. Multiple lesions of different vascular basins
5. -Signs of inflammatory processes

Pulse-therapy scheme in non-specific aorta-arteritis include:
1. Antibiotics and analgesics
2. Antisensitizers and mineralocorticoids
3. -Cytostatics and corticosteroids
4. Immunomodulators and vitamins
5. Thrombolytics and disaggregants

Quantity of forms of nonspecific aorta-arteritis is:
1. 2
2. 4
3. -10
4. 12
5. 5

Nonspecific aorta-arteritis is:
1. Metabolic disease
2. Infectious disease
3. -Autoimmune disease
4. Parasitic disease

Aorta lesion accompanied by occlusive-stenotic celiac trunk, mesenteric vessels and renal arteries lesions is called:
1. -Deneray's syndrome
2. Leriche's syndrome
3. Takayasu's syndrome
4. Gregoir's disease
5. Parks-Weber-Rubashov disease

Operation of choice in different kinds of peripheral arteries aneurisms is:
1. Amputation
2. Ligature surgery
3. Aneurism plugging
4. -Aneurism resection and vessel prosthetics

Bifurcational prostheses of best quality are those made of:

1. Fluorlonlavsan
2. Kapron
3. Polyvinylpyrrolidone
4. **-Polytetrafluorethylen**

What operations are applied in surgical therapy of abdominal aorta aneurisms?

1. **-Intravascular sten-grafting**
2. **-Aneurism resection with prosthetics**
3. Aneurism closure
4. Aneurism invagination
5. All the variants are right
6. All variants are wrong

UNIT 15. OBLITERATING DISEASES OF PERIPHERAL ARTERIES. BALLOON ANGIOPLASTY AND STENTING OF THE MAIN ARTERIES OF THE LIMBS

1. Who are most susceptible to obliterating thromboangiitis?

1. Women of 18 – 35 years old
2. **-Men of 18 – 35 years of age**
3. Both men and women under 40
4. Both men and women over 40
5. Men over 40

2. What method is preferred at the 1st stage of obliterating thromboangiitis?

1. **-Conservative treatment**
2. Lumbar sympathectomy
3. Periarterial sympathectomy
4. Restorative vascular surgery
5. Primary amputation

3. What medicines are indicated for conservative treatment of obliterating thromboangiitis of the 2nd stage?

1. Rheologically active materials
2. Corticosteroids
3. B vitamins
4. Antiaggregants
5. Prostaglandin derivatives

Choose the correct combination of answers:

a) 1, 3, 4
b) 1, 2, 3
c) 1, 4, 5
d) 4, 5
e) -All answers are correct

4. The patient, 61 y.o., complained of pains in the left foot and crus increasing when walking. He cannot walk more than 60 m. The examination detected segmental atherosclerotic occlusion of 2-3 cm of the left superficial femoral artery. Common femoral artery is well-contrasted with the deep one. Popliteal and foot arteries are filled through collaterals. What treatment should be indicated?

1. Plasty of deep femoral artery
2. Resection of occlusive arterial part with end-to-end anastomosis
3. Left-side femoral-poplietal shunting
4. **-Endovasal plasty of left femoral artery**
5. Conservative therapy

6. -Femoral artery endarterectomy

5. The patient, 70 y.o., has obliterating atherosclerosis of the vessels of the lower limbs. The examination detected local stenosis (<75%) of left external iliac artery. What method of treatment will be the most effective in this case?
1. Conservative treatment
2. -Endovascular catheter angioplasty
3. Lateral autovenous plasty of external iliac and superficial femoral arteries
4. Left-side femoral-poplietal shunting
5. Lumbar sympathectomy

6. What is the most common cause of acute thrombosis of the arteries of the lower limbs?
1. Obliterating thromboangiitis
2. -Obliterating atherosclerosis
3. Puncture and catheterization of arteries
4. Extravasal arterial compression
5. Erythrocythemia

7. What symptom is not typical for acute limb ischemia of the stage IIb developed after femoral artery embolism?
1. Pains in the limb
2. "Marble skin"
3. Sensation of coldness in limbs
4. Lack of active joint movements
5. -Muscle contracture

8. What is the operation of choice for the patient of 38 y.o. with obliterating thromboangiitis and chronic insufficiency of stage IIb with the occlusion of popliteal and anterior tibial artery?
1. Profundoplasty
2. Endarterectomy of the popliteal artery
3. -Femoral posterior tibial shunting
4. Percutaneous intravascular dilation by Gruentzig catheter
5. Primary limb amputation

9. In what cases is the thrombectomy at acute arterial obstruction of limbs in severe ischemia not indicated? Embolectomy or thrombectomy is indicated in all cases in acute obstruction of extremities arteries in severe ischemia, except:
1. At acute myocardial infarction
2. -At acute contracture of affected limb
3. At acute ischemic stroke
4. At pneumonia complicated by an abscess
5. At suprafascial edema of the crus

10. What is mostly affected at obliterating thromboangiitis
1. Arch of aorta and brachiocephalic trunk
2. Bifurcation of aorta
3. Thoracic aorta
4. Femoral artery
5. -Arteries of the crus

11. What is the method of choice at treatment of the patient with stenosis of common iliac artery with length of 2 cm, narrowing the vessel by 2/3 of the lumen?
1. Bifurcational aortofemoral shunting
2. Lumbar sympathectomy

3. One-sided iliac-femoral shunting
4. Arteriotomy and intimothrombectomy
5. -Percutaneous endovascular dilation (angioplasty) of stenosis location

12. The patient, 34 y.o., has rheumatic mitral stenosis, was admitted to surgery department of the hospital with signs of embolism of the right brachial artery (acute arterial insufficiency) in 6 hours from the onset of the disease. What actions would be the most appropriate?
1. Complex antithrombotic therapy
2. Thrombolytic therapy
3. -Emergency embolectomy of the brachial artery
4. Emergency mitral commissurotomy
5. Elective mitral commissurotomy

13. The patient, 70 y.o., has coronary heart disease and cardiac fibrillation; complains of pains in legs and apparent dyspnea which appeared 7 hours before. Tthe patient's condition is very bad; there are some signs of pulmonary edema; arterial hypertension – 190/110 mm Hg. Both lower extremities and buttocks are marmorate and cold. No active movements, only passive. Total anesthesia of the extremities. No pulsation of the femoral arteries. What caused such a condition?
1. Acute left ventricular failure
2. Acute right ventricular failure
3. Acute thrombosis of the lower vena cava
4. Leriche's syndrome
5. Thromboembolism of the pulmonary artery
6. Aortic bifurcation embolism
Choose the correct combination of answers:
a) 2, 3, 4
b) 2, 3, 5
c) 1 and 5
d) -2 and 6
e) 1 and 6

14. What is typical for insufficiency of arterial circulation in the lower extremities?
1. -Samuels's test
2. Hackenbruch's test
3. -Plantar ischemia sign
4. Troyanov-Trendelenburg's test
5. Barrow-Sheinis's test

15. What combination of instrumental methods of examination would be the most appropriate at choosing the approach of treatment the patient with severe chronic ischemia of nondefined origin?
1. Sphygmography
2. -Aorto-arteriography
3. Thermography
4. -Doppler ultrasound
5. Reovasography

16. What is method of choice at embolism of femoral artery and developed limb contracture in ankle and knee joints?
1. Emergency embolectomy
2. Thrombolytic therapy
3. Anticoagulant therapy
4. Symptomatic therapy
5. -Primary limb amputation

17. What has decisive role in differentiation of obliterating thromboangiitis from obliterating atherosclerosis of vessels in lower limbs?
1. Oppel's test
2. Reovasographic findings
3. -Aorto-arteriographic findings
4. Data of radionuclide study of vessels
5. Samuels's test

18. What is method of choice at segmental atherosclerotic occlusion of femoral artery and apparent ischemia of the limb?
1. Conservative treatment
2. -Reconstructive vascular surgery
3. Lumbar sympathectomy
4. Thrombectomy with Fogarty catheter
5. Primary limb amputation

19. The patient, 70 y.o., has atherosclerosis in vessels of lower extremities. He was detected occlusion extending over superficial femoral artery. What method of treatment should be indicated?
1. Conservative treatment
2. Endovascular catheter angioplasty
3. Lateral autovenous plasty of superficial femoral artery
4. -Femoral-popliteal shunting
5. Thrombectomy

20. What clinical sign distinguishes acute ischemia developed at embolism of femoral artery of stage III from other stages?
1. Pains in the limb
2. Coldness of the limb
3. No active movements in joints
4. Sharp pains in joints at passive movements
5. -Total muscle contracture

21. What is the most informative method of specifyng the causes and stage of arterial obstruction?
1. Sphygmography
2. Reovasography
3. -Aorto-arteriography
4. Transcutaneous oxygen tension
5. Thermography

22. The patient with mitral valvular disease and cardiac fibrillation had embolectomy of the femoral artery. What therapy is he contra-indicated?
1. Anti-enzyme therapy
2. Disaggregant therapy
3. -Thrombolytic therapy
4. Antibacterial therapy
5. Disintoxication therapy

23. The patient, 63 y.o., complained of pains in the left foot and crus intensifying when walking. He cannot walk more than 60 metres. The examination at hospital including angiography revealed segmentary atherosclerotic occlusion of the left femoral artery in Hunter's canal with the length up to 20 cm. Common, superficial and deep femoral arteries are well-contrasted. Popliteal and crural arteries are filled through collaterals. What kind of surgery should be indicated?
1. Plasty of deep femoral artery
2. Resection of the occlusive part of the artery with the end-to-end anastomosis

3. -Left-side femoral-popliteal shunting
4. Linton's surgery
5. Endovasal plasty of the left femoral artery

24. The patient, 24 y.o., was admitted to hospital. He complained of pains in his left foot and crus appearing at walking. There are no pains at rest. He has been sick for 4 years. First, he could walk 50-60 m without a break. Recently intensive pains at rest at night have been bothering him. He smokes up to 30 cigarettes per day. The examination showed his condition as satisfactory. Cardiac or pulmonary pathologies were not detected. Cutaneous covering of the left foot and crus is pale, colder than symmetric parts of the right limb. Active movements in the joints are limited. Hypoesthesia of the left foot. No arterial pulsation in the left foot, impaired pulsation in the heel. Arterial pulsation in the femoral and popliteal arteries is distinct. Angiography revealed that common, superficial, and deep femoral arteries of the left lower limb are even-outlined; popliteal artery is evenly narrowed, its walls are flat; Arteries of the crus are narrowed sharply, are contrasted with separate parts. There are cockscrew collaterals. Foot arteries are not contrasted. What operative treatment is the most reasonable?
1. Endarterectomy of popliteal and tibial arteries
2. -Arterialization of the venous bed of the foot
3. Profundoplasty
4. Iliofemoral prosthetics
5. Left-side femoral-popliteal shunting

25. What can be the cause of femoral artery embolism in the patient who does not have any heart diseases?
1. Aortic aneurysm
2. Aneurysm of iliac artery
3. Aorta atheromatosis with mural thrombosis
4. Aorta lesion by non-specific aorto-arteriitis with mural thrombosis
5. -There are no correct answers

26. The patient, 62 y.o., suffers from obliterating vascular atherosclerosis of left lower extremity. The Doppler ultrasound and Duplex ultrasonography detected occlusion of left superficial femoral artery (20 cm) in the Hunter's canal. Common and deep femoral arteries are patent. What should be done to reestablish blood flow in the limb?
1. Plasty of deep femoral artery
2. Profundoplasty and periarterial sympathectomy
3. -Femoral-popliteal shunting
4. Endovasal angioplasty of the left femoral artery
5. Sympathectomy

27. What is affected first of all at obliterating atherosclerosis?
1. Microvasculature
2. Intraorganic vessels
3. -Main arteries of elastic type
4. Main arteries of muscular type
5. Arteriovenous shunts
6. Venous vessels

28. Information after what examination is necessary for choosing the best method of operative treatment of chronic aorta occlusions and arteries of the lower extremities?
1. Sphygmography
2. Oscillography
3. Skin thermometry
4. -Aorto-arteriography
5. -Doppler ultrasound
6. Evaluation of TPO_2 of tissues of the lower limbs

29. What is not typical for atherosclerotic popliteal artery occlusion if compare with Leriche's?
1. -«High» intermittent claudication
2. Drop of skin temperature of the limbs
3. Skin atrophy of the distal parts of the limb
4. -Impotence
5. No pulsation in the foot arteries

30. What method of choice would be at obliterating thromboangiitis with occlusion of all main arteries of the crus, and with collateral's good compensatory abilities?
1. -Conservative therapy
2. Primary amputation of crus
3. Femoral-popliteal shunting
4. Femoral-tibial shunting
5. Endarterectomy

31. Which of the following diseases cannot be the cause of brachial artery embolism?
1. Mitral stenosis
2. -Abdominal aneurysms
3. Aneurysms of heart
4. Myocardium
5. Compressure of the subclavian artery by the cervical rib

32. What pathological changes can be observed at obliterating thromboangiitis?
1. Disturbances of local neuroreceptor reaction
2. Arteriospasm
3. Ischemia of arterial wall
4. Proliferation of connective-tissue elements of vascular wall
5. Thrombosis with obliteration of vascular lumen
6. -All answers are correct

33. Which of the following is not an angiographic sign of obliterating thromboangiitis?
1. Even narrowing of the arteries
2. Diffuse nature of occlusions
3. Cone-shaped rupture of vascular opacification
4. -Corroded outlines of main arteries
5. Numerous small wavy narrowing collateral branches

34. What would be the method of choice for a patient of 83 y.o. with chronic arterial insufficiency, stage IV and foot gangrene at atherosclerotic arterial occlusion of the arteries of the lower limbs?
1. Conservative treatment
2. Lumbar sympathectomy
3. -Primary limb amputation
4. Periarterial sympathectomy
5. Reconstructive vascular surgery

35. Obliterating thomboangiitis of the lower extremities can be characterized by the affection of:
1. Iliofemoral segment
2. Femoral-popliteal segment
3. -Arteries of crus and foot
4. The whole arterial bed of the lower limb
5. External carotid artery

36. In which part of artery does pathological process at obliterating thromboangiitis (endarteritis) begin?

1. Intima
2. Media
3. -Adventitia
4. Diffusively in all layers of the artery

37. Which of the following can be possible clinical course of obliterating thromboangiitis (endarteritis)?
1. Acute clinical course
2. Remission stage
3. Chronic clinical course
4. -All answers are correct
5. 1 and 2

38. Conservative treatment at obliterating thromboangiitis (endarteritis) should include:
1. Vasodilators
2. Vasodilators. Medicines improving microcirculation
3. Laser blood irradiation
4. Hemosorption and plasmapheresis
5. -Vasodilators, medicines improving microcirculation, laser blood irradiation, plasmapheresis

39. Conservative treatment of obliterating thromboangiitis (endarteritis) should be held:
1. For a month once per year
2. All year round
3. In the stage of exacerbation
4. -Mostly, for one month in the hospital twice a year and supportive therapy all year round
5. Seasonal therapy

40. The patient has obliterating thromboangiitis (endarteritis), stage IV chronic arterial insufficiency. The typical reconstructive surgery cannot be performed as there is an isolated popliteal artery segment. What should be indicated?
1. Amputation at the lower third of the thigh
2. Amputation at the upper third of the crus
3. -Revasculization of the limb by shunting of popliteal artery into the isolated segment
4. -Arterialization of the venous foot blood stream
5. Conservative treatment and local necrectomy
6. Metatarsal foot amputation

41. What type of sympathetic nervous system operation can be performed on the majority of patients with obliterating endarteritis (thromboangiitis)?
1. Thoracic sympathectomy
2. Periarterial sympathectomy
3. Procaine block of the lumbar sympathetic ganglions
4. -Lumbar sympathectomy
5. Sympathetic nervous system operation cannot be indicated

42. What differs Buerger's disease from obliterating endarteritis?
1. Distal affection of the arterial bed
2. Predominant proximal segment affection of the arteries of the lower limbs
3. Diffuse affection of the arterial bed of the lower extremities
4. -Distal affection of the arteries of the lower extremities with the migrating thrombophlebitis in the superficial veins
5. There are no fundamental differences

43. What should be included in conservative treatment of obliterating endarteritis (thromboangiitis)?
1. Hyperbaric oxygenation

2. Hemosorption
3. Laser blood irradiation
4. Plasmapheresis
5. -All mentioned above

44. What is the most effective medicine to inject intra-arterially into the affected limb for treatment of the obliterating endarteritis (thromboangiitis)?
1. Novocaine
2. Rheopolyglukin
3. Solution of hydrogen peroxide
4. -Vasaprostan
5. This method of treatment is not effective

45. Involvement of peripheral arteries can be caused by all the following except:
1. -Takayasu's disease
2. Buerger's disease
3. -Nonspecific aorto-arteritis
4. Obliterating atherosclerosis
5. Vinivarter's disease
6. Obliterating endarteritis
7. Obliterating thromboangiitis

46. What methods can be used for topical diagnostics of extension of affected peripheral arteries?
1. -Doppler ultrasound with Duplex scanning
2. Reovasography
3. Capillaroscopy
4. Evaluation of transcutaneous oxygen tension
5. -Arteriography

47. Surgical repair of bloodstream includes all the following except:
1. -Lumbar sympathectomy
2. -Dietz's surgery
3. Shunting
4. Endarterectomy
5. Prosthetics

48. Which of the following is not related to the modern high-technology methods of limb revasculization?
1. -Oppel's surgery
2. Laser deobliteration of the arteries
3. Rotary deobliteration
4. Balloon angioplasty
5. Artery stenting
6. -Dietz's surgery

49. What is the most modern device for embolectomy of the main artery?
1. Vollmar's Vascular ring
2. Vacuum suction
3. -Fogarty's balloon catheter
4. Dormia basket
5. Fenestrated forceps

50. Occlusive disease of main peripheral arteries of the lower limbs is typical for:
1. Takayasu disease
2. Leriche`s syndrome

3. -Buerger's disease
4. -Winiwarter disease
5. Denerey's syndrome
6. Raynaud's syndrome
7. Gregoir`s disease

51. What anastamoses are applied at vascular prosthesis?
1. -End-to-end anastomosis
2. End-to-side anastomosis
3. Anastamosis with prosthetic device
4. Arteriovenous fistula is applied additionally
5. Operation on the peripheral nervous system is performed additionally

52. Endarterectomy can be:
1. -Open
2. Parietal
3. Proliferative
4. -Closed
5. Intraluminal

53. How can obliterating thromboangiitis (endarteritis) progress?
1. -Acute, malignant
2. Prolonged
3. Prolonged, protracted
4. -Chronic
5. Alternating

54. By what can differ the character of affection at the obliterating thromboangiitis (endarteriitis)?
1. Lower limbs can be affected with the same frequency as the upper ones
2. -Lower limbs are affected more frequently
3. Both men and women can be affected equally
4. -Both limbs are soon affected symmetrically
5. There are no correct answers

55. What are the symptoms of chronic ischemia of the lower limbs?
1. -Alopecia (baldness) of the limb
2. Joint deformity
3. -Skin atrophy
4. Skin pigmentation
5. Itch of plantar surface
6. All mentioned above

56. Stage II chronic arterial insufficiency according to Fontaine-Pokrovsky is characterized by:
1. -Cladicatio intermitens
2. Genu valgum
3. -Intermittent claudication
4. Flegmasia coerulea dolens
5. Pains at rest
6. Trophic disorders
7. All mentioned above

57. Name the symptoms of Buerger's disease.
1. -Lesion of the lower extremities
2. -Migrating thrombophlebitis

3. Nail clubbing
4. Pains in small joints
5. Clubbed fingers

58. What should be done at progressive wet foot gangrene?
1. Make numerous incisions on the foot
2. -Perform emergency thigh amputation
3. Perform artery shunting
4. Carry on activities aimed at conversion of humid gangrene into dry one
5. Carry out massive antibiotic therapy

59. Occlusive atherosclerosis of arteries of the lower extremities is characterized by:
1. "Volatile" pains in the joints
2. -Intermittent claudication
3. Fulminant foot necrosis
4. Trophic ulcers in the area of knee joints
5. -No pulsation in popliteal and foot arteries
6. Concomitant deep vein trombophlebitis

60. Symptoms of plantar ischemia are typical for:
1. -Buerger's disease
2. Postthrombophlebitic syndrome
3. Raynaud's disease
4. Varicose superficial veins
5. Gregoire's disease
6. -Obliterating atherosclerosis

UNIT 16. VARICOSE VEINS

1. What symptoms are not typical for varicose veins?
1. Trophic ulcers of crus
2. Hypertrophy of extremities
3. Reduction in skin temperature
4. «Low» intermittent claudication
5. Fatigability of extremeties after long static load
Choose the correct combination of answers:
a) 1, 2
b) -2, 3, 4
c) 3, 4, 5
d) 2, 4, 5
e) All answers are correct

2. During what diseases can superficial varicose veins of lower extremities occur?
1. Varicose veins
2. Aplasia of deep veins
3. Congenital arteriovenous fistula
Choose the correct combination of answers:
a) 1, 2
b) 1, 3
c) -All answers are correct

3. What methods are used for detection of valvular insufficiency of perforating varicose veins of the lower extremities?
1. Barrow-Cooper-Sheinis's test

2. Antegrade ileo-cavagraphy
3. Ultrasound study
4. Distal ascending phlebography
5. Defining oxygen saturation of the blood

Choose the correct combination of answers:

a) 1, 2, 3
b) 1, 3, 5
c) 1, 4
d) -1, 3, 4
e) All answers are correct

4. What objectives does surgery have in varicose veins of the lower extremities?

1. Preclusion of abnormal blood discharge from deep veins into the superficial
2. Removal of varicose veins
3. Restoration of patency of deep veins
4. Correction of the relative incompetence of valves of femoral vein
5. Removal of changed trophic tissues

Choose the correct combination of answers:

a) 1, 2, 3
b) -1, 2, 4
c) 2, 3, 4
d) 3, 4, 5
e) All answers are correct

5. What kinds of surgery are performed in varicose veins?

1. Troyanov-Trendelenburg's surgery
2. Babcock's surgery
3. Thrombectomy
4. Narat's surgery
5. Cockett's surgery

Choose the correct combination of answers:

a) 1, 2, 3
b) 1, 2, 3, 5
c) -1, 2, 4, 5
d) 2, 4, 5
e) All answers are correct

6. What clinical characteristics are typical for varicose subcutaneous veins of lower extremities?

1. Sharp pains in the limb
2. Constant edema of the whole limb
3. Trophic disorders near the medial malleolus
4. Podedema and dull pains appearing at the end of a day
5. Varicose superficial veins

Choose the correct combination of answers:

a) All answers are correct
b) 1, 3, 4, 5
c) 2, 3, 4
d) -3, 4, 5
e) 2, 3, 5

7. What factors predispose to the development of trophic skin disorders in varicose veins of lower extremities?

1. Arterial occlusion of crus
2. Inconsistency of perforating veins

3. Incompetence of valves of the great saphenous vein trunk
4. Acute thrombosis of deep veins of crus
5. Dermatitis and lymphostasis

Choose the correct combination of answers:

a) -2, 3
b) 2, 5
c) 3, 4
d) 1, 2, 3
e) 1, 3, 5

8. What information can be obtained by functional tests in varicose veins of lower extremities?

1. Valvular insufficiency of superficial veins can be detected
2. Thrombophlebitis of perforating veins can be diagnosed
3. Localization of incompetent perforating veins can be detected
4. Data on the presence of arteriovenous blood discharge can be obtained
5. Deep veins patency can be assessed

Choose the correct combination of answers:

a) -1, 3, 5
b) 3, 4, 5
c) 1, 4, 5
d) 1, 2, 3, 5
e) 1, 2, 4, 5

9. What operations eliminating venovenous shunt through perforating veins of the crus are performed in varicose veins of the lower extremities?

1. Madelung's operation
2. Babcock's surgery
3. Cockett's surgery
4. Narat's surgery
5. Linton's operation

Choose the correct combination of answers:

a) Only 3
b) 1, 2, 4
c) 1, 2, 5
d) 4, 5
e) -3, 5

10. Which of the following does not refer to complications of varicose veins?

1. -Gangrene of foot and crus
2. Thrombophlebitis of superficial veins
3. Bleeding from superficial varicose veins
4. Trophic crus ulcers
5. Acute trombophlebitis of varicose veins with abscess formation

11. What operations is phlebectomy of varicose veins of lower extremities performed with?

1. Linton's
2. Babcock's
3. Narat's
4. Girard-Spasokukockiy's
5. Troyanov-Trendelenburg's
6. Madelung's

Choose the correct combination of answers:

a) 1, 2, 5
b) 1, 5, 6

c) -2, 3, 5, 6
d) 2, 4, 5, 6
e) All answers are correct

12. What are the main clinical presentations of varicose veins of lower extremities?
1. Podedema and dull pains appearing at the end of a day
2. Skin hyperemia
3. Varicose superficial veins
4. «Low» intermittent claudication
5. Trophic disorders in the medial crural region

Choose the correct combination of answers:
a) 1, 2, 3
b) -1, 3, 5
c) 2, 3, 4
d) 3, 4, 5
e) All answers are correct

13. You are examining a patient, 45 y.o. She was operated on varicose veins of the right lower limb. In 1.5 years after the operation varicose subcutaneous veins appeared again, first on the crus, later on the thigh. What methods can be used to detect the reason of the disease relapse?
1. Doppler ultrasound
2. Reovasography
3. Retrograde femoral phlebography
4. Distal ascending phlebography
5. Arteriography

Choose the correct combination of answers:
a) 1, 2
b) All answers are correct
c) -1, 3, 4
d) 2, 4
e) 2, 3, 4, 5

14. What information can be obtained by functional tests in varicose veins?
1. Valvular insufficiency of superficial veins can be detected
2. Localization of incompetent perforating veins can be detected
3. Deep veins patency can be assessed
4. Valvular incompetence of deep veins can be estimated
5. Artery occlusion can be detected

Choose the correct combination of answers:
a) -1, 2, 3
b) 1, 3, 5
c) 2, 4, 5
d) 1, 2, 3, 4
e) 1, 2

15. What methods can enable to define inconsistency and localization of perforating veins of lower extremeties?
1. Three-tourniquet (Sheinis) test
2. Perthes test
3. Distal ascending phlebography
4. Reovasography
5. Ultrasonography

Choose the correct combination of answers:
a) 2, 3

b) 4, 5
c) -1, 3, 5
d) 1, 2, 5
e) All answers are correct

16. What do patients with varicose veins of lower extremities complain of?
1. Heaviness in legs at night
2. Restless legs
3. Intermittent claudication
4. Spasms of sural muscles at rest
5. Stable edema of shin and thigh

Choose the correct answer:
a) -1, 2, 4
b) 3, 4, 5
c) 1, 2, 3, 4
d) 1, 2, 3, 5
e) All answers are correct

17. What should be done at profuse bleeding from ruptured varicose subcutaneous vein fo crus?
1. Apply a tourniquet above the rupture
2. Keep the limb in elevated position
3. Apply a compressive bandage on the vein rupture
4. To perform Troyanov-Trendelenburg surgery
5. Administer fibrinolysin intravenously

Choose the correct answers:
a) 1, 2, 3
b) 1, 3, 5
c) 1, 3
d) 3, 4
e) -2, 3

18. Where does great subcutaneous vein interflow with common femoral vein?
1. From 2- 3 cm above inguinal ligament to 5 cm below it
2. 6 cm below inguinal ligament
3. At the same level as inguinal ligament
4. From the level of inguinal ligament to 7 cm distal from it
5. From 1 cm above inguinal ligament to 3 cm below it

19. Which of the following can be tributary of the great subcutaneous vein near saphenous opening?
1. -Superficial epigastric, superficial iliac circumflex, and superficial external pudendal veins
2. Posteromedial, superficial epigastric, superficial iliac circumflex veins
3. Anterolateral, superficial epigastric, superficial iliac circumflex veins

20. What veins form the short saphenous vein?
1. Lateral marginal vein, plantar vessels, posteromedial vein
2. -Lateral marginal vein, plantar vessels and deep anastamosis of external plantar vein
3. Superficial iliac circumflex, anterolateral, superficial epigastric veins

21. What functional tests enable to assess the patency of deep veins of lower extremities?
1. Pratt-2, Talman's
2. Hackenbruch- Sicard, Shwarz
3. Pratt-2, Barrow-Cooper-Sheinis
4. -Mayo-Pratt's, Delbe-Perthes

22. What fuctional tests enable to detect valvular insufficiency of communicating veins?
1. Pratt-2, Barrow-Cooper-Sheinis
2. Brodie-Troyanov-Trendelenburg
3. -Pratt-2, Barrow-Cooper-Sheinis, Talman
4. Mayo-Pratt's, Delbe-Perthes

23. What is phlebography of lower extremities performed for?
1. To detect artriovenous fistulas
2. -To assess the state of valvular apparatus of deep communicating veins, to assess the patency of deep veins
3. Only to assess patency of deep veins

24. What information is obtained by distal phlebography?
1. Informs on the state of valves of deep veins
2. Informs on the patency of deep veins and state of its valves
3. -First of all it informs on the patency of deep veins and the state of valvular apparatus of communicating veins
4. It is not used for the assessment of the state of venous system of lower extremities

25. What are the main factors of varicose veins development?
1. -Prolonged standing, rise in intra-abdominal pressure, heredity
2. Prolonged standing, non-functioning arteriovenular anastomoses
3. Physical load on legs, weakness of muscular elastic fibers of venous wall

26. What changes in venous hemodynamics can be observed at high venovenous blood discharge (reflux)?
1. -Reflux from deep venous network through inconsistent ostial valve into the system of great subcutaneous vein
2. Reflux into superficial venous network through inconsistent communicating veins
3. Reflux into superficial venous network through arteriovenous anastomoses

27. What changes at high venovenous reflux are observed?
1. Reflux into superficial venous network through arteriovenous anastomoses
2. -Reflux into superficial venous network through inconsistent communicating veins of crus and foot
3. Reflux from deep venous network through inconsistent ostial valve into the system of great subcutaneous vein

28. The compensation stage of venous hemodynamics is characterized by:
1. -Pain, heavy aching legs, annoying pains in the areas of varicose veins
2. Complaints mentioned above plus edemas of foot and malleolus which disappears after night's rest
3. Trophic disorders of crus skin appear against a background of varicose subcutaneous veins

29. Indicate the main symptoms of subcompensation stage of venous hemodynamics
1. Pain, heavy aching legs, annoying pains in the areas of varicose veins
2. -Complaints mentioned above plus edemas of foot and malleolus which disappears after night's rest
3. Trophic disorders of crus skin appear against a background of varicose subcutaneous veins

30. Indicate the main symptoms of decompensation stage of venous hemodynamics:
1. -Trophic disorders of crus skin appear against a background of varicose subcutaneous veins
2. Pain, heavy legs after physical trainings
3. Pain, heavy aching legs, annoying pains in legs, edemas of foot and malleolus

31. What are trophic tissue disorders at varicose disorders of lower extremities characterized by?
1. Drop in temperature, trophic disorders of lower limbs
2. -Brown induration of skin, hair loss, dry and wet tetters, tropic ulcers
3. Hypertrophy and lengthening of the extremity affected, hypertrichosis, ulcers

4. Vascular nevus pigmentosis on the skin of lower extremities, convoluted subcutaneous veins

32. Give the fullest characteristics of ulcers at varicose veins.

1. -They are situated on the inner side of crus above the ankle; more seldom they can be situated behind external crus in the site of previous dermatitis and eczema exposure. Ulcers are plane, solitary, painful, with abundant purulent discharges, irregular-shaped

2. They are situated on the lateral side of the crus, above the ankle; have clear boundaries. Ulcers are deep, often numerous, not painful, with purulent discharges

3. They are circular, numerous, with abundant purulent discharges

33. What diseases should be differentiated with varicose veins?

1. -Parks-Weber-Rubashov syndrome, Klippel-Trénaunay syndrome, femoral hernia, post-thrombophlebitis syndrome

2. Parks-Weber-Rubashov syndrome, secondary Raynaud's, postthrombophlebitic syndrome

3. Klippel-Trénaunay syndrome, femoral hernia, Paget-Schroetter's syndrome, Rubashov'syndrome

34. What clinical symptoms are typical for Parks-Weber-Rubashov syndrome?

1. Diffuse varicose subcutaneous deep veins, lengthening of the extremity, hypertrichosis, ulcers, temperature drop on the affected side, low oxygen saturation of venous blood from subcutaneous veins

2. Local subcutaneous varices, limb reduction, temperature rise, no ulcers

3. Diffuse varicose subcutaneous veins, occlusion of main arteries of the lower limbs

4. -Diffuse varicose subcutaneous veins, hypertrophy of the extremity affected, hypertrichosis, ulcers, temperature rise on the side of the affection, high oxygen saturation, systolic murmur over the arteriovenous anastomosis

35. What are the most typical symptoms of Klippel-Trenaunay syndrome?

1. -Triad symptoms: vascular pigmentary spots on the skin of the lower extremities, varicose veins on the lateral surface of limbs, increased limb

2. Vascular pigmentary spots on the skin of the lower extremities, limb reduction
3. Varicose subcutaneous veins and occlusion of main arteries
4. Congenital arteriovenous fistulas

36. At what age do anatomical changes of lower limbs mostly occur in Park-Weber syndrome?

1. In adulthood
2. Before 20 years old
3. **-Before 10-12 years old**
4. Before 14-16 years old
5. Before 6-8 years old

37. What are the main principles of conservative treatment of varicose veins?

1. -Strapping, wearing elastic cloths, treatment of the concomitant diseases with coughing and constipation, administration of phlebodynamic

2. Wearing elastic cloths, treatment of the concomitant diseases with coughing and constipation, walking in high heels, jogging, sunbathing

3. Wearing elastic cloths, massage of the lower extremities, sunbathing, administration of phlebodynamic medicines

38. What are common indications for phlebosclerosing therapy of varicose veins?

1. Enlargement of small valves or certain small veins if Brodie-Troyanov-Trandelenburg's test is negative
2. Preserving certain nodes and small veins after the surgery
3. Diffuse nature of varicose veins
4. Combination of diffuse enlargement of main valves of subcutaneous veins with local enlargement of their influxes in the form like nodes

Choose the correct answer:

a) 1, 3, 4
b) -1, 2
c) 3, 4
d) 2, 3
e) 3, 1

39. What is the essence of phlebosclerosing therapy of varicose veins?
1. Electrocoagulation of subcutaneous veins
2. -Injection of substances causing aseptic inflammation through the venous vessel lumen followed by sclerosing and lumen obliteration
3. Injection of substances causing aseptic inflammation through the venous vessel lumen followed by lumen obliteration and electrocoagulation

40. List phlebosclerosing drugs:
1. Fibro-vein
2. Varicocidum
3. Trombovar
4. Aethoxysklerol
5. Phenylin
6. Troxevasin

Choose the correct answer:
a) 1, 2, 6
b) 1, 2, 5
c) -1, 2, 3, 4
d) 1, 5, 6
e) All answers are correct

41. Troyanov–Trendelenburg operation during phlebectomy implies:
1. Ligation of communicating veins on the crus
2. Removal of subcutaneous veins by probes (either from metal or from plastic)
3. -Transection of great saphenous vein in the place it flows into femoral vein with ligation and transaction of all subcutaneous veins draining into v. saphena magna

42. Narat's surgery during phlebectomy implies:
1. Ligation of communicating veins on the crus
2. Removal of subcutaneous veins by probes (either from metal or from plastic)
3. Transection of great saphenous vein at its orifice
4. -Removal of varicose veins subcutaneous out from small incisions of 4–8 cm

43. Babcock's surgery implies:
1. Crossectomy
2. Ligation of communicating veins on the crus
3. Removal of varicose subcutaneous veins out from small incisions of 4–8 cm
4. -Removal of subcutaneous veins by probes out from two incisions

44. What operations are performed for ligation of inconsistent communicating veins?
1. Linton's
2. Cocket's
3. Narat's
4. Schede's
5. Sokolov-Klapp's

Choose the correct answer:
a) -1, 2
b) 1, 3

c) 1, 2, 3, 4
d) There are no correct answers

45. What does method of ligation of communicating veins according to Linton imply?
1. Suprafascial ligation of communicating veins
2. Resection of communicating veins
3. **-Subfascial ligation of communicating veins**
4. Sub- and suprafascial ligation of communicating veins

46. What does method of ligation of communicating veins according to Cockett imply?
1. **-Suprafascial ligation of communicating veins**
2. Resection of communicating veins
3. Subfascial ligation of communicating veins
4. Sub- and suprafascial ligation of communicating veins

47. What type of ligation of communicating veins would be appropriate for marked trophic changes of skin and subcutaneous fat in crus?
1. Sokolov-Clapp's technique
2. Troyanov-Trendelenburg surgery
3. **-Endoscopic transaction of communicating veins or Felder's method**
4. Schede's method

48. What is the essence of Felder's method in ligation of communicating veins?
1. Suprafascial ligation of communicating veins from incision of medial surface of lower third of the crus
2. -Subfascial preparation of the communicating veins from the incision on the back surface of the crus that was made from popliteal space to the ankle crossing the Achilles tendon
3. Subfascial ligation of communicating veins from continuous incision of lateral surface of the crus
4. The method does not imply treatment of communicating veins

49. Operation of Sidorina in varicose surgery implies:
1. **-«Tunnel» veins removal**
2. Phlebectomy in solid incision in medial crus
3. Removal of varicose veins out from 4-6 cm incision of skin and subcutaneous fat

50. What approaches are used for ligation of small subcutaneous vein near its orifice?
1. Transversal
2. Longitudinal
3. Oblique
4. S-shaped

Choose the correct answer:
a) 1, 2
b) 1, 3
c) 1, 2, 3
d) 1, 4
e) -All answers are correct

51. What complications can occur at phlebosclerosing therapy of varicose subcutaneous veins of lower extremities?
1. Infiltrates
2. Circumscribed necroses of skin and subcutaneous fat
3. Acute trombophlebities of subcutaneous and deep veins
4. Pulmonary embolism

Choose the correct answer:
a) 1, 3

b) 1, 2
c) 1, 2, 3
d) 2, 4
e) -All answers are correct

52. What medicines have phlebodynamic effect?
1. -Troxevasin, venoruton, detralex, endotelon, aescine
2. Troxevasin, trental, venoruton, detralex
3. Venoruton, phenylin, trental, troxevasin
4. Detralex, endotelon, aescine, glivanol, aspirin, heparin

53. Which of the following can be related to predisposing factors of varicose veins?
1. Weakness of muscular elastic fibers of venous walls
2. Hypoplasia and aplasia of venous valves
3. Weakness of deep crural fascia
4. Occurrence of non-functioning arteriovenous anastomoses
5. Hormonal imbalance
6. Disturbance of muscle venous pump of crus and foot

Choose the correct answer:
a) 1, 2
b) 1, 2, 3
c) 1, 4
d) 1, 5, 6
e) -All answers are correct

54. What for is endoscopic investigation of veins (veinoscopy) used?
1. To find out localization of large venous tributaries
2. To estimate the state of venous valves
3. To estimate the state of communicating veins
4. To estimate the patency of deep veins

Choose the correct answer:
a) 1, 2
b) -1, 2, 3
c) 1, 3
d) 1, 4

55. In diagnostics of what types of veins are computed tomography and magnetic resonance imaging informative?
1. Superficial and deep veins
2. Only superficial veins
3. -First of all in diagnostics of major venous vessels (vena cava, subclavian, iliac veins)

56. What test can be used to estimate the state of deep veins?
1. Arteriography
2. -Functional phlebotonometry
3. Capillaroscopy
4. Test Pratt-2

57. By how many per cents does the pressure increase in deep venous system of the lower extremities during the functional phlebotonometry at Valsalva maneuver in patients with consistent valvular apparatus of deep and communicating veins?
1. By 20%
2. By 15-20%
3. -By 10-12%

4. By 30%
5. By 40%

58. What communicating veins exist?
1. Direct
2. Indirect
3. Combined
4. Arteriovenous
Choose the correct answer:
a) 1, 4
b) 1, 3
c) -1, 2
d) 3, 4
e) All answers are correct

59. Is it true that non-direct communicating veins connect subcutaneous veins with muscular, which directly or indirectly interconnect with deep veins?
1. -Yes
2. No

60. Is it true that direct communicating veins connect subcutaneous veins with deep ones?
1. -Yes
2. No

Unit 17. THROMBOPHLEBITIES OF SUBCUTANEOUS AND DEEP VEINS OF EXTREMITIES

1. A patient, 49 y.o., in 6 days after stomach resection concerning tumour, had pains in the left lower extremity. The patient's condition is satisfactory. At palpation stomach is soft, painless. The left lower extremity is not changed. Cutaneous covering of the right lower extremity is of a normal color, there is minor pododema in the periankle area. Arterial pulsation in the foot is distinct. Sharp pains appear at dorsal flexion of the foot. Moses symptom is positive. What complication had developed during the post-operational period?
1. Acute myositis
2. Osteoarthritis of ankle joint
3. -Thrombosis of deep veins of the crus
4. Embolism of femoral artery
5. Lymphostasis

2. What can help to prevent from the development of acute deep vein thrombosis?
1. Antibiotic therapy
2. Strapping of the lower extremities
3. Vishnevsky ointment compress
4. Prescription of low doses of heparin
5. Early acivation of the patient
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 3, 5
c) -2, 4, 5
d) 1, 3
e) All answers are correct

3. What surgical prophylaxis of pulmonary embolism should be indicated for a patient with a floating thrombus in the infrarenal part of the inferior vena cava?
1. -Cava filter placement
2. Inferior cava thrombectomy
3. Plication of the inferior vena cava under renal veins
4. Ligation of the inferior vena cava
5. Suturation of the inferior vena cava by machine stitch
6. Resection of the inferior cava

4. What are main clynical symptoms of acute stage of Paget-Schroetter disease?
1. Swelling of face, neck, upper body and the upper extremities
2. Cyanosis of face and neck
3. -Arching pains in arms
4. -Cyanosis of cutaneous covering of the arm, more distinct venous picture, swelling in the arm
5. Swelling in the legs

5. What symptoms are typical for acute thrombosis of deep veins of the crus?
1. Edema of the whole lower limb
2. Moderate pains in sural muscles
3. Minor edema of the foot and a lower third of the crus
4. Positive Homans' sign
5. Positive intermittent claudication sign
Choose the correct combination of answers:
a) 1, 2, 3
b) -2, 3, 4
c) 2, 4, 5
d) 2 and 5
e) 3, 5
f) All mentioned above

6. You have a patient's in-home visit. She is 20 y.o., 38 weeks pregnant. Having examined her, you diagnosed iliofemoral venous thrombosis. What should be indicated?
1. -Hospitalize the patient in the maternity hospital, carry out conservative treatment indicated and controlled by vascular surgeon
2. To observe the patient at home, carry out conservative treatment
3. Indicate bed rest, dressing with Vishnevsky ointment

7. The patient, 67 y.o., suffers from varicose veins of the right lower limb. 3 days ago he had onset of acute thrombophlebitis of varicose veins of the crus. What should the conservative therapy for him?
1. Heparin – up to 30000 IU per 24 hours
2. Broad spectrum antibiotic
3. Troxevasin ointment – locally
4. Butadionum – 1 IU x 3 times per day
5. Aspirin – ¼ IU x 3 times per day
Choose the correct combination of answers:
a) 1, 3, 5
b) 1, 2, 5
c) 2, 3, 4
d) -2, 3, 4, 5
e) 1, 2, 4

8. The patient, 50 y.o., suffers from varicose veins of the lower limbs. He complains of pains, redness and indurations along superficial veins on the left crus, hyperthermia which appeared 5 days before. The condition is satisfactory. No edema and cyanosis of the lower limb. Hyperemia is detected on the inner

surface of the crus, and painful taenia to middle thirs of the crus can be palpated. What would be your therapeutic approach?
1. Carry out angiographic research
2. Ligate the femoral vein
3. Perform operation of Troyanov-Trendelenburg
4. Place cava filter
5. -Prescribe bed rest and conservative treatment; after the reduction of acute inflammation make the patient ready for the surgical

9. What symptoms are typical for varicose veins of lower extremities complicated by acute subcutaneous vein thrombophlebitis?
1. -Sharp pains in the extremity, mostly in the area of localization of thrombophlebitis
2. Constant edema of the whole limb
3. Trophic skin disorders near medial ankle
4. Trophic skin disorders of a toe
5. Podedema and dull pains in the leg that appear in the afternoon
6. -Dilatation of superficial veins with localized area of induration and hyperemia above it

10. What can be the place of primary formation of thrombus in the system of the inferior vena cava?
1. Deep veins of the crus
2. Iliofemoral venous segment
3. Superficial veins of the lower extremities
4. Internal iliac veins
5. Veniplexes of small pelvis
Choose the correct combination of answers:
a) 1, 2, 4
b) 1, 2, 3
c) 2, 1, 4, 5
d) -All answers are correct
e) There are no correct answers

11. The patient, 60 y.o., with coronary heart disease and cardiac fibrillation, had a sudden attack of pains in the right lower limb. Examination also revealed clearly marked edema of the right leg. Cutaneous covering of the limb are cyanotic with distinct venous picture. Palpation in the area of vascular fascicle on the thigh is painful. Homans' sign is positive. Pulsation on the foot arteries is distinct. What is the diagnosis?
1. Embolism of the right femoral artery
2. -Acute iliofemoral venous thrombosis
3. Intermuscular hematoma
4. Acute lymphostasis
5. Leriche's syndrome

12. Acute iliofemoral venous thrombosis can be complicated by:
1. -Pulmonary embolism
2. Muscle contracture
3. -Post-thrombotic syndrome
4. Femoral phlegmon
5. Crush syndrome

13. The patient had stomach resection for cancer. He has been detected the floating thrombus in the infrarenal part of the inferior vena cava. What method of surgical preventive measure against pulmonary embolism is the most appropriate in this situation?
1. -Cava filter placement
2. Thrombectomy from inferior vena cava

3. Ligation of the inferior vena cava
4. Plication of the inferior vena cava by machine stitch
5. Inferior vena cava thrombectomy followed by its placation

14. The patient, female, 55 y.o., was admitted to the surgical department. She has been suffering from varicose veins of the right lower extremity for a long time. She complains of pains in the right thigh. The condition is satisfactory. Band of hyperemia can be seen on the medial surface from middle one-third of crus to knee joint; solid painful filamentary cord can be palpated. The limb is not edematous. Homans' sign is negative. What treatment should be indicated?
1. Strict bed rest, heparinotherapy
2. -Bed rest, compress with heparin ointment, antibiotic therapy, disaggregants
3. Urgently perform Troyanov-Trendelenburg surgery
4. To place cava filter
5. Urgently perform Linton's operation

15. Clinical symptoms of a female patient indicate acute thrombosis of deep veins of the crus. What specialized tests can specify the diagnosis?
1. Thermography
2. -Doppler ultrasound
3. Retrograde iliocavography
4. -Distal ascending phlebography
5. Transcutaneous oxygen tension

16. What are clinical signs of acute iliofemoral venous thrombosis?
1. -Arching pains in the leg
2. «Intermittent claudification»
3. -Cyanosis of cutaneous covering of the extremity, intensification of venous picture
4. Abscence of pulse in the femoral artery
5. Edema of the low extremity up to knee joint

17. The patient, 70 y.o., had an emergency appendectomy for perforating appendicitis. Indicate treatment aimed at prevention of acute thrombosis of deep veins of the lower extremities in the post-operational period.
1. Exercise therapy for the lower limbs, respiratory gymnastics
2. Strapping of the lower limbs
3. Elevated position of the lower limbs
4. Early mobilization of the patient
5. Subcutaneous injection of clexane or fraxiparine
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 3, 5
c) 2, 3, 4
d) 2, 3, 5
e) 2, 4, 5
f) -All answers are correct

18. What are the main clinical symptoms of massive pulmonary embolism?
1. Pains behind the breastbone
2. Collapse
3. Apnoea
4. Cyanosis of face and upper body
5. Distention and pulsation of jugular veins
Choose the correct combination of answers:
a) 1, 2, 3

b) 1, 3, 4
c) 2, 3, 5
d) 3, 4
e) -All answers are correct

19. The patient, 55 y.o., is in gynaecological department. 2 days after the removal of hysteromyoma she was diagnosed iliofemoral venous thrombosis. What would be your approach?
1. -Carry out conservative therapy in the gynaecological clinic following the consultation of angiosurgeon
2. -If the conservative therapy is effective, to discharge the patient and prescribe ambulatory aftercare under the angiosurgeon's (surgeon's) supervision
3. To move the patient to the surgical hospital after the removal of the sutures
4. To question the transfer of the patient to vascular department for operative treatment
5. Urgently transfer the patient to the surgical department for operative treatment

20. What methods can prevent from pulmonary embolism at floating thrombosis of the inferior vena cava?
1. Thrombectomy
2. -Plication of the lower vena cava
3. Resection of the lower vena cava
4. -Cava filter placement
5. Formation of aortocaval fistula

21. The patient, 60 y.o., had emergency appendectomy for perforating appendicitis. What would be the actions aimed at the prevention of acute thrombophlebitis of deep veins of the lower extremities during the post-operational period?
1. Leg strapping
2. Elevated position of the legs
3. Subcutaneous introduction of low molecular weight heparin
4. Early mobilization of the patient
5. -All answers are correct

22. Clinical signs indicate acute thrombosis of the deep veins of the crus. What methods will help to specify the diagnosis?
1. -Doppler ultrasound
2. Retrograde iliocavography
3. Oscillography
4. Aorto-angiography

23. What symptoms are typical for acute iliofemoral phlebothrombosis?
1. -Stable limb edema
2. Vein reduction at elevated position of the limb
3. Reticular varicose veins
4. Pulsation of veins and systolic murmur over them
5. -Subcutaneous veins getting more distinct, and cyanosis of skin on the lower limb
6. Hypertrophy and leg lengthening

24. A patient, 65 y.o., with gross obesity, complains of severe pains in the left crus that appeared 8 hours ago and increased steadily. The left crus is increased, it is edematous and cyanotic. What supposed diagnosis is the most probable ?
1. Arterial embolism
2. Arterial thrombosis
3. -Venous thrombosis
4. Erysipelatous inflammation
5. Osteomyelitis

25. What symptom is not typical for acute thrombophlebitis of superficial veins?
1. Hyperemia of skin along the vein
2. Induration along the vein
3. -Significant limb enlargement
4. Topical temperature rise
5. Pains along the vein
6. -No pulsation of the dorsal foot artery

26. Acute thrombosis in the system of the lower vena cava can be complicated by the embolism of systemic circulation at:
1. Coarctation of aorta
2. Leriche's syndrome
3. Aortic insufficiency
4. Arteriovenous fistulas of the lower limbs
5. -Open oval window

27. The patient, 50 y.o., with varicose veins of the lower extremities, was admitted to hospital with complaints of pains, redness and induration along superficial veins on the left thigh and crus. Examination revealed hyperemia on the inner surface of the left thigh and crus along varicose veins, and painful taenia can be palpated to the missle third of the thigh. What would be your approach?
1. Prescribe strict bedrest, conservative treatment
2. Carry out angiography
3. Ligate the femoral vein
4. -Perform Troyanov-Trendelenburg's, Madelung's
5. To place cava filter

28. What characteristics should be taken into consideration in differential diagnosing of acute iliac-femoral venous thrombosis from thromboembolism of femoral artery?
1. Nature of edema
2. Skin colour
3. State of superficial veins
4. Muscle contracture
5. Pulsation of arteries
Choose the correct combination of answers:
a) 2, 3, 4
b) 3, 4, 5
c) 1, 2, 3
d) 1, 3, 5
e) -All answers are correct

29. The patient, 30 y.o., has an acute thrombosis of deep veins of the right crus of 3-day prescription. What indications would be appropriate?
1. Compressees with heparin ointment
2. Anticoagulant therapy
3. Antiaggregants (trental)
4. Broad spectrum antibiotic
5. Strapping of the extremity
Choose the correct combination of answers:
a) 1, 2, 3
b) 1, 3, 5
c) 2, 3, 5
d) 2, 4, 5
e) -All answers are correct

30. What factors participate in the development of thrombophlebitis of deep veins of limbs?
1. -Slowing of blood flow in the venous system of lower extremities
2. -Damaging the endothelium of the varices
3. Shunt from deep veins into superficial ones through perforants
4. Relative valvular insufficiency of deep veins
5. Systemic arterial hypertension
6. Inconsistency of ostial valve

31. The patient, 76 y.o., has varicose veins in the left lower limb with soft tissues trophism disorders. 3 days before he had an onset of acute thrombophlebitis of varicose crural veins. What should be included in the conservative therapy?
1. -Broad spectrum antibiotics
2. Hormonal preparation
3. Direct anticoagulant
4. Indirect anticoagulant
5. -Disaggregants
6. Vitamins

32. Paget-Schroetter syndrome is:
1. -Acute venous thrombosis of subclavian and axillary veins
2. Chronic venous insufficiency after acute venous thrombosis of subclavian and axillary veins
3. Acute thrombosis of the upper vena cava
4. Post-thrombotic syndrome of the upper limbs
5. This syndrome is not related with venous pathology

33. What do clinical findings of Paget-Schroetter syndrome include?
1. -Progressing swelling in the upper limb
2. -Severe pains in the upper limb and cyanosis of the skin
3. Progressing swelling in the lower limb
4. Severe pains in the lower limbs and cyanosis of the skin
5. 3, 4
6. All mentioned above

34. What should be performed for diagnosing Paget-Schroetter disease?
1. Roentgenography of cervical and thoracic part of the spine
2. -Doppler ultrasound
3. Aorto-arteriography
4. -Phlebography
5. All mentioned above

35. What complication of the deep vein thrombosis of the lower limbs is the most dangerous?
1. Trophic crus ulcer
2. -Pulmonary embolism
3. Phlebitis of varicose nodes
4. Obliteration of deep veins
5. Elephantiasis

36. Which of the following is not a main symptom of subclavian-axillary venous thrombosis?
1. Fatigue in the arm when working
2. Swelling in the arm
3. Cyanosis of cutaneous covering of forearm and shoulder
4. -Elbow joint enlargement
5. Arching pains in the limb

6. -Lengthening of the upper limb
7. All answers are correct

37. What are indications for emergency surgery at acute thrombophlebitis of subcutaneous veins?
1. -Localization of thrombophlebitis in the area of great saphenous vein orifice
2. Stage 1 of the inflammation process in the area of thrombophlebitis
3. Combination of thrombophlebitis with erysipelas
4. -Ascending thrombophlebitis
5. Total thrombosis of great saphenous vein in the crus

38. Triad of thrombosis of Virchow includes:
1. -Slowdown of the blood flow in the vascular bed
2. Pathologic arteriovenous fistulas
3. Electrolytic blood disturbances
4. Increase in arterial influx
5. Necrotic changes of soft tissues
6. Reduction of oxygen saturation

39. What operation is perfomed at acute thrombophlebitis of subcutaneous veins?
1. Ditrichs'
2. -Madelung's y
3. Cockett's
4. Linton's
5. Felder's
6. All mentioned above

40. Venous gangrene is:
1. Takayasu's syndrome
2. Buerger's disease
3. Denerey's syndrom
4. -Gregoir's disease
5. Klippel-Trenaunay's syndrome
6. Parks-Weber-Rubashov's disease

41. What is strapping of the lower limbs during the postoperational perod aimed?
1. Necessity of lymphostasis prevention
2. -Prevention of pulmonary embolism
3. -Faster blood flow in deep veins
4. Prevention of trophic disorders
5. Necessity to influence the arterial blood flow
6. Stabilization of osteoarticular system

42. What factor(s) does(do) not promote the better venous blood flow in the lower limbs during the post-operational period
1. Early wake-up
2. Strapping of the crus
3. Elevated position of legs
4. -Prolonged and strict bed rest
5. Sural muscle contraction
6. Massage of the lower limbs

43. Because of what can phlebothrombosis of the lower limbs be dangerous?
1. Renal infarct
2. -Infarct pneumonia

3. Thromboembolism of mesenteric vessels
4. Pylephlebitis
5. -Pulmonary embolism

44. What promotes the development of acute iliofemoral phlebothrombosis?
1. Increasing thrombocyte adhesion
2. Slowdown of blood circulation
3. Hypercoagulation blood condition
4. Damaging of vessels endothelium
5. Increased ability of erythrocytes to aggregation
6. Lower rate of calcium ions in blood
Choose the correct combination of answers:
a) 2, 3
b) 2, 4, 5
c) 1, 3, 4
d) 2, 3, 5
e) -1, 2, 3, 4, 5
g) All answers are correct

45. What symptoms are typical for acute thrombosis of deep veins of the crus?
1. Edema of the whole lower limb
2. Moderate pains in the sural muscles
3. Small edema of the foot and the lower third of crus
4. Positive Homans' sign
5. Pale cutaneous covering
6. Positive plantar ischemia sign
Choose the correct combination of answers:
a) 1, 2, 3
b) -2, 3, 4
c) 2, 4, 5
d) 2, 5
e) 3, 5

46. List curative measures aimed at the prevention of further spread of thrombosis in the main veins of the lower limbs.
1. Compresses with Vishnevsky ointment
2. Antibiotics
3. Strict bed rest
4. Anticoagulant therapy
5. Antiaggregant therapy
6. Strapping of the extremity
Choose the correct combination of answers:
a) 1, 2, 3
b) 2, 5, 6
c) 3, 4, 5
d) -4, 5, 6
e) All answers are correct

47. Which of the following signs are taken into consideration when making a differential diagnosing of acute iliofemoral venous thrombosis from thromboembolism of femoral artery?
1. Length of the extremity
2. Nature of edema
3. Skin colour
4. The condition of superficial veins

5. Muscle contracture
6. Artery pulsation
Choose the correct combination of answers:
a) 1, 2, 3, 4, 5
b) 1, 3, 4
c) 1, 4, 5, 6
d) -2, 3, 4, 5, 6
e) All answers are correct

48. The patient, 38 y.o., is suspected in having thrombosis of deep crural veins. What methods can confirm the diagnosis and will enable to define topical diagnosing of the lesion?
1. Sphygmography
2. Capillaroscopy
3. Reovasography
4. Phlebotonometry
5. -Radiotracer methodology with marked fibrinogen
6. -Ascending distal functional phlebography

49. Which methods of diagnosing of pulmonary embolism are the most precise?
1. Survey chest radiography
2. Electrocardiography
3. Radiocardiography
4. -Pulmonary angiography
5. -Perfusion lung scan

50. What factors can promote the development of venous thrombosis?
1. Damage of venous wall
2. Congenital arteriovenous shunts
3. Increased blood thrombosis capacity
4. Heartbeat rhythm disturbance
5. Slowdown of blood flow in veins
Choose the correct combination of answers:
a) 1, 2, 4
b) 1, 3, 4
c) -1, 3, 5
d) 3, 4, 5
e) All answers are correct

51. After what surgery can acute thrombophlebitis of subcutaneous veins develop?
1. Herniotomy
2. Strumectomy on nodular goiter
3. Resection of 2/3 of the stomach on peptic ulcer
4. -Hysterectomy on cancer
5. Hemorrhoidectomy
6. Femoral-popliteal shunting with synthetic prosthesis

52. Varicose veins reach the decompensation stage with the occurrence of:
1. -Acute thrombophlebitis
2. Valvular insufficiency of great saphenous an deep veins
3. Valvular insufficiency of communicating veins
4. Varicose veins combined with obliterating atherosclerosis
5. Venous lake

53. What disease is not related to special clinical course of acute iliofemoral thrombosis?

1. Gregoire's disease
2. «Milk leg»
3. -Genu valgum
4. Flegmasia cerulea dolens
5. Venous gangrene
6. Flegmasia alba dolens

54. What is indicated on early stages of Gregoire's disease?
1. Phlebectomy
2. Reconstruction of iliac arteries
3. -Broad incisions of fascial muscle sheaths
4. Linton's surgery
5. Intersection of inguinal ligament on the affected side

55. When first should zink-gelatinous bandage be applied for a patient with acute thrombophlebitis?
1. When admitted to hospital
2. Before physiotherapy
3. -At the end of conservative treatment course
4. In a year after the disease

56. Unna boot bandage consists of:
1. -Zinc, gelatin, glycerine
2. Vaseline, lanolin, magnesium
3. Calcium, plaster, water
4. Stearin, alcohol, magnesium sulphate
5. Barium sulfate, collagen, agar

57. What clinical symptom is typical for acute thrombophlebitis of deep veins?
1. Rovsing's sign
2. Körte's symptom
3. -Homan's sign
4. Mussi's symptome
5. Yaure-Rosanov's symptome

58. Moses sign at acute thrombophlebitis is:
1. Palpation of the crus is painful
2. Pains in the crus at dorsal flexion
3. -Pains at pressing the crus back- and frontwards
4. Pains at palpation in the area of inner surface of the hill and ankle
5. Pains at tapping the shinbone

59. Which of the following is direct anticoagulant that is always used for the treatment of acute thrombophlebitis?
1. Trental
2. Aspirin
3. -Clexane
4. Neodicumarinum
5. Fibrinolysin
6. Streptokinase

60. Plication of inferior vena cava is:
1. -Insertion of 3-4 mattress sutures into the inferior vena cava in the transversely
2. Removal of thrombosis from the venous lumen using a Fogarty catheter
3. Ligation of the inferior vena cava

4. Anastomosis between the inferior vena cava and aorta
5. Anastomosis between the inferior vena cava and aorta

UNIT 18. POSTTHROMBOPHLEBITIC SYNDROME. LIMB LYMPHEDEMA

1 Postthrombotic diseases of lower extremities is the result of:
1. Superficial veins thrombosis
2. Varicose superficial veins dilatation
3. **-Deep veins thrombosis**
4. Great saphenous vein ligation
5. Main artery thrombosis

2. A patient had acute sinistral iliofemoral venous thrombosis. The therapy was conservative. At present he has left leg edema, enlarging in the evening. Examination detected enchancement of hypodermic venous pattern and no trophic skin disorders. Left shin perimeter is 2 cm enlarged. What therapy should be prescribed:
1. Elastic bandaging;
2. Physiotherapeutic procedures;
3. Trental, complamin, venorutin, aescusan intake;
4. Bandage with Vishnevsky ointment;
5. Antibiotics intake.

Right variants:
a) -1, 2, 3
b) 1, 3, 4
c) 3, 4, 5
d) 1, 2, 5
e) 4, 5

3. What are the main pathologic hemodynamic factors, causing posttrombophlebitic disease of lower extremities:
1. Arterial occlusion;
2. Mechanical obstacle in the deep veins blood flow;
3. Blood regurgitation in deep veins;
4. Shunt into the hypodermic venous network through a perforant;
5. Arterial systemic hypertension.

Right variants:
a) 1, 3, 4
b) 1, 4, 5
c) -2, 3, 4
d) 2, 3, 5
e) 2, 4, 5

4. The complex of symptoms, developing 2 months later the recent acute deep veins thrombophlebitis of lower extremities is called:
1. **-Postthrombophlebitic disease**
2. Gregoir's disease
3. **-Postthrombophlebitic syndrome**

4. Postcholecystectomy syndrome
5. Parks-Weber syndrome
6. Postthrombatic occlusion of peripheral arteries
7. Burger's disease

5. Postthrombophlebitic disease usually affects:
1. Capillary system
2. Communicuntor veins
3. **-Deep veins of lower extremities**
4. Arterial vessels
5. Arteriovenous fistulas
6. Everything mentioned

6. Postthrombophlebitic disease is most evident after:
1. Thrombophlebitis of popliteal-tibial segment
2. Thrombophlebitis of femoral-tibial segment
3. **-Thrombophlebitis of iliofemoral segment**
4. Thrombophlebitis of iliocaval segment
5. Thrombophlebitis of inferior vena cava

7. Pathophysiology of venous hemodynamics in postthrombophlebitic disease first of all is connected with:
1. Varicose superficial veins dilatation
2. Pathologic arterial blood shunt into the deep venous system
3. Pathologic blood shunt out of arteries into superficial venous system
4. **-Venous hypertension of lower extremities**
5. Everything mentioned

8. Typical complex of symptoms in postthrombophlebitic disease doesn't include:
1. Pains in lower extremities
2. Edema of lower extremities
3. **-Pulseless feet**
4. Repeated varicose veins dilatation
5. Pigmentation and induration of shin skin

9. Typical complex of symptoms in postthrombophlebitic disease doesn't include:
1. Pigmental nevus on lower extremities
2. Chilling and pailing of lower extremities
3. Skin papillomatosis of lower extremities
4. Pulseless lower extremities
5. Joints valgus
6. **-Everything mentioned**

10. The most widespread forms of postthrombophlebitic disease are:
1. **-Edematic-painful**
2. **-Varicose-ulcerous**
3. Trophic
4. Dystrophic

5. Everything mentioned

11. What are the determining diagnostic techniques for surgical therapy in postthrombophlebitic disease diagnosing?
1. Functional tests
2. Radionuclide angiography and phlebography
3. **-Ultrasonic dopplerography**
4. **-Contrast phlebography**
5. Computer tomography
6. Everything mentioned

12. What are the most often methods of postthrombophlebitic disease surgical treatment?
1. Prosthetic valve implantation into the deep venous system
2. Cockett surgery
3. Extravasal correction of valves in the deep veins
4. Autovenous shunting and deep veins prosthetics
5. **-Linton surgery accompanied by combined phlebectomy**

13. What treatment mode is used in venous occlusion of upper extremities?
1. **-Conservative therapy**
2. Thrombectomy
3. 1 rib resection, scalenotomy
4. Autovenous shunting
5. Endovasal balloon angioplasty

14. The syndrome conditioned by hypoplasia or aplasia of the deep venous system of lower extremities is called:
1. Takayasu's syndrome
2. Parks-Weber-Rubashov syndrome
3. **-Klippel-Trenaunay syndrome**
4. Leriche’s syndrome
5. Mandor’s syndrome

15. In Klippel-Trenaunay syndrome the main role is played by:
1. Pigmental and venous lakes
2. Hypodermic veins varix
3. Considerably enlarged extremities soft tissues
4. **-Everything mentioned**

16. What should be applied in Klippel-Trenaunay syndrome diagnosing:
1. Extremity volume measuring
2. Phlebotonometry
3. Ultrasonic scanning
4. Phlebography
5. **-Everything mentioned**

17. Optimal terms of surgery for the patients with Klippel-Trenaunay syndrome are:

1. Neonatal period
2. 2-3 years
3. **-4-7 years**
4. 10-13 years
5. After 15 years

18. What method of Klippel-Trenaunay syndrome therapy gives best results:
1. Electrocoagulation
2. Sclerotherapy
3. Elastic bandaging of lower extremities
4. Surgical therapy
5. **-All the mentionев methods combined**

19. Lymphatic system of lower extremities is:
1. Common system of lymphatic vessels, entering into inguinal lymph nodes
2. Superficial and deep lymphatic system
3. **-Superficial lymphatic system, dividing into the large and small basins of small hypodermic veins and deep lymphatic system**
4. System of lymphatic vessels, entering into femoral vein and regional lymph nodes

20. Lymphedema can arise because of:
1. Capillar walls damage with hyperpermeability development
2. Great lymphatic vessels obstruction
3. Hydrostic and osmotic pressure disorders
4. Hypersomatic fluid in tissues
5. **-Everything mentioned**

21. The possible stages of lymphedema:
1. **-Primary**
2. **-Secondary**
3. Mixed
4. Combined
5. Everything mentioned

22. The most probable cause of upper extremities lymphedema 14 days after radical extended mastectomy is:
1. **-Operative removal of regional lymphatic collectors**
2. Metastases into axillary lymph nodes
3. Paget-Schroetter syndrome
4. Acute subclavian vein thrombosis
5. Generalized lymphadenitis

23. In the lymphedema diagnosing the leading role is played by:
1. The affected extremity X-Ray
2. Arteriography
3. Phlebography
4. **-Lymphography**

5. Ultrasonic dopplerography

24. Conservative therapy of lymphedema mild cases includes:
1. Thorough hygiene of extremities
2. High position of extremity
3. Periodical extremities compression
4. Diuretics intake
5. **-Everything mentioned**

25. Differential lymphedema diagnosing is carried out in:
1. Obesity
2. Postthrombophlebitic syndrome of extremities
3. Lower extremities hemangioma
4. Autovenous fistula
5. **-Everything mentioned**

26. The most often used methods in surgical therapy of lymphedema are:
1. Ablastics surgery
2. **-Lymphovenous anastomoses**
3. External drainage of superficial and deep lymphatic systems outflow

27. The leading role of phlebohemodynamics after recent lower extremities deep veins thrombophlebitis is played by:
1. Superficial venous network
2. **-System of muscular and intramuscular veins**
3. Lymphatic system
4. Intraosseous vascular lump
5. Arteriovenous anastomosis

28. In postthrombophlebitic syndrome all the mentioned processes take place except:
1. Recanalization of the thrombosed vein
2. **-Valve lumps**
3. Valve destruction
4. Rightvenous fibrosis
5. Increase of hydrostatic venous pressure

29. In thrombophlebitic syndrome the major pathological changes occur in:
1. **-Deep veins**
2. Great elastic arteries
3. Great muscular arteries
4. Lymphatic vessels
5. Superficial venous network

30. Clinical forms in postthrombophlebitic syndrome are:
1. Painless
2. Algesic
3. **-Edematic-algesic**

4. Trophic
5. Angiotrophic
6. **-Mixed**

31. What complaints are correspond to a postthrombophlebitic syndrome:
1. Extremities chill
2. **-Extremities pain**
3. Extremity length extension
4. **-Extremity volume extension**
5. Feet joints deformation

32. In postthrombophlebitic syndrome almost 100% cases have:
1. **-Extremities edema**
2. Hyperpigmentation
3. Cellulitis
4. Hypodermic veins dilatation
5. Shin ulcer

33. Ulceration in postthrombophlebitic syndrome is most often occur in:
1. Thigh
2. Anterior surface of shin upper third
3. **-Medial surface of shin lower third**
4. Foot
5. Doesn't have defined localization

34. Trophic ulcer localization on the medial surface of the lower shin third is conditioned by:
1. Linton's communicant
2. **-Cockett communicator**
3. Felder communicator
4. Gregoir's communicator
5. Dodd communicator
6. Boyd communicator

35. Martarella trophic ulcer is characteristic of:
1. Postthrombophlebitic syndrome
2. Varicose disease
3. Syphilis
4. **-Hypertonic disease**
5. Thrombooblitory arteries diseases
6. Pancreatic diabetes

36. What symptoms are absent in clinical representation of postthrombophlebitic syndrome:
1. **-Trophic disorders in the thigh**
2. Evidence of the hypodermic pubis and and anteroventral veins
3. Varicose hypodermic venous extremity network dilatation
4. Inverted pop-bottle syndrome
5. Phleboginious lumbosacral radiculitis

6. -Knees and feet joints deformation

37. Pain syndrome in edematous-painful form of postthrombophlebitic syndrome is conditioned by:
1. Necrosis in the ulcer area
2. -Inflammation of sensory nerves in the venous adventitia
3. -Nerves irritation by the edematous tissues
4. Ischemia caused by the great arterial blood flow disorder

38. Trophic disorders in postthrombophlebitic syndrome can be explained by:
1. Virchow's thromboformation theory
2. -Leukocyte trap theory
3. Autoallergic theory
4. -Fibrous cuff syndrome

39. The indications for surgical postthrombophlebitic syndrome therapy are:
1. Progressing extremity edema
2. Often disease exacerbation
3. -Varicose form with incompetent communicative veins
4. -Ulcerous form
5. Combination of postthrombophlebitic syndrome and obliterating arterial diseases
6. Everything mentioned

40. Complex trophic ulcers treatment in postthrombophlebitic syndrome consists in:
1. Combination of venotonics, disaggregants, thrombolytics
2. -Venous hemodynamic correction, medicamental therapy, local treatment
3. Combination of surgery for superficial and deep venous system
4. Everything mentioned

41. The most pathogenetically grounded method of conservative therapy in postthrombophlebitic syndrome is:
1. Medicamental therapy by venotonics
2. -Compressive supporting therapy
3. Physiotherapy based on magnetic field
4. Exercise therapy
5. Following the work-rest regime

42. All methods relate to the compressive supportive therapy in postthrombophlebitic syndrome, except:
1. Compressive-elastic stockinet
2. -Desault's bandage
3. Unna’s bandage
4. -Plaster circular bandage
5. Zinc gelatinous dressing
6. Elastic bandaging

43. III stage of hemodynamic disorder (lympho-venous deficiency stage) in postthrombophlebitic syndrome is characterized by:
1. -Ulcerous defects

2. Hemosiderosis
3. Stable edemas
4. Transient edemas
5. Indurates without necrotic changes

44. Lymphographic examination according to:
1. Linton's method
2. Cockett's method
3. Felder's method
4. **-Kinmont's method**
5. Seldinger's method
6. Dos-Santos method

45. In fybrodema (IV lymphedema stage) the recommended surgery is:
1. Lymphoadenectomy
2. Lymphovenous anastomosis on the shin and thigh
3. Lymphovenoys thigh anastomosis
4. Periarterial sympathectomy
5. **-Dermolipofascioectomy**

46. What surgeries, eliminating shunt out of the deep veins into superficial are used in postthrombophlebitic syndrome:
1. **-Linton's**
2. Palm-Esperson's
3. Warren-Tire's
4. **-Felder's**
5. Psatakis's

47. Difference between Linton's and Felder's surgeries lies in:
1. **-Access through shin**
2. Reconstruction character of deep venous network
3. Under-and-over fascial communicant veins bandaging
4. Number of bandaged communicant veins
5. Everything mentioned

48. Access in Felder's operation is carried out:
1. By stripe method through shin and thigh
2. **-Along the back shin surface from the popliteal space to the lateral malleolus**
3. Along the back shin surface in its lower third
4. Parallel to the inguinal fold
5. Along the back thigh surface

49. All the mentioned preparations refer to the phlebodynamic ones except:
1. Glyvenolum
2. **-Ascorbic acid**
3. **-Triampur**
4. Detralex

5. Aescusan
6. Anavenol

50. The process of deep veins recanalization after recent acute thrombophlebitis takes:
1. 3 days
2. 2 months
3. 2 weeks
4. **-A year and more**
5. Doesn't occur

51. All the enumerated factors increase the clinical signs of postthrombophlebitic syndrome, except:
1. Pregnancy
2. Acute thrombophlebitis
3. **-Weight loss**
4. Acsites
5. Abdominal cavity tumours

52. What are the causes of chronic venous insufficiency of lower extremities:
1. Heart lesion in left ventricular failure;
2. Mechanical blood extremities outflow obstruction;
3. Insignificant heart effect of suction in right ventricular failure;
4. Valvular insufficiency of the large hypodermic and deep veins;
5. Valvular insufficiency of communicator veins.

Right variants:
a) 4
b) 1, 4
c) -2, 4, 5
d) 2, 3, 4, 5
e) All variants are right

53. What are the characteristics of lower extremities postthrombophlebitic syndrome:
1. Skin pigmentation;
2. Congestive dermatitis and sclerosis;
3. Skin atrophy;
4. Cutis marmorata;
5. Recurrent superficial veins varix.

Right variants:
a) 2, 3
b) 4, 5
c) 1, 2, 4
d) -1, 2, 5
e) 2, 3, 4, 5

54. What is wrong? Postthrombophlebitic syndrome is often accompanied by:
1. Telangiectasia
2. **-Pale feet and shin skin**
3. Shin hyperpigmentation

4. Distal part of extremity lengthening
5. -Extremity eczema lesion
6. All variants are right

55. What are prevention techniques of postthrombophlebitic syndrome development after recent acute ileofemoral phlebothrombosis:
1. Venotonics and disaggregant intake;
2. Cava-filter installation;
3. Linton's operation;
4. Zink-gelatinous dressing;
5. By-pass grafting bypassing thrombosis area;
6. Elastic compressive knit.
Right variants:
a) -1, 4, 6
b) 1, 3, 4, 5, 6
c) 2, 3, 5
d) All variants are right
e) None of the variants are right

56. Valvular insufficiency in postthrombophlebitic syndrome can be diagnosed by:
1. -Duplex scanning of lower extremities venous system
2. -Vertical dynamic distal phlebography
3. Aorto-angiography
4. Determining of trancutane tissue oxygen tension
5. All variants are right
6. None of the variants are right

57. Shin subfascial dissection of perforant veins aiming to separate deep and superficial venous system can be carried out with the help of:
1. Linton's surgery
2. Felder's surgery
3. Endoscopic method
4. -All variants are right
5. None of the variants are right

UNIT 19. CHRONIC PARAPRACTITIS. EPITHELIAL COCCYGEAL COURSE. RECTOVAGINAL FISTULAS. NONNEOPLASTIC DISEASES OF THE COLON.

1. What is most characteristic of chronic paraproctitis?
1. Hematuria
2. -Mouth of a fistula on the perineum skin
3. Discharge of crimson blood after defecation
4. Pains under belly
5. Diarrhea

2. Following methods are used for rectal fistulas examination:
1. Visual examination and palpation

2. Digital rectal investigation
3. Staining of the fistula tract
4. Fistulography
5. -Everything mentioned above

3. Epithelial coccygeal course:
1. Is connected with the sacrum
2. Is connected with the coccyx
3. -Ends blindly in the subcutaneous tissue of the inter-buttock area
4. Is situated between the posterior rectal surface and the anterior sacral surface
5. Is communicated with the rectal lumen

4. Congenital megacolon (Hirschsprung's disease) is diagnosed with the help of:
1. Fecal microbiological test
2. X-ray examination
3. -Large intestine biopsy

5. In Hirschsprung's disease there is no diagnostic meaning in:
1. Irrigoscopy
2. Examination of the barium passage along the large intestine
3. -Change of internal rectal sphincter tone
4. Svenson's biopsy
5. Colonoscopy

6. What intestine is damaged most often in ulcerative colitis?
1 .Ascending colon
2. -Transverse colon
3. Descending colon
4. Blind gut
5. Rectum

7. Toxic megacolon is the complication of:
1. Crohn's disease
2. Hirschsprung's disease
3. Gardner's syndrome
4. Peutz–Jeghers syndrome
5. -Nonspecific ulcerative colitis

8. Sudden stop of diarrhea in nonspecific ulcerative colitis accompanied by severe intoxication points to the:
1 .Effectiveness of conservative therapy
2. -Toxic dilatation
3. Wrong diagnosis
4. Perforation
5. Hypovolemia

9. In continuous therapy of ulcerative colitis following signs can be revealed except:

1. Shortening of the bowel
2. Reduction of mucous surface brightness
3. -Enlargement of the retroperitoneal lymph nodes
4. Right variants are 1 and 2

10. In therapy of nonspecific ulcerative colitis all the following preparations are used except:
1. Antibiotics
2. -Laxatives
3. Vitamines
4. Immunostimulants
5. Hormonal preparations

11. What is used in therapy of ulcerative colitis?
1. Total parenteral nutrition
2. Total colectomy with ileostomy
3. Subtotal colectomy with ideostomy
4. -All the mentioned methods
5. None of the methods

12. Complication of nonspecific ulcerative colitis, not demanding any operative intervention is:
1. Bleeding
2. Toxic megacolon
3. -Water-electrolyte imbalance
4. Malignization
5. Perforation

13. In bowel perforation due to ulcerative colitis following measures are indicated:
1. -Perforation suturing and ileostomy
2. Proximal colostomy
3. Total colectomy and ileostomy
4. Resection of the bowel segment with perforation
5. Loop exteriorization with peritoneum perforation

14. Surgical therapy in nonspecific ulcerative colitis is indicated in:
1 .Profuse bleeding
2. Bowel perforation
3. Toxic dilatation
4. Non-effective conservative therapy
5. -All the mentioned disorders

15. What microorganism causes pseudomembranous colitis due to antibiotic therapy?
1. Staphylococcus
2. Streptococcus
3. Colon bacillus
4. Bacteroides
5. -Clostridium difficile

16. The following methods are used in pseudomembranous colitis therapy:
1. Stop of antibiotics intake (clindamycin)
2. Metronidazole
3. Water-electrolyte imbalance correction
4. Vancomycin
5. -Steroids

17. Agent of choice in pseudomembranous colitis therapy is:
1. Metronidazole
2. Tetracycline
3. Cefuroxime
4. Biseptol
5. -Vancomycin

18. The following factors influence diverticulum development except:
1. Chronic constipations
2. -Large amount of feces
3. Hereditary predisposition
4. Age-related tissues degeneration
5. Annular contraction of the intestine

19. The most frequent large intestine diverticulum localization is:
1. Blind gut
2. Ascending colon
3. Transverse colon
4. Descending colon
5. -Sigmoid colon
6. Rectum

20. The most frequent colon diverticulum complications are:
1. Bleeding
2. Bowel perforation
3. Diverticulitis
4. Bowel obstruction
5. Internal intestinal fistula
Right variants:
a) 1, 2, 3
b) 1, 4, 5
c) 2, 4, 5
d) -1, 3
e) 4, 5

21. Biochemical disorders accompanying villous adenoma includes everything except:
1. Hypokalemia
2. Hyponatremia
3. Hypochloremia
4. Uraemia

5. -Hypocalcemia

22. Lymph outflow from the sigma is performed through the following lymph nodes:
1. Superior mesenteric lymph nodes
2. -Inferior mesenteric lymph nodes
3. Para-aortic lymph nodes
4. None of the mentioned lymph nodes
5. Through all the mentioned lymph nodes

23. The most effective therapy of rectal fistulas is:
1. Conservative
2. Sclerosing
3. -Surgical
4. Fistula filling

24. Surgical therapy of intrasphincteric rectal fistulas includes all the following operations except:
1. Fistula dissection in the rectal lumen
2. Fistula excision in the rectal lumen (according to Gabriel)
3. Fistula excision with the purulent cavity opening
4. -Fistula excision with purulent cavity opening, suturing and drainage

25. Surgical therapy of trans-sphincteric rectal fistulas includes all the following operations except:
1. Fistula excision in the rectal lumen with a wound bottom suturing
2. Fistula excision in the rectal lumen with partial wound bottom suturing. Opening and drainage of the purulent cavity
3. Fistula excision in the rectal lumen with opening and drainage of the purulent cavity
4. -Fistula excision with ligation conduction

26. Operation of choice in therapy of extra-sphinteric fistulas of the 1st stage is:
1. Fistula excision with the sphincter suturing
2. Fistula excision with the rectal mucosa transfer
3. Fistula excision without the sphincter suturing
4. -Dosed sphincterotomy at a depth of 0,6-0.8 cm with fistula excision

27. Operation of choice in therapy of extra-sphinteric fistulas of the 2nd stage is:
1. -Fistula excision with the sphincter suturing
2. Fistula excision with the rectal mucosa transfer
3. Fistula excision with ligation conduction
4. Dosed sphincterotomy at a depth of 0,6-0.8 cm with fistula excision

28. Operation of choice in therapy of extra-sphinteric fistulas of the 3rd stage is:
1. Fistula excision with the sphincter suturing
2. -Fistula excision with the rectal mucosa transfer or fistula excision with ligation conduction into the sinus tract
3. Fistula excision (without sphincter excision) with ligation conduction into the ligation tract
4. Dosed sphincterotomy at a depth of 0,6-0.8 cm with fistula excision

29. Operation of choice in therapy of extra-sphinteric fistulas of the 4th stage is::

1. Fistula excision with the sphincter suturing
2. Fistula excision with the rectal mucosa transfer
3. Dosed sphincterotomy at a depth of 0,6-0.8 cm with fistula excision
4. -Fistula excision without sphincter excision with ligation conduction into the ligation tract

30. In extra-sphinteric fistulas, complicated by purulent cavity, the most radical surgery:
1. Fistula excision in the rectal lumen
2. Drainage of the purulent cavity
3. Blinichev's mucous membrane plastic pull-through
4. Fistula excision with the sphincter suturing
5. -Ligation conduction and purulent cavity drainage

31. Rest cure after a fistula excision with plastic transfer of distal rectal mucosa **should last for:**
1. 2-3 days
2. 3-4 days
3. 4-5 days
4. 5-6 days
5. -6-7 days

32. After fistula excision with sphincter suturing stool is detained for:
1. 2-3 days
2. 3-4 days
3. 4-5 days
4. -5-6 days
5. 6-7 days

33. Classification of rectovaginal fistulas according to localization of the opening into the vagina includes everuthing except:
1. Fistula located in the lower third of the vagina
2. Fistula located in the middle third of the vagina
3. Fistula located in the upper third of the vagina
4. -Total vaginal fistula

34. The most reliable method of colon polyps diagnosing is:
1. Radiographic contrast study by barium sulfate passage through the mouth
2. Irrigoscopy
3. -Colonoscopy
4. Feces analysis on presence of occult blood
5. Pneumocolonoscopy

35. A 66-year-old patient suddenly fell ill. Symptoms are: pains in the left iliac area, temperature increase, muscle tension and painfulness in the left iliac area. What is the most likely diagnosis?
1. Stenosing cancer of the sigmoid colon
2. -Sigma diverticulitis
3. Colon polyposis
4. Sigma volvulus
5. Crohn's disease

36. What examinations have a diagnostic meaning in Hirschsprung's disease?

1. Irrigoscopy
2. Examination of barium passage through the intestine
3. Measurement of the rectal sphincter tone
4. Scatological investigation
5. Svenson's biopsy

Choose the correct answer combination:

a) -, 2 and 5
b) 1, 3 and 5
c) 2, 4 and 5
d) 1, 2, 3 and 5
e) All variants are correct
f) 1, 2, 3

37. What is not characteristic of nonspecific ulcerative colitis?

1. -Right parts of the intestine are affected
2. Manifestation with diarrhea with mucus and blood
3. Development of anemia and hypoalbuminemia
4. Iridocyclitis
5. Tendency to malignization

38. Specify the conservative therapy in nonspecific ulcerative colitis:

1. Dietotherapy (elimination of milk and milk products)
2. Vitamins therapy
3. Sulfanamide therapy
4. Desensitizing therapy

5. -Everything mentioned

39. What examination techniques help to approve Crohn's disease diagnosing?

1. Irrigoscopy (garland-like alteration of dilated and narrowed areas)
2. Plan radiography of the abdominal organs (Kloiber's cups)
3. Irrigoscopy (filling defect in the ileum and blind gut)
4. Colonoscopy with biopsy
5. Laparoscopy with mesentery lymph nodes biopsy

Choose the correct answer combination:

a) -1 and 4
b) 2 and 5
c) 4 and 5
d) 3 and 4
e) All variants are correct

40. What colon polypes have the least tendency to malignization?

1. -Hyperplastic
2. Villiferous
3. Adenomatous
4. Multiple adenomatous
5. Malignization index is the same in all cases

41. You should give a consultation to a 15-year-old boy. From birth he has been suffering from constipation. Stool can be absent for 7-10 days, the patient uses laxatives and enemas. He has physical and mental development lag. The tongue is wet. The abdomen is enlarged. The abdominal wall is slack. Digital rectal investigation shows no pathology. What is your provisional diagnosis?

1. -Hirschsprung's disease
2. Duplex colon
3. Sigmoid colon stenosis

4. Sigmoid colon volvulus
5. Nothing of the mentioned above

42. Toxic dilatation of the colon in ulcerative colitis is conditioned by:
1. Muscle fibers dystrophy
2. Intestinal nervous apparatus disorder
3. Electrolytic disorders
4. Nothing of the mentioned above
5. -Everything mentioned above

43. A 70-year-old patient presented to a hospital. About 2 days ago she felt pains in the left iliac area, increasing when coughing and physical activity. Had been suffering from constipations for a long time. Physical examination detected satisfactory condition. The tongue was wet and furred. The abdomen participated in breathing, palpation showed muscle tension and painfulness in the left iliac area. Blumberg's sign was moderately evident. Leucocytosis was moderate, temperature was 37,2°. What is your provisional diagnosis?
1. Spastic colon
2. Left-sided renal colic
3. -Colon diverticulitis
4. Torsion of the sigmoid appendix epiploica
5. None of the mentioned above.

44. A 70-year-old patient has been suffering from increasing constipation for the past 3 months. In recent weeks, there is no stool for 3-4 days. **The patient uses laxative. About a week ago an episode of bleeding occurred (200ml of blood discharged). Physical examination detected satisfactory condition. The abdomen was bloated, soft, pathologic masses are absent. Tympanic resonance is high in percussion. Digital rectal investigation detected no pathology. What is your provisional diagnosis?**
1. Diverticulitis of the sigmoid colon
2. Megacolon
3. -Tumor of the left side of the colon
4. Sigmoid volvulus
5. None of the mentioned above

45. What helps to approve Hirschsprung's disease diagnosing?
1. Irrigosccopy
2. Colonoscopy
3. Laparoscopy
4. Ultrasonic scanning
5. Transrecatl biopsy of the rectal and sigmoid mucosa
Choose the correct answer combination:
a) -1, 2 and 5
b) 1, 2 and 3
c) 2 and 5
d) 5
e) All variants are correct

46. Give a complication of nonspecific ulcerative colitis:
1. Bleeding
2. Perforation
3. Stenosis
4. Malignization
5. -Everything mentioned above

47. Clinical representation of perianal fistula is characterized be everything mentioned below, except:

1. Suppuration
2. Periodic exacerbations
3. -Fear of stool
4. Normal temperature
5. Pus and blood discharge from a sinus opening

48. Describe clinical representation of total perianal fistula:
1. Gas passing through a fistula
2. Purulent discharge from a fistula
3. Liquid feces discharge from a fistula
4. Periodic exacerbation of pain with temperature increase
5. -Everything mentioned above

UNIT 20. HEMORRHOIDS AND ITS COMPLICATIONS. ACUTE ANAL ABSCESSES. ANAL FISSURES. CRIPTITES. RECTAL PROLAPSE

1. The main reason of acute anal abscess is:
1. Hemorrhoids
2. Injury of rectal mucosa after medical procedures
3. -Microtraumas of rectal mucosa
4. Bullet wound of the rectum
5. Inflammatory diseases of organs neighbor to the rectum

2. What therapeutic methods should be used in acute anal abscess?
1. Massive antibacterial therapy
2. Physiotherapy
3. Emergency surgery
4. Elective operation

Choose the correct answer combination:
a) 1, 2
b) 1, 4
c) 1, 2, 4
d) 2, 3
e) -1, 3

3. From what diseases acute anal abscess should be differentiated?
1. Buttock carbuncle
2. Buttock abscess
3. Prostate abscess
4. Suppuration of coccygeal cysts
5. Bartholinitis

Choose the correct answer combination:
a) 1, 2
b) 3, 5
c) 4
d) All variants are correct
e) -All variants are incorrect

4. These principles should be followed in therapy of acute anal abscess:
1. Early surgery

2. Adequate opening and sanitization of a suppurative focus
3. Excision of the internal aperture
4. Adequate draining

Choose the correct answer combination:

a) 1, 2
b) 1, 2, 4
c) 1, 3
d) 2, 4
e) -All variants are correct

5. Which of the following measures are important for acute anal abscess prevention?

1. Cleansing enemas
2. Medicinal enemas
3. Saline laxatives
4. Treatment of the accompanying proctological and gastro-intestinal diseases
5. Washing of the perineum after defecation instead of toilet paper use

Choose the correct answer combination:

a) 1, 2
b) 1, 3, 4
c) 2, 3, 5
d) -2, 4, 5
e) All variants are correct

6. The following symptom complex is characteristic of rectal fissure (the choice depends on the disease stage):

1. Moderate pain in the anal region, increasing during defecation, anal itch, voluminous bleeding after defecation.
2. Feeling of incomplete emptying after defecation, blood-coloured ribbon stool, tenesmus, unstable stool, defluvium, sometimes single portions of dark blood
3. Unstable stool, feeling of heaviness in the pelvic area, feces of normal configuration with dark or crimson blood, scybalous stool, the abdomen is bloated and unrelieved with poor stool
4. Frequent liquid stool, tenesmus, mucous and bloody discharge, sometimes profuse diarrhea, possible temperature reaction

5. -Severe pain after defecation, 2-3 drops of blood after defecation, fear of stool, chronic constipation

7. The most often form of paraproctitis is:

1. -Subcutaneous paraproctitis
2. Submucous paraproctitis
3. Ischiorectal paraproctitis
4. Pelviorectal abscess
5. Intercondyloid paraproctitis

8. Surgery on acute anal abscess should be performed under:

1. Intravenous anasthesia
2. Local anesthesia
3. Sacral anesthesia
4. Peridural anesthesia

5. -Any kind of anesthesia, except local anesthesia

9. In case of hemorrhoidal boluses acute thrombosis ambulotary therapy it is most rationally to:
1. Indicate laxatives (magnesium sulfate), lead water, intake of aescusan or aspirin, suppositories with belladonna
2. Novocaine block, reduction of a hemorrhoid
3. -Indicate analgetics, fomentations during first 2-3 days, rest cure, heparin ointment dressing and a diet
4. Remove thrombosed boluses
5. Apply sclerosing therapy

10. Coccygeal epithelial course:
1. Is connected to the sacrum
2. Is connected to the tip
3. -Ends blindly in the subcutaneous tissue of the inter-buttock area
4. Is situated between the posterior rectal surface and the anterior sacral surface
5. Is communicated with the rectal lumen

11. The length of the rectum according to Tonkov and Fedorov:
1. 18 cm
2. 14.18 cm
3. -15-20 cm

12. The length of the anal canal is:
1. 2-3 cm
2. -3-4 cm
3. 4-5 cm
4. 5-6 cm

13. Rectal blood supply is realized:
1. Through internal pudendal artery branches
2. Through internal iliac artery branches
3. Through internal mesentric artery branches
4. Through superior mesenteric artery branches
5. Through sacral artery
Right variants:
a) 1, 4, 5
b) 2, 3, 4
c) 1, 3, 5
d) 1, 2, 5
e) -1, 2, 3

14. Function, not characteristic of the rectum is:
1. Reservoir
2. Evacuator
3. Sucking
4. Retention of the intestinal contents
5. -Secretory
6. Ecscretory

15. The rectal anomaly that doesn't exist is:
1. Atresia
2. Innate narrowing
3. Innate fistulas
4. Ectopia of the anus
5. -Hypertrophy of the anus

16. What contributes to anal fissure development?
1. Acute anal abscess
2. Hemorroids
3. -Lasting constipation
4. -Rectal and anal canal trauma

17. Most often an anal fissure forms on:
1. -Posterior semicircle of the anal canal
2. Anterior semicircle of the anal canal
3. Right semicircle of the anal canal
4. Left semicircle of the anal canal
5. Anterior and posterior semicircle of the anal canal

18. What is enough for anal fissure diagnosing?
1. Digital rectal investigation
2. Irrigoscopy
3. Proctoscopy
4. Colonoscopy
5. -Anoscopy

19. Clinical representation of chronic anal fissure is characterized by:
1. Pain during defecation
2. Voluminous bleeding
3. -Pain after defecation
4. -Poor bleeding during defecation
5. Variants 1 and 2 are correct

20. Clinical representation of acute anal fissure is characterized by:
1. Pain during defecation
2. Constipation
3. Pain after defecation
4. Voluminous bleeding
5. Variants 1 and 2 are correct
Right variants:
a) 1, 4, 5
b) 2, 3, 4
c) -1, 2, 3
d) 1, 3, 5
e) 1, 2, 5

21. Treatment of acute anal fissure should be directed to:
1. Pain and spasm control
2. Stool normalization
3. Fissurectomy
4. Fissurectomy with dosed sphincterotomy

Right variants:

a) -1, 2
b) 3, 4
c) 1, 3
d) 1, 4
e) 2, 4

22. The most effective treatment mode of chronic callous anal fissure is:
1. Injection of novocaine and spirit under a fissure
2. Presacral block with novocaine solution
3. Fissure excision
4. Digital sphincter stretching according to Recamier
5. -Fissure excision with dosed sphincterotomy

23. In therapy of posterior chronic fissure dosed sphincterotomy supposes an excision of rear portion of the internal sphincter at a depth of:
1. 0,4 - 0,6 cm
2. -0,5 - 0,8 cm
3. 0,8 - 1,0 cm
4. 1,0 - 1,5 cm
5. 1,5 - 2,0 cm

24. What percent of adult population suffers from hemorrhoids:
1. More than 1%
2. More than 5%
3. -More than 10%
4. More than 15%
5. More than 30%

25. What factors predispose to hemorrhoids?
1. Drinking alcohol
2. Hard labour
3. Sustained and intractable constipations
4. Proctosigmoiditis
5. -Everything mentioned above

26. How many stages of severity does acute hemorrhoids have?
1. Two
2. -Three
3. Four
4. Six
5. More than six

27. What is enough for hemorrhoid diagnosing?
1. Digital rectal and anal examination
2. Proctocopy
3. -Anoscopy
4. Irrigoscopy
5. Colonoscopy

28. Following signs are characteristic of harbinger of hemorrhoids:
1. Excretion of crimson blood during defectation
2. Some difficulties with defecation
3. Discomfort in the anal region
4. Anal pains during defecation
5. -Variants 1 and 2 are correct
6. Variants 1 and 4 are correct

29. Hemorrhoidectomy is indicated in:
1. Anal itch
2. Prolapsed hemorrhoids of the 1st stage
3. Pain during defecation
4. -Prolapsed hemorrhoids of the 3rd stage
5. Hemorrhoid exacerbation

30. The most effective method of hemorrhoid therapy is:
1. Conservative
2. Injection
3. -Operative
4. Liquidation of constipations
5. Sclerosation

31. Milligran-Morgan implies:
1. Circular excision of the anal canal mucosa
2. Excision of hemorrhoids at 2, 5, 8 o'clock position
3. -Excision of hemorrhoids at 3, 7, 11 o'clock position
4. Excision of hemorrhoids at 3, 7, 11 o'clock position with restoration of anal canal mucosa
5. Excision of prolapsed hemorrhoidal boluses

32. Therapeutic approach in acute hemorrhoidal boluses thrombosis includes everything mentioned, except:
1. Anaesthetics intake
2. -Sclerotherapy
3. Anti-inflammatory therapy
4. Presacral novocaine block

33. In case of hospitalization what is indicated to a patient with acute inflammation of hemorrhoidal boluses after acute symptoms subsiding?
1. Sclerotherapy

2. Hemorrhoid ligation
3. -Hemorrhoidectomy
4. Presacral novocaine block

34. Surgical therapy of hemorrhoid is contraindicated in:
1. Evident portal hypertension
2. Essential hypertension of the 3rd stage
3. Liver and heart diseases with blood circulation disorders
4. Umbilical hernia
Right variants:
a) -1, 3, 4
b) 1, 2, 3
c) 2, 4
d) 2, 3, 4
e) 2, 3

35. Hemorrhoid should be differentiated from:
1. Dolichosigmoid
2. Anal fissure
3. Polyp
4. Paraproctitis
5. -Anal canal cancer

36. What should be undertaken in complication of hemorrhoids by anal canal fissure?
1. Anal fissure excision
2. Anti-inflammatory therapy
3. Hemorrhoidectomy
4. -Presacral novocaine block
5. Hemorrhoidectomy with dosed sphincterotomy

37. The most frequent complication in the early period after hemorrhoidectomy is:
1. Evident pain syndrome
2. Perianal itch
3. Bleeding
4. Acute anal abscess
5. -Urination retention

38. Remote complications after hemorrhoidectomy are:
1. Stenosis of the anus
2. Sphincter insufficiency
3. Incomplete internal fistula
4. Rectal prolapse
Right variants:
a) 1, 3, 4
b) 2, 3, 4
c) -1, 2, 3
d) 2, 3, 4

e) 1, 2, 4

39. Bandaging after hemorrhoidectomy is performed:
1. Every other day during 6-7 days
2. On the 4^{th}, 5^{th} and 7^{th} day
3. -Every day during 6-7 days
4. On the necessity
5. Only on the 4^{th} day before enema

40. In favourable course of postoperative period after hemorrhoidectomy working capacity restores in:
1. 5-7 days
2. 7-14 days
3. 14-19 days
4. -20-30 days
5. 30-40 days

41. Hemorrhoid therapy can be not effective enough if following measures are neglected:
1. Colitis therapy
2. Proctosigmoiditis therapy
3. Stool regulation
4. Liquidation of constipation
5. -All variants are correct

42. The most radical method of hemorrhoidal bolus acute thrombosis therapy is:
1. Anticoagulant
2. Sclerotherapy
3. Presacral novocain block
4. -Operative intervention

43. What leads to inflammation process of Morgagni's crypts (criptitis):
1. Obturation of the lumen of the gland ducts
2. Poor drainage of the crypt
3. Crypt deformation
4. Foreign bodies in the intestinal lumen
5. -All variants are correct

44. Basic sign of cryptitis is:
1. Pain in the anus during defecation
2. Stripes or drops of blood in feces
3. Discomfort
4. Itch in the anus
5. -All variants are correct

45. Therapy of non-complicated cryptitis includes:
1. Diet
2. Exclusion of spicy dishes
3. Exclusion of alcohol

4. Surgical theapy
Right variants:
a) -1, 2, 3
b) 1, 3, 4
c) 2, 3, 4
d) 1, 2, 4
e) 3, 4

46. Excision of a crypt according to Gabriel is indicated in:
1. Sphinteric proctitis
2. Persistent course of disease without tendency to improvement
3. Tendency to abscess formation
4. Fistula formation
Right variants:
a) 1, 2, 3
b) 1, 3, 4
c) -2, 3, 4
d) 1, 2, 4
e) 3, 4

47. Acute anal abscess is:
1. Inflammation of the perirectal tissue
2. Inflammation of the perirectal tissue with mucosal prolapse
3. Inflammation of the perirectal tissue with hemorrhoidal trombophlebitis
4. -Inflammation of the perirectal tissue due to nidus of infection in the rectal wall

48. According to localization acute anal abscess can be:
1. Subcutaneous
2. Submucous
3. Ischiorectal
4. High
Right variants:
a) 1, 3, 4
b) -1, 2, 3
c) 2, 3, 4
d) 1, 2, 4
e) 3, 4

49. In etiology of paraproctitis the major meaning has:
1. General septic diseases
2. Hemorrhoids
3. Rectal prolapse
4. Rectal mucosa trauma
5. -Inflammation of anal glands

50. Typical ischiorectal periproctitis is characterized by everything mentioned below except:
1. Mucus discharge

2. High temperature
3. Deep pelvic pains
4. -Absence of skin changes

51. According to inflammatory activity periproctitis includes everything mentioned below except:
1. Acute
2. -Subacute
3. Recurrent
4. Chronic (rectal fistula)

52. According to position of the sinus tract to the sphincter fibers there are
1. Intrasphinter fistula
2. Blind fistula
3. Transsphincteric fistula
4. Extrasphinteric fistula
5. Amphibolic fistula
Right variants:
a) 1, 2, 3
b) -1, 3, 4
c) 2, 3, 4
d) 2, 4, 5
e) 3, 4, 5

53. After an abscess opening following clinical outcomes can be observed except:
1. Fistula formation in the rectum (chronic paraproctitis)
2. Development of recurrent paraproctitis
3. Recovery
4. -Development of rectosigmoiditis

54. The main principles of surgery in acute anal abscess include everything except:
1. Abscess opening
2. Abscess cavity drainage
3. Elimination of an internal aperture through which an abscess is connected to the intestine
4. -Wound suturing

55. Following incisions are used for acute anal abscess opening except:
1. Radial
2. Semilunar
3. -Deep draining incision

56. Radical therapy method of acute subcutaneous paraproctitis is:
1. General antibiotic therapy
2. Systematic abscess punctures with antibiotic lavage
3. Opening and drainage of an abscess cavity
4. -Opening of an abscess cavity with crypt excision in the area of an inflamed anal gland and purulent passage

57. Following measures in acute ischiorectal paraproctitis are indicated:

1. Abscess puncture and antibiotics injection
2. Abscess opening through lumen of the intestine
3. Abscess opening through the perineum with transection of the coccygeal and rectal ligament
4. Abscess puncture and introduction of the drainage for cavity lavage
5. -Opening, abscess drain, crypt excision in the anal canal

58. Predisposing factor, contributing to rectal prolapse are:
1. Constipation
2. Diarrhea
3. Rough labour
4. Cough
5. -Weakness of pelvic floor muscles

59. Producing factors, contributing to rectal prolapse are all the following except:
1. Constipation
2. Diarrhea
3. Rough labour
4. Cough
5. -Weakness of pelvic floor muscles

60. How many stages of rectal prolapse are distinguished?
1. 2
2. -3
3. 4
4. 5
5. 6

61. How many stages of sphincter insufficiency are distinguished?
1. 2
2. -3
3. 4
4. 5
5. 6

62. Rectal prolapse diagnosing is based on data of:
1. Ultrasound
2. Radiography
3. -Objective examination and complaints
4. Irrigoscopy
5. Proctoscopy

63. In rectal prolapse of the III-IV stage the most effective surgery is:
1. Thiersch's operation
2. -Zerenin-Kümmel's operation
3. Kadyan-Brun's operation
4. Svyatuhin’s surgery
5. Gerard-Marchant operation

UNIT 21. SUPPURATIVE DISEASES OF THE LUNGS AND PLEURA

1. What time is necessary for acute lung abscess to become chronic one:
1. 4-6 weeks
2. -6-8 weeks
3. 8-10 weeks
4. More than 10 weeks

2. A 25-year-old patient complains of cough with mucopurulent sputum to 700 ml per day. As a child he was frequently hospitalized with left-sided pneumonia. He left the hospital with substantial improvement, though exacerbations often happened in spring and autumn. Over the last year his general condition has worsened: rapid fatigability, increase of phlegm amount with blood streaks, increased temperature. The medical examination shows acrocyanosis and clubbed fingers. While breathing the delayed expiration of the left side of the chest is observed. Below the scapula angle, where the percussion sound is blurred and shortened, the breathing is weak with single coarse rales. What diseases can be suspected?
1. Acute pneumonia with abscess formation
2. Chronic pneumonia
3. Multiple bronchiectasis
4. Bronchial asthma
5. Pulmonary tuberculosis
Right variants:
a) 1, 3, 5
b) -2, 3
c) 1, 2, 4,
d) 3, 5
e) 1, 2, 5

3. Characteristic features of pulmonary gangrene are:
1. Development of the disease in organism areactivity
2. Absence of granulation bank on the border of the lung lesion
3. Extensive necrosis of the pulmonary tissue
4. Putrid infection
5. Evident intoxication
Right variants:
a) 2 and 3
b) 1, 2, 5
c) 1, 3, 4
d) 3, 4, 5
e) -All the variants are correct

4. A 65-year-old patient was treating herself for hyperthermia during 2 weeks. She connects her illness with supercooling, after which the temperature rose to 38^0, cough at first dry and then with mucopurulent sputum appeared. The state of health was steadily worsening; the patient felt weakness, chill and fever. Three days ago during the coughing 200 ml of fetid phlegm exuded. What disease can be suspected?
1. Pleural empyema
2. -Acute lung abscess
3. Exacerbation of chronic nonspecific pneumonia
4. Lung cancer with pneumonitis
5. Bronchiectatic disease

5. Three days after acute lung abscess evacuation a patient felt sharp pains in the right side of the chest while coughing and short breath. Medical examination showed delayed expiration of the right side of the

chest while breathing. In the upper-right parts the vesiculotympanitic resonance is detected. Dull sound is heard below the scapula. Breathing in all parts of the right lung is weakened. Development of what state can be suspected?
1. Lung gangrene
2. -Pyopneumothorax
3. Hydrothorax
4. Hemothorax
5. Pneumothorax

6. What measures should be taken at first to specify the diagnosis in patients with suspected acute lung abscess?
1. Pulmonary angiography
2. Bronchoscopy
3. -Fluoroscopy of lungs
4. Lungs tomography
5. Lung perfusion scan

7. A 68-year-old patient was operated on blind gut cancer. 16 days later the abscess of the inferior lobe of right lung has developed. The diameter of the abscess equaled 8 cm. What treatment mode would you prefer?
1. Thoracotomy with lobectomy
2. Thoracotomy with abscess cavity tamponade
3. Bronchoscopy with abscess cavity catheterization
4. Indication of antibiotic therapy and proteolytic enzymes for spontaneous lancing of the abscess into the bronchus.
5. -Percutaneous drainage of the abscess cavity (thoracocentesis)

8. A 63-year-old patient had right hemicolectomy for cancer. 12 days later later the abscess of the inferior lobe of right lung has developed. The diameter of the abscess equaled 8 cm. What treatment mode would you prefer?
1. Thoracotomy with lobectomy
2. Thoracotomy with abscess cavity tamponade
3. -Percutaneous drainage of the abscess cavity (thoracocentesis)
4. Bronchoscopy with abscess cavity catheterization
5. Indication of antibiotic therapy and proteolytic enzymes for spontaneous lancing of the abscess into the bronchus.

9. What test should be carried out in the first place if abscess of the lung is suspected?
1. Lungs tomography
2. Bronchoscopy
3. Perfusion lung scan
4. -Biplane fluoroscopy of the lungs
5. Pulmonary angiography

10. Acute pleural empyema was detected in a 67-year-old patient who suffered from pneumonia. What measures should be taken in that case?
1. Artificial pneumothorax
2. -Paracentetic percutaneous drainage of the pleural cavity with active aspiration
3. Thoracotomy with pleural cavity tamponade
4. Decortication of the lung and pleural cavity drainage
5. One-time puncture of the pleural cavity with aspiration of the content and following antibiotics injection

11. According to genesis acute lung abscesses can be subdivided into:
1. Postpneumatic

2. Traumatic
3. Aspiration-occlusive
4. Hematogenic-embolic
5. Lymphogenous

Right variants:

a) 1 and 3
b) 1, 2, 4
c) 1, 2, 5
d) 2, 3, 4
e) -All the variants are correct

12. Everything is characteristic of gangrene except:

1. Absence of granulation bank on the border of a lesion
2. -Presence of pyogenic membrane
3. Spread of pulmonary tissue necrosis
4. Disease development in patients with suppressed cellular immunity
5. Lung field shadowing without clear boundaries, that is detected in roentgenograms

13. A patient with prolonged right-sided pneumonia felt a sharp deterioration of general condition. X-ray detected right lung collapse, wide horizontal fluid level and sharp shift of mediastinum shadow to the left. What is the diagnosis?

1. Acute lung abscess with burst into the bronchus
2. -Pleural empyema
3. Pyopneumothorax
4. Pulmonary-bronchial sequestration
5. Thromboembolism of the pulmonary artery right branch

14. What are the indications for lobectomy in acute lung abscess?

1. Increase of purulent intoxication, despite conservative therapy
2. Repeated bleedings from a burst lung abscess
3. Development of pneumonia in a healthy lung
4. Development of acute hepatonephric insufficiency
5. Suspected cavitary form of lung cancer

Right variants:

a) 1, 2, 4
b) 1, 2, 5
c) 1, 3, 5
d) 2, 3, 4
e) -All variants are correct

15. What microorganism is the most common reason of purulent destructive process in lungs?

1. Streptococcus
2. -Haemolyticus staphylococcus
3. Colon bacillus
4. Viruses

16. Give the ways of pathogen penetration into the lung tissue:

1. Aspiration-inhalation

2. Hematogenic-embolic
3. Lymphogenous
4. Traumatic

The right variant is:

a) 1, 3
b) 2, 4
c) 3, 2
d) -All variants are correct

17. Pyogenic abscesses situated predominantly in the right lung are explained by:

1. Short left main bronchus being the continuation of the trachea
2. -Short and wide right main bronchus being continuation of the trachea
3. 3 lobes in the right lung
4. 2 lobes in the left lung

18. In the 2nd period of acute lung abscess formation X-ray examination detects:

1. -Single or multiple cavities with horizontal fluid level and inflammatory infiltration of the surrounding pulmonary tissue.
2. Poorly defined focal shadow of different size with irregular boundaries
3. Single or multiple cavities with horizontal fluid level without inflammatory infiltration of the surrounding pulmonary tissue

19. Does the X-ray CT detect cavernous formations with distinct internal boundary, inflammatory elevated border around the cavity and common state of mediastinum lymph nodes in lung abscess?

1. -Yes
2. No

20. Give the complications of acute lung abscess:

1. Pyopneumothorax
2. Pleural empyema
3. Pus aspiration in healthy parts of bronhial tree with appearance of new abscesses
4. Pulmonary hemorrhage
5. Mediastinitis

Right variants:

a) 1, 3
b) 2, 4
c) 5
d) -All the variants are correct

21. What is detected with the help of X-ray examination in the first period of acute abscess formation?

1. Focal shadowing with horizontal fluid level
2. -Focal shadowing of different size and intensity with poorly defined circuits and uneven boundaries.
3. Focal shadowing with horizontal fluid level and poorly defined circuits

22. From what diseases is acute lung abscess differentiated?

1. Suppurative pulmonary cyst
2. Encapsulated pleural empyema

3. Pulmonary tuberculosis
4. Lung cancer
Right variants:
a) 1, 3
b) 2, 4
c) -All variants are correct

23. What is the essence of microtracheostomy by Cuno?
1. Percutaneous catheterization of lung abscesses
2. Percutaneous catheterization of bronchi
3. -Percutaneous catheterization of trachea and bronchi
4. Endoscopic catheterization of lung abscesses

24. In Fowler's position a patient:
1. Is placed on the right side
2. Is placed on the left side
3. -Is placed in a semi-upright sitting position
4. Is placed in posteriorly declined position

25. What is the most rational combination of drugs when combined antibioticotherapy is indicated?
1. Cephalosporin + penicillin
2. Aminoglycoside + penicillin + sulfanilamide
3. -Cephalosporin + aminoglycoside + metronidazole

26. Give the drugs, which are used more often in antibacterial monotherapy:
1. Carbapenems
2. Cephalosporin
3. Fluoroquinolones
Right variants:
a) 1
b) 3
c) -All the variants are correct
d) 2

27. What is the essence of immunomodulating therapy in surgery of suppurative pulmonary diseases?
1. Indication of interleukin-2
2. Indication of roncoleukin
3. Quantum blood modification
Right variants:
a) 2
b) 1
c) -All the variants are correct
d) 3

28. Immunoglobulin replacement therapy in surgery of suppurative pulmonary diseases includes:
1. Intravenous transfusion of fresh frozen heparinized plasma
2. Intravenous transfusion of fresh heparinized blood

3. Intravenous injection of immunoglobulin human normal

Right variants:

a) 1, 2

b) 2

c) 2, 3

d) -All the variants are correct

29. What is the indication for the surgical therapy of acute lung abscesses?

1. Extensive foci of suppurative destructive lung lesions if the conservative therapy effect is absent
2. Abscess bleeding that can not be stopped by conservative measures
3. Acute abscesses of inferior lobes of the lungs

Right variants:

a) -1, 2

b) 2, 3

c) All the variants are correct

30. Give the possible outcomes of acute lung abscess:

1. Full recovery
2. Clinical recovery
3. Clinical improvement
4. No improvement
5. Fatal outcome

Right variants:

a) 1, 2

b) 2, 3, 5

c) 4, 5

d) -All variants are correct

31. Give factors, which promote transition of acute abscess into a chronic abscess:

1. Large abscesses
2. Multiple abscesses
3. Tissue sequestration in the abscess cavity
4. Bad conditions of the abscess drainage
5. Reduction of protective functions of the organism

Right variants:

a) 2, 3

b) 4, 5

c) 1

d) -All variants are correct

32. What are indications for surgical treatment of chronic lung abscesses?

1. Absence of effect from conservative therapy that has been used during 3-6 months
2. Repeated pulmonary hemorrhage
3. Rapidly developing intocsication

Right variants:

a) 1

b) 2, 3

c) -All variants are correct

33. What is the surgery extent in chronic lung abscess?
1. Lobectomy
2. Pulmonectomy
3. Segmentectomy
4. Vishnevsky surgery
Right variants:
a) -1, 2, 3
b) 4
c) 3, 4

34. What variants of pulmonary gangrene are known?
1. Disseminated
2. Local
3. Distal
4. Complicated
Right variants:
a) 3
b) 4
c) -1, 2

35. Give indications for surgical treatment of pulmonary gangrene:
1. Progressing of suppurative destructive process in pulmonary tissue
2. Erosive bleeding
3. Bronchiectasis
Right variants:
a) -1, 2
b) 2, 3
c) 1, 3

36. Give indications for surgical therapy of pulmonary staphylococcal distruction:
1. Progressing of suppurative-destructive process
2. Complications development
3. Bronchiectasis
4. Chronic mediastinitis
Right variants:
a) 3
b) -1, 2
c) 4

37. Give the surgery extent in pulmonary staphylococcal distruction:
1. -Thoracotomy with abscess opening, sequestrum removal and residual cavity
2. Thoracotomy, sanitization and residual cavity drainage
3. Ttransthoracic abscesses drainage

38. What pulmonary disease is characterized by presence of phlegm, which gives 3-layer sediment: lower layer consists of islets of pulmonary tissue; middle layer is turbid and liquid; upper layer is mucopurulent and foamy?

1. Lung abscess
2. Multiple bronchiectasis
3. -Pulmonary gangrene
4. Chronic pneumonia

39. What pulmonary disease is characterized by presence of phlegm, which gives 3-layer sediment: lower layer is purulent; middle layer consists of serous fluid; upper layer is foamy?

1. -Lung abscess
2. Multiple bronchiectasis
3. Pulmonary gangrene
4. Chronic pneumonia

40. What forms of bronchiectasis exist?

1. Sacculated
2. Cylindric
3. Bronchiectasis, extended as a result of bronchiectases inflammation
4. Fusiform

Right variants:

a) -1, 2, 3
b) 1, 4
c) 3, 4

41. What pulmonary disease is characterized by presence of phlegm, which gives 3-layer sediment: lower layer is purulent; middle layer consists of serous fluid; upper layer is mucus?

1. Lung abscess
2. -Multiple bronchiectasis
3. Lung gangrene
4. Chronic pneumonia

42. How does atelectasis of a lung lobe look like on the X-ray picture?

1. -The affected part of the lung is reduced in volume and appears to be a triangle shadow with top in the root
2. The affected part of the lung is enlarged and appears as a rectangular shadow
3. The affected part of the lung is reduced, mediastinum is shifted to the opposite side

43. In what stage of bronchoectatic disease the surgical treatment is indicated?

1. The 1st I
2. The 3rd
3. The 2nd

Right variants:

a) The 1st
b) -The 2nd and 3rd
c) All variants are correct

44. What surgical approach should be chosen in patients with bronchoectatic disease in case of limited involvement of both lungs into pathologic process?
1. Lung resection is performed step-by-step beginning with the lung which is affected to a lesser extent.
2. -Lung resection is performed step-by-step or simultaneously, beginning with the lung which is the most affected.

45. What lung disease is characterized by arachnoid net symptom detected by pulmonary angiography.
1. Abscess
2. Solitary cyst
3. -Cystic disease
4. Chronic pneumonia

46. What extent of endoscopic intervention is performed in pulmonary cysts?
1. Bullectomy
2. Pleurodesis by medical adhesive
3. Electro-lasar bulla coagulation
4. Lung resection
5. Pulmonectomy
Right variants:
a) 1, 2, 5
b) 1, 3, 4, 5
c) -1, 2, 3, 4
d) All variants are correct

47. What is the essence of assisted thoracoscopic surgery?
1. Videothoracoscopia in addition to large thoracotomy
2. -Videothoracoscopia in addition to small thoracotomy (length of incision is from 3,5 to 5cm)
3. Videothoracoscopia in addition to wide thoracotomy

48. What are the variants of limited pleural empyema?
1. Parietal
2. Basal
3. Interlobal
4. Apical
5. Mediastinal
6. Total
Right variants:
a) 1, 2, 3, 6
b) 1, 3, 4, 5, 6
c) -1, 2, 3, 4, 5
d) All variants are correct

49. What are the variants of free pleural empyema:
1. Total
2. Subtotal
3. Small
4. Limited

Right variants:
a) 1, 2, 4
b) 3, 4
c) -1, 2, 3
d) All variants are correct

50. How should the pleural cavity be drainaged in a patient with total pleural empyema with the aim of constant lavage and active aspiration?
1. -One drain is directed to the pleural cavity through the second intercostal space along the midclavicular line, another is directed to the pleural cavity through the seventh and eighth intercostal space along the posterior axillary line
2. One drain is directed to the pleural cavity through the second intercostal space along the midclavicular line, another is directed to the pleural cavity through the fifth and seventh intercostal space along the midaxillary line.
3. One drain is directed to the pleural cavity through the second intercostal space along the anterior clavicular line, another is directed to the pleural cavity through the sixth and seventh intercostal space along the posterior axillary line.

51. What is the indication for surgical treatment of acute pleural empyema?
1. Progressive acute empyema, complicated by phlegmon of chest soft tissues, mediastinitis and sepsis
2. Ineffectiveness of drainage of acute empyema due to large pulmonary sequestrum.
3. Anaerobic empyema
4. Very bad patient's state
Right variants:
a) 1, 3, 4
b) 1, 2, 4
c) -1, 2, 3
d) All variants are correct

52. What is the essence of A.V. Vishnevsky method in treatment of acute pleural empyema?
1. -Resection of one rib with incision of 10 cm at the bottom of empyema, its emptying and filling of residual cavity with ointment impregnated tampons
2. Resection of two ribs with incision of 5-7 cm at the bottom of empyema cavity, its emptying and filling of residual cavity with ointment-impregnated tampons
3. Wide thoracotomy, empyema cavity inspection and sanatization

53. What is the essence of Konnors method in therapy of acute pleural empyemas?
1. Resection of one rib with incision of 10 cm at the bottom of empyema cavity, its emptying and filling of residual cavity with ointment impregnated tampons
2. -Resection of two ribs with incision of 5-7 cm at the bottom of empyema cavity, its emptying and filling of residual cavity with ointment-impregnated tampons
3. Wide thoracotomy, empyema cavity inspection and sanatization

54. Give the essence of Delorme's operation:
1. -Release of the lung from cicatrization, covering visceral pleura
2. Removal of commissures, situated on the lung and costal pleura
3. Resection of both lobes of the lung

55. Give the variants of surgeries applied in surgery of chronic pulmonary empyemas:
1. Decortication
2. Pleurectomy
3. Thoracoplasty
4. Open drainage
5. Resections
Right variants:
a) 1, 3, 5
b) 2, 4, 5
c) -All variants are correct

56. What is the essence of pleurectomy in surgery of chronic pleural empyemas?
1. -Obliteration of pleural cavity by removing of comissures, situated on the lung and costal pleura; lung smoothing
2. Resection of two ribs with incision of 5-7 cm at the bottom of empyema cavity, its emptying and filling of residual cavity with ointment-impregnated tampons
3. Wide thoracotomy, empyema cavity inspection and sanatization

57. What is the essence of resections in surgery of chronic pleural empyemas?
1. -Removal of affected part of the lung, decortications and pleurectomy
2. Removal of the affected part of the lung only
3. Wide thoracotomy, empyema cavity inspection and sanatization

58. Chronic pulmonary abscess should be differentiated from:
1. Lung tuberculosis
2. Lung cancer
3. Lung actinomycosis
4. Chronic pneumonia
Right variants:
a) 1, 4
b) 2, 4
c) 3, 4
d) -1, 2, 3

59. On the basis of clinical-roentgenological data gangrene of the middle lobe of the right lung was detected in a 40-year-old patient. Method of choice in treatment is:
1. Thoracocentesis
2. Intensive therapy with injection of antibiotics in pulmonary artery
3. -Lobectomy
4. Intensive therapy with endobronchial injection of antibiotics
5. Pulmonectomy

Учебное издание

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