

MINISTRY OF HEALTH OF THE REPUBLIC OF
BELARUS

EDUCATIONAL INSTITUTION
“GRODNO STATE MEDICAL UNIVERSITY”

DEPARTMENT OF SURGICAL DISEASES №1

S U R G E R Y

Tests

for the 5th year students of the Faculty of Foreign Students
(in English)

Grodno 2013

UDK 617(076.1)(075.8)

BBK 54.5ya73

X-50

Recommended by the Central Scientific-methodical
Council of the EI “Grodno State Medical University”
(protocol № from 2013).

Authors: The first surgical diseases department, associate
professors V.P.Vasilevsky, N.D. Maslakova, M.A.
Mozheiko, E.V. Mogilevec

Chief Editor: Head of the first surgical diseases department,
M.D, prof. N.I. Batvinkov.

Reviewer: Prof. of general surgery department of the Grodno
State Medical University, M.D G.G. Marmysh.

X-50

Surgery: tests for the 5th year students of the
Faculty of Foreign Students (in English)/ Vasilevsky V.P.,
Maslakova N.D., Mozheiko M.A., Mogilevec E.V.; chief
editor N.I. Batvinkov – [1st ed.]. - Grodno: GrGMU, 2013. -
p.

ISBN 985-6727-97-9

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.

UDK 617(076.1)(075.8)

BBK 54.5ya73

ISBN 985-6727-97-9

© GrGMU, 2013

CONTENTS

INTRODUCTION.....4

Part 1. Test questions.....

UNIT 1. DISEASES OF THE THYROID GLAND

UNIT 2. DISEASES OF THE MAMMARY GLAND

UNIT 3. SURGERY OF CONGENITAL AND ACQUIRED
HEART DISEASES. CORONARY HEART DISEASE.
PERICARDITISES.

UNIT 4. NONNEOPLASTIC DISEASES AND
ESOPHAGUS DAMAGES

UNIT 5. DIAPHRAGMATIC HERNIAS. MEDIASTINUM
TUMORS AND CYSTS, MEDIASTINITES

UNIT 6. CHRONIC PANCREATITIS AND ITS
COMPLICATIONS

UNIT 7. POSTCHOLECYSTECTOMIC SYNDROME

UNIT 8. PORTAL HYPERTENSION

UNIT 9. FOCAL LIVER LESIONS,
OBSTRUCTIVE JAUNDICE.

UNIT 10. SPLEEN DISEASES AND INJURIES. BLOOD
DISEASES REQUIRING SPLENECTOMY

UNIT 11. TRANSPLANTATION OF ORGANS AND
TISSUES.

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 first surgical diseases department, 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 first surgical diseases department 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 first surgical
diseases department ,
professor

.N. I. Batvinkov

Unit 1. DISEASES OF THE THYROID GLAND

1. According to Shevkunenko the thyroid gland is covered with the following fasciae?

1. The third;
2. The forth;
3. The fifth;
4. The first;
5. The second.

Right variants:

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

2. The thyroid capsule is formed by:

1. Visceral layer of the IV fascia according to Shevkunenko;
2. Parietal layer of the IV fascia;
3. The third fascia;
5. The fifth fascia.

Right variants:

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

3. Hormones of the thyroid gland are:

1. Monoiodotyrosine;
2. Diiodotyrosine;
3. Triiodotyrosine;
4. Tetraiodotyrosine.

Right variants:

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

4. At what life period the thyroid gland reaches its greatest mass?

1. In a newborn;
2. At the period of puberty;
3. At the period of maturity;
4. At senile age.

Right variants:

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

5. Thyroidal hormones:

1. Intensify oxidation processes in the organism;
2. Depress;
3. Have not any influence.

Right variants:

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

6. In the II stage of the thyroid gland enlargement:

1. The enlarged isthmus is clearly palpable;
2. While swallowing the both thyroid lobes are palpable;

3. The thyroid gland is visible while neck examination without act of swallowing or palpation.

Right variants:

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

7. Intensity and rate of absorption of J131 in the thyroid gland depends on:

- 1. The thyroid gland function;
- 2. Age;
- 3. Sex.

Right variants:

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

8. Normal level of protein-bound iodine (PBI) varies:

- 1. From 2-9 mcg %
- 2. From 3-8 mcg%
- 3. From 3,5-7,5 mcg%

Right variants:

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

9. The region is considered to be endemic goiter territory if the increase of the thyroid gland is observed in:

- 1. 20% of adults and 15% of children;
- 2. 10% of adults and 20% of children;

3. 15% of adults and 25 % of children.

Right variants:

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

10. For normal functioning of the thyroid gland the daily dose of iodine should comprise:

- 1. 50 mcg;
- 2. 50-70 mcg;
- 3. 90-120 mcg;
- 4. 190-200 mcg.

Right variants:

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

11. The surgical treatment in diffuse goiter should be used:

- 1. In long-existing goiter;
- 2. In goiter, compressing neighbor organs;
- 3. In suspicion of malignant degeneration;
- 4. In goiter with symptoms of thyrotoxicosis;
- 5. In goiter of the IV and the V stage.

Right variants:

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

12. Low levels of thyroidal hormones cause:

1. Decrease of thyroid-stimulating hormone (TSH) secretion;
2. Increase of thyroid-stimulating hormone (TSH) secretion;
3. Do not influence thyroid-stimulating hormone (TSH) secretion.

Right variants:

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

13. In majority of patients with endemic goiter the functional state of the gland:

1. Is asymptomatic;
2. Has features of mild hypothyroidism;
3. Has features of mild thyrotoxicosis.

Right variants:

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

14. Give the pathomorphological forms of goiter:

1. Nodular;
2. Diffuse;
3. Mixed.

Right variants:

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

d) 3

15. In nodular form of goiter it is indicated:

1. Conservative treatment;
2. Operative treatment.

Right variants:

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

16. In nodular forms of goiter the following operations are indicated:

1. Node enucleation;
2. Partial resection of the thyroid gland;
3. Lobectomy;
4. Subtotal resection.

Right variants:

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

17. The degree of thyrotoxicosis:

1. Depends on the degree of the thyroid gland enlargement;
2. Does not depend on the degree of the thyroid gland enlargement.

Right variants:

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

18. The symptoms of thyrotoxicosis are:

1. Tachycardia;
2. No changes in pulse;
3. Bradycardia .

Right variants:

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

19. In thyrotoxicosis the basal metabolism is:

1. Normal;
2. Decreased;
3. Increased.

Right variants:

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

20. The prevention of endemic goiter consists in:

1. Application of the thyroid gland hormones;
2. Salt iodination;
3. Intake of antistrumin.

Right variants:

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

21. A 35-year-old patient enters to hospital with a severe form of thyrotoxicosis. What is indicated?

1. Conservative treatment;

2. Operative treatment;

3. Preoperative preparation with the following surgery.

Right variants:

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

22. Surgical treatment in thyrotoxicosis is indicated:

1. For young people (younger than 45 years old), in case their conservative therapy during 4-6 months was ineffective;
2. In case of thyrotoxicosis in childhood;
3. In nodular and mixed forms of goiter;
4. In large goiters;
5. In mild degree of thyrotoxicosis.

Right variants:

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

23. Congenital goiter occurs in infants, whose mothers:

1. Suffer from untreated thyrotoxicosis;
2. Suffer from untreated hypothyroidism;
3. Take thyrostatics;
4. Receive supporting therapy of thyroid hormones.

Right variants:

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

24. A 69-year-old patient after the thyroid gland surgery felt weak, sleepy, flabby. The face became puffy. It is connected with:

1. Respiratory failure;
2. Heart failure;
3. The patient's age;
4. Hypothyroidism.

Right variants:

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

25. A 72-year-old patient after the thyroid gland surgery suffered from convulsions in limbs and trismus of facial muscles. It is connected with:

1. Exsiccosis;
2. Malnutrition;
3. Parathyroid glands removal.

Right variants:

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

26. The most frequent form of thyroid cancer is:

1. Follicular;
2. Medullar;
3. Alveolar;
4. Poorly differentiated;
5. Papillary.

Right variants:

- a) 1, 3

- b) 2
- c) 4
- d) -5

27. During the nodular goiter surgery the urgent histological examination has shown cancer cells. How the operation should be finished?

1. Subtotal thyroid gland resection;
2. Node enucleation;
3. Removal of the lobe with isthmus;
4. Thyroidectomy.

Right variants:

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

28. After thyroid gland subtotal resection due to thyrotoxic goiter the patient showed husky voice, cough, choking while swallowing. What complication has developed?

1. Larynx edema;
2. Hemorrhage in soft tissues;
3. Damage of superior laryngeal nerve;
4. Damage of one inferior and superior laryngeal nerve;
5. Damage of both inferior laryngeal nerves.

Right variants:

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

29. A thick stiff painless neoplasm was detected in a 35-year-old patient in the thyroid gland area. Local lymphatic nodes are not palpable. What is necessary for the diagnosis verification?

1. Fibrogastroscopy;
2. Bronchoscopy;
3. Chest radiography;
4. Paracentetic biopsy;
5. Thyroid gland ultrasonic scanning;
6. Scintigraphy .

Right variants:

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

30. The first 24 hours after the subtotal thyroid resection due to thyrotoxic goiter the patient showed tachycardia of 135-140 bpm, the temperature rose to 39⁰C, the patient was excited, the short breath was 28 per minute. What complication developed?

1. Hypertensic crisis;
2. Hemorrhage in tissues;
3. Thyrotoxic crisis;
4. Pneumonia.

Right variants:

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

31. Cholesterol blood level in patients with thyrotoxic goiter is:

1. Decreased;
2. Increased;
3. Normal.

Right variants:

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

32. Blood sugar in patients with thyrotoxicosis most often is:

1. Normal
2. Increased
3. Decreased

Right variants:

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

33. Patients with thyrotoxicosis have infrequent eye blinking and eye fixation. It is:

1. Stellwag`s symptom;
2. Graefe`s sign;
3. Kocher`s sign;
4. Möbius`s symptom.

Right variants:

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

d) 4

34. The indication for surgery in nodular goiter is:

1. Trachea and esophagus compression;
2. Thyrotoxicosis;
3. The risk of thyroiditis;
4. Possibility of malignization;
5. Cosmetic effect.

Right variants:

a) -1, 4

b) 1, 3

c) 2, 4

d) 2, 3

e) 3, 5

35. What are indications for operative therapy of Hashimoto's thyroiditis?

1. Compression syndrome;
2. Possibility of malignization;
3. Hypothyroidism.

Right variants:

a) 1, 3

b) 2, 3

c) -1, 2

36. The indication in follicular carcinoma of thyroid gland is:

1. Subtotal resection of the thyroid gland;
2. Hemithyroidectomy of a lobe;
3. Thyroidectomy.

Right variants:

a) 1

b) 2, 3

c) -3

37. Most often used thyrostatic medicine in thyrotoxis goiter mercazolil can cause:

1. Anemia;
2. Leukopenia;
3. Erythrocytosis;
4. Agranulocytosis.

Right variants:

a) 1, 2

b) 3, 4

c) -2, 4

Unit 2. DISEASES OF THE MAMMARY GLAND

1. Following treatment is not used in diffuse mastopathy:

1. Estrogenic drugs
2. Physiotherapy
3. Lasting intake of potassium iodide
4. Partial mammary gland resection.

5. -Radiation therapy

2. In mammary gland cancer with 2.5 cm diameter without enlargement of regional lymph nodes the stage is:

1. -1

2. 2 A

3. 2 B

4. 3 A

5. 3 B

3. The following lymph glands are not regional:

1. Axillary
2. Parasternal
3. Subclavian
4. Lymph glands of the opposite side.

5. -All the enumerated lymph glands are regional

4. Everything mentioned below is indicated in lactostasis except:

1. Mammary glands massage
2. Thorough breast milk expression

3. -Antibiotic therapy

4. Elevation of mammary gland
5. Continued breastfeeding

5. What is indicated in mammary gland fibrous adenoma?

1. Simple mastectomy
2. Mammary gland amputation

3. -Partial resection

4. Radical mastectomy
5. Radiation therapy

6. Halsted radical mastectomy includes:

1. -Removal of the mammary gland with pectoralis minor and major muscles, the tissues of infraclavicular, axillary and subscapular area.
2. The variant mentioned above + removal of parasternal and mediastinal tissues and lymph nodes.

3. Removal of the mammary gland with pectoralis minor muscle and tissues of axillary, subscapular and andinfraclavicular area

4. Removal of the mammary gland sector with axillar tissue and lymph nodes.

5. Mammary gland removal

7. The mammary tumor with 1.5 cm diameter and single enlarged axillary lymph nodes concerns to the following stage:

1. -T1N1M0

2. T1N0M0
3. T2N1M0
4. T3N0M0

8. It is characteristic of the 2b cancer stage:

1. Absence of metastases in regional lymph nodes of the opposite side
2. Distant metastases
3. Metastases in axillary subclavicular and supraclavicular lymph nodes.
4. Ulceration in the area of tumor

5. -Axillary lymph nodes lesion

9. The stage of mammary tumor with 2.5 cm diameter and not enlarged regional lymphnodes is:

1. T1N1M0
2. -T1N0M0
3. T2N0M0
4. T2N1M0
5. T3N0M0

10. What is recommended in case of microcalcifications detection during the mammography?

1. Dynamic observation
- 2. -Partial resection with urgent histologic examination**
3. Paracentetic biopsy
4. Ultrasonic diagnosing
5. No observation is necessary

11. What treatment is indicated in 4 cm mammary tumor with metastases in regional lymph nodes?

1. Symptomatic
2. Surgical
3. Radial
- 4. -Complex**
5. Combined

12. The most effective examination method in mammary tumor with diameter less than 0.5 cm is:

- 1. -Mammography**
2. Ultrasonic scanning
3. Thermography
4. Palpation
5. Radioisotopic diagnosing

13. Mammary tumor with 1.5 cm diameter with enlarged axillary lymph nodes concerns to the following stage:

1. 1
2. 2 A
- 3. -2 B**
4. 3 A

5. 3 B

14. In horizontal position the mammary tumor is not detected in:

1. Umbilical symptom
- 2. -Koenig syndrome**
3. Payr's sign
4. Pribram symptom
5. ``Orange peel`` syndrome

15. What is recommended in cancer of upper external quadrant of mammary gland without metastases with 2 cm diameter?

1. Symptomatic therapy
- 2. -Surgical therapy**
3. Radiation therapy
4. Combined therapy
5. Complex therapy

16. What is recommended in Paget's carcinoma with not enlarged lymph nodes if a patient is 45 years old?

1. Radiation therapy
2. Chemotherapy
- 3. -Radical mastectomy**
4. Radiation therapy + partial resection
5. Combined therapy

17. A 50-year-old patient's mammary gland is infiltrated, edematous, sharply dense and enlarged. Mammary skin is covered by red spots with uneven tongue-shaped edges. The nipple is drawn in and deformed. The diagnosis is:

1. Acute mastitis
2. Paget`s carcinoma
- 3. -Erysipelas-like cancer**
4. Solid carcinoma
5. Corset cancer

18. What is indicated in mammary cancer with upper limb edema?

1. Radical Halsted mastectomy
2. Patey`s operation
3. Simple masectomy
4. Extended mastectomy
- 5. -None of the enumerated syrgeries.**

19. A 27-year-old patient has 2 indurations with 2 cm diameter at the edge of the left mammary gland upper quadrants. These indurations are not welded to skin, they become firmer and painful during the premenstrual period:

1. Peget`s cancer
2. Fibrous adenoma
3. Lipoma
- 4. -Nodal mastopathy**
5. Galactocele

20. The mammary cancer most often metastasizes into:

1. Mediastinum
- 2. -Bones**
3. Skin
4. Liver
5. Adrenal glands

21. What is indicated in mammary cancer of the 2a stage?

1. Partial resection
- 2. -Radical mastectomy**
3. Radiation therapy
4. Chemotherapy
5. Everything mentioned above is correct

22. All the cancer forms mentioned below are diffuse except:

1. Edematous infiltrative cancer
2. Mastitis-like carcinoma
3. Erysipelas-like carcinoma
4. Corset cancer
- 5. -Paget`s cancer**

23. The main way of lymph outflow from the mammary gland is:

1. Crossed
2. Subclavian
- 3. -Axillary**
4. Parasternal
5. Intercostal

24. Partial mammary gland resection is indicated in:

1. Purulent mastitis
2. Diffuse mastopathy
- 3. -Nodal mastopathy**
4. Paget`s cancer
5. Gynicomastia

25. Blood discharge from the nipple is characteristic of:

1. -Intraductal papilloma

- 2. Paget`s disease
- 3. Nodal mastopathy
- 4. Cyst
- 5. Fibrous adenoma

26. What is not characteristic of mammary cancer?

- 1. Umbilication
- 2. ``Lemon skin``
- 3. Nipple retraction
- 4. -Hyperpigmentation**
- 5. Ulceration

27. Most rarely mammary cancer metastasizes into:

- 1. Pleura
- 2. Lungs
- 3. Axillary and parasternal lymph nodes
- 4. Bones
- 5. -Brain**

28. Pridmore`s symptom is pathognomonic for:

- 1. Acute mastitis
- 2. Fibrous-cystic mastopathy
- 3. -Mammary cancer**
- 4. Mammary fibrous adenoma
- 5. Intraductal papilloma

29. Give the most often congenital mammary gland anomaly:

- 1. Inverted nipple

2. Atelia

3. Amastia

4. -Polythelia and polymastia

5. Milk ducts allotopia

30. Of what benign disease blood discharge from the nipple is characteristic?

1. -Intraductal papilloma

- 2. Paget`s disease
- 3. Nodal mastopathy
- 4. Cyst
- 5. Fibrous adenoma

31. Which of the following symptom does not characterize mammary cancer?

- 1. Umbilication
- 2. "Lemon skin"
- 3. Nipple retraction
- 4. -Nipple and areola hyperpigmentation**
- 5. Ulceration

32. Which of the following additional methods of mammary cancer treatment is used most often?

- 1. Ovariectomy
- 2. Chemotherapy
- 3. Hormonotherapy
- 4. -Radiation therapy**
- 5. Panhysterectomy

33. The painful tumor was detected in upper external quadrant of the mammary gland. It has 3 cm in diameter;

the skin over it is not changed. There is a yellowish discharge from the nipple. Axillary lymph nodes are slightly enlarged and painful. Painfulness, tumor size and discharges from the nipple change cyclical during the month. What is the preliminary diagnosis?

1. Intraductal papilloma
2. -Nodal form of chronic cystic mastitis
3. Fibrous adenoma
4. Diffusive cancer
5. Nodal cancer

34. A 39-year-old patient complains of pain and deformation of the right mammary gland. Examination showed that the gland is much enlarged and deformed; the skin is infiltrated, thick and tuberous with areas of hemorrhages and ulceration on the surface. The nipple is deformed and retracted. Palpation detects enlarged dense lymph nodes on the right. There is no pathology in internal genital organs. The diagnosis is:

1. Diffusive mastopathy
2. Paget`s disease
3. Mastitis-like carcinoma
4. -Corset cancer
5. Colloid carcinoma

35. A 35-year-old patient complains of reddening and thickening of the nipple. The examination has shown that the nipple and a part of areola are covered by crust and eschar, there is a weeping in the nipple area. On desquamation of the crust wet granular surface is detected. The nipple is thick and dense. The diagnosis is:

1. Actinomycosis of the mammary gland
2. -Paget`s disease
3. Nipple eczema
4. Scirrus of the mammary gland
5. Mastitis-like carcinoma

36. A 19-year-old patient complains of moderate pains in the mammary gland, increasing in premenstrual period. Both mammary glands are symmetrical and have regular configuration. Nipples and skin are not changed. Palpation detects tuberous lumps accompanied by a neoplasm with distinct borders and diameter 6 cm. The neoplasm is easily shifted and is not connected with tissues and the nipple. Regional lymph nodes are not enlarged. The diagnosis is:

1. -Chronic cystic mastitis accompanied by fibrous adenoma
2. Mammary cancer
3. Mammary gland abscess
4. Lipoma
5. Mammary gland sarcoma

37. There is a single painless node with 5 cm diameter in the upper-external quadrant of the mammary gland; the node has dense consistency and is limited from surrounding tissues. The nipple is not changed, discharge is absent. Regional lymph nodes are not enlarged. What is your preliminary diagnosis?

1. -Fibrous adenoma of the mammary gland
2. Mammary gland cancer
3. Mastitis

4. Nodular mastopathy
5. Chronic cystic mastitis

38. A 28-year-old patient has diffuse slightly palpable induration nidi in both mammary glands. These indurations become painful and dense in premenstrual period. Mammary gland skin is not changed. The nipples have regular shape, discharge is absent. Lymph nodes are not enlarged. The diagnosis is:

- 1. -Bilateral diffuse fibrocystic mastopathy**
2. Mammary gland fibrous adenoma
3. Infiltrative edematous form of cancer
4. Bilateral diffuse mastitis
5. Mastitis-like carcinoma

39. A 22-year-old patient complains of 39°C temperature; pain and swelling in the mammary gland. Two weeks ago she gave a birth. The mammary gland is edematous and crimson red. Palpation detects painful diffuse infiltrate. The lymph nodes in the axillary area are painful. The diagnosis is:

- 1. -Acute mastitis**
2. Diffuse mastopathy
3. Chronic mastitis
4. Erysipeloid carcinoma
5. Nodular mastopathy

40. Brest-cancer stage 2b has been detected in a 43-year-old patient. Approach is:

- 1. -Radical mastectomy with pre- and postoperative R-therapy**

2. Irradiation of the mammary gland and areas of regional metastasizing (3,500-4,500 rad)
3. Radical mastectomy, bilateral ovariectomy, irradiation and hormonotherapy
4. Radical mastectomy, prolonged hormonotherapy
5. Radiationtherapy, hormonotherapy

41. Neither microscopy of the nipple discharge nor examination of the punctate from the tumor detected atypical cells in a patient with suspected mammary gland fibrous adenoma. The approach is:

1. To discharge a patient and continue outpatient observation
2. To indicate hormonotherapy with methyltestosteronum
3. To indicate antibiotic therapy
- 4. -Partial resection with urgent histological study**
5. To carry out simple mastectomy

42. What is the basis of acute mastitis prophylaxis?

1. Increase of organism resistibility of pregnant women
2. Sanitization of endogenous infection nidi
3. Teaching women the rules of breastfeeding
4. Thorough expression of breast milk after feeding

5. -Everything mentioned above

43. A 28-year-old woman complains of tumor-like lump in the left axillary area (during several years), which swells before menstruation, increases and becomes painful. The examination shows 4 cm lump of soft-elastic consistence and lobulous structure. The diagnosis is:

1. Single metastasis of a slowly growing tumor
2. Axillary region lipoma

3. Axillary region fibroma
- 4. -Accessory breast**
5. Hydradenitis

44. A 20-year-old woman complains of tumor-like lump in the left mammary gland. The examination showed a dense 2 cm tumor in the upper quadrant, flattened skin, peripheral lymph nodes are not enlarged. What are the additional tests?

1. Ductography
2. Mammography
- 3. -Puncture biopsy**
4. Mediastinoscopy
5. Ultrasonic scanning

45. A 50-year-old patient has accidentally found an induration in the mammary gland. The gland is not enlarged, skin has normal color. Palpation shows uneven, tuberous skin surface of cartilage density and enlarged subclavian lymph nodes. The diagnosis is:

1. Mastitis
2. Fibrous adenoma
- 3. -Cancer**
4. Chronic cystic mastitis
5. Actinomycosis

46. A 25-year-old patient complains of painful and dense mammary glands in premenstrual period. Examination showed small slightly palpable diffuse indurations. Nipples and areolas are of regular shape with no discharge. The skin on the mammary glands is not

changed. Axillary lymph nodes are not enlarged. The diagnosis is:

1. Bilateral mastitis-like carcinoma
2. Plasma-cell mastitis
3. Bilateral diffuse fibrocystic mastopathy
4. Bilateral intraductal papillomas
- 5. -Bilateral mastopathy**

47. During the examination of a 30-year-old pregnant woman in antenatal clinic a 3 cm tumor node was detected in the mammary gland. Term of pregnancy is 12 weeks. After antenatal clinic and oncologist's examination the mammary gland cancer was detected. What is the medical approach?

- 1. -Urgent abortion, radical Halsted's mastectomy**
2. Maintenance of pregnancy, Halsted's radical mastectomy
3. Maintenance of pregnancy, Peity's radical mastectomy
4. Abortion, chemotherapy with cytostatics, hormonotherapy
5. Urgent abortion, Halsted's radical mastectomy, postoperative radiation therapy

48. A large tumor with skin ulceration, nipple retraction and deformation was detected in a 70-year-old patient. There are multiple enlarged lymph nodes in the axillary region, spine X-ray shows the destruction of 4-5 lumbar vertebrae. What is the diagnosis and a disease stage?

- 1. -4th stage of mammary gland cancer**
2. 1st stage mammary gland cancer
3. 2b cancer stage
4. 3 cancer stage
5. Paget's cancer

49. A woman came to an outpatient department with complaints about a dense node in the upper-external quadrant of the right mammary gland. Which of the following examinations would you indicate for diagnosis?

1. Ductography
2. Mammography
- 3. -Puncture biopsy**
4. Lymphography
5. Brest thermography

50. During medical examination of a 22-year-old girl a 2x2 cm node with dense consistency and smooth surface was detected in the upper-external quadrant of the mammary gland. The node is easily shifted and limited from the surrounding tissue. Koenig symptom is positive. What disease can be supposed if peripheral lymph nodes are not palpable?

1. Lipoma
- 2. -Fibrous adenoma**
3. Nodal mastopathy
4. Mammary gland sarcoma
5. Breast cancer

UNIT 3. SURGERY OF CONGENITAL AND ACQUIRED HEART DISEASES. CORONARY HEART DISEASE. PERICARDITISE

1. Pericarditises are subdivided according to:

1. Etiology;
2. Mechanism of the disease appearance;

3. Clinical-morphological form;
4. Dissemination.

Right variants:

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

2. What are clinical-morphological forms of acute pericarditises?

1. Catarrhal;
2. Dry (fibrinous);
3. Wet (exudative);
4. Adhesive- fibrosing.

The Right variants: are:

- a) 1, 3, 4
- b) -1, 2, 3**
- c) 2, 3, 4
- d) All the variants are correct

3. What clinical morphological forms of chronic pericarditises are distinguished?

1. Exudative;
2. Exudative-adhesive;
3. Adhesive- fibrosing;
4. Dissemination of the inflammatory granulomas.

Right variants:

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

4. Patients with exudative pericarditis have broadening of the borders of absolute heart dullness to the right to the mamillary line and make obtuse angle with hepatic dullness instead close to right angle in healthy people. It is:

1. -Epstein symptom
2. Ediefsen symptom
3. Wytner`s symptom

5. Patients with large amount of liquid in the pericardium take a characteristic position in bed: they sit with the torso bended forward and the forehead leaned on a pillow. It is:

1. -Breiman symptom
2. Wytner`s symptom
3. Gerke symptom
4. ``Floating heart`` phenomenon

6. What amount of fluid in pericardium increase heart shadow, which takes triangular or spherical shape?

1. 100–200 mm
2. 500 mm
3. -200–300 mm
4. 600–800 mm

7. What methods of pericardium puncture have been developed?

1. Larrey`s;
2. Marfan`s;
3. Pirogov`s;

4. Delorme`s and Mignon`s;
5. Vishnevsky`s.

Right variants:

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

8. What method of pericardium puncture supposes its puncture in the point, situated in the angle between XII rib`s cartilage and xiphoid process?

1. Marfan`s
2. -Larrey`s
3. Pirogov`s
4. Shaposhnikov`s

9. What is the extent of surgery in patients with acute pericarditis?

1. -Thoracotomy, wide excision of the pericardium parietal layer, exudate aspiration, lavage and drainage of pericardial cavity.
2. Pericardium puncture by Dos Santos.
3. A surgery is not performed, complex conservative therapy is indicated

10. Chronic exudative pericarditis most often is:

1. The consequence of spread of inflammatory process from pleural cavity to the pericardium
2. A single nosological form of inflammatory process
3. The second phase of acute pericarditis in case of its ineffective therapy

4. The consequence of dissemination of pyoinflammatory process in an organism

11. What disease should be differentiated from chronic pericarditis?

1. Hydropericardium;
2. Myxedema;
3. Chylopericardium;
4. Myocardial infarction;
5. Pleurisy.

Right variants:

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

12. What surgery is performed in patients with chronic pericarditis?

1. Partial excision of pericardium modified parietal layer
2. Limited resection of the pericardium with a window over the left atrium
3. **-Limited resection of the pericardium with a window over the left ventricle or wide excision of pericardium modified parietal layer**

13. What mechanisms of cardiac compression are observed in chronic constrictive pericarditis?

1. Primary
2. **-Primary and secondary**
3. Secondary
4. Tertiary

14. What is the extent of surgery in constrictive pericarditis?

1. **-Subtotal pericardectomy**
2. Total pericardectomy
3. Isolated pericardectomy
4. Dissection of the pericardium

15. What is the danger of technically wrong pericardectomy?

1. It may cause left heart overload and brain edema
2. It may cause only right heart overload
3. **-It may cause right heart overload and pulmonary edema**
4. It may cause left heart overload

16. What is the sequence of pericardium excision in patients with constrictive pericarditis?

1. **-Excision of the pericardium over the left ventricle, right ventricular and aorta outflow, right ventricular, atriums and cava outflow**
2. Excision of the pericardium over the right ventricle, right ventricular and aorta outflow, left ventricular
3. Excision of the pericardium over the left ventricle, aorta, right ventricular outflow and left ventricle
4. Excision of the pericardium over the right ventricular outflow and aorta, right ventricle, atrium and cava outflow

17. What period of time is necessary for adaptation of the heart, after removing the «shell» in patients with constrictive pericarditis?

1. -3-7 days
2. 1-3 days
3. 8-10 days
4. 11-12 days

18. What is the extent of surgery in patients with postinfarction cardiac aneurysm?

1. Excision of the aortic valve mouth
2. Suture of the aneurism wall
3. Plastic surgery of coronary artery
4. -Excision of the aneurism walls and suture of the postoperative defect

19. The surgical treatment should be applied in the following stage of the aortal valvular disease:

1. In the 1st
2. -In the 2nd and 3rd
3. In the 3rd and 4th
4. In the 4th

20. What aortic valve lesions are most common?

1. Specific
2. Atherosclerotic
3. In bacterial endocarditis
4. -Rheumatic

21. What are the congenital heart diseases, concerning to the morbus-caeruleus?

1. Trilogy, tetralogy, pentalogy of Fallot;
2. Tricuspid valve atresia;

3. Shift of the tricuspid valve to the right ventricle with the defect of the interatrial septum;
4. Transposition of the vessels;
5. Defect of the interatrial septum.

Right variants:

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

22. Give the heart diseases, concerning to acyanotic heart disease:

1. Defect of the interatrial septum;
2. Defect of the interventricular septum;
3. Patent ductus arteriosus;
4. Aorta-pulmonary artery fistula;
5. Transposition of the vessels.

Right variants:

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

23. Give the congenital heart disease, in which circulatory disturbance is caused by great vessels constriction:

1. Isolated pulmonary artery stenosis;
2. Aortic stenosis;
3. Coarctation of aorta;
4. Transposition of the vessels.

Right variants:

- a) 1, 2

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

24. What is the extent of surgery in pulmonary valvular stenosis?

- 1. Commissurotomy
- 2. **-Dissection of the pulmonary trunk initial part with commissurotomy to the walls of pulmonary artery**
- 3. Dissection of the right ventricle excretory tract, radial excision of fibrous ring

25. What blood circulation is affected by congenital aorta stenosis?

- 1. Pulmonary
- 2. Regional
- 3. **-Coronary and cerebral**
- 4. General

26. What variants of congenital aortic stenosis exist?

- 1. Valvular, combined
- 2. Congenital and aquired
- 3. **-Valvular, subvalvular and supra-valvular**

27. What is the reason of a sudden death in congenital aortic stenosis?

- 1. **-Sudden cardiac arrest due to coronary blood circulation disorder**
- 2. Cerebral vascular embolism
- 3. Myocardial infarction

28. What heart configurations are characterized by distinct waist, hypertrophic and enlarged left ventricle and aorta in its ascending part?

- 1. **-Aortic**
- 2. Mitral

29. What are the main symptoms of patent ductus arteriosus?

- 1. Dyspnea, increasing in physical activity;
- 2. Palpitation;
- 3. Weakness;
- 4. Acrocyanosis.

Right variants:

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

30. What are the complications of patent ductus arteriosus?

- 1. **-Subacute bacterial endocarditis**
- 2. **-Aneurysmatic duct widening with rupture and bleeding**
- 3. Cerebral vascular embolism
- 4. Myocardial infarction

31. Give the variants of surgeries in patent ductus arteriosus:

- 1. Duct delegation with 2 ligatures combined with underrunning by 3rd ligature;
- 2. Duct section with suture of the ends;

3. Duct plastics.

The Right variants: are:

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

32. What maldevelopment causes atrial septal defect?

- 1. Hypoplasia of heart chambers
- 2. Hypoplasia of heart conduction tracts

3. -Hypoplasia of macroseptum and septulum

- 4. Hypoplasia of left atrium

33. What defect of the interatrial septum is characterized by enlargement of the right ventricle only?

- 1. Primary
- 2. -Secondary

34. What defect of the interatrial septum is characterized by enlargement of both ventricles and left atrium?

- 1. -Primary
- 2. Secondary

35. What size of the interatrial septum defect needs to be closed by synthetic patch?

- 1. Up to 1 cm
- 2. From 1 to 2 cm
- 3. -Exceeding 1-2 cm

36. What surgeries are performed for the interatrial septum defects treatment?

- 1. U-type suturing of the defect;

2. Closing of the ostium by the synthetic patch;

3. Defect embolization;

4. Defect filling.

Right variants:

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

37. Should surgical treatment of interventricular septum defects be introduced before or after Eisenmenger's syndrome development?

- 1. -Before Eisenmenger's syndrome development
- 2. After Eisenmenger's syndrome development

38. What symptoms are characteristic of tetralogy of Fallot?

- 1. Pulmonary artery constriction;
- 2. Interventricular septum defects;
- 3. Shift of the aorta to the right, disposition of its opening over a defect in interventricular septum;
- 4. Hypertrophy of the right ventricle wall.

Right variants:

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

39. Is the tetralogy of Fallot combined with interventricular septum defect, patent ductus arteriosus, double aortic arch?

- 1. -Yes
- 2. No

40. What are the main symptoms of haemodynamics in the tetralogy of Fallot?

- 1. -The extent of pulmonary artery constriction**
2. The extent of aorta opening constriction
3. Mitral incompetence

41. Does the interventricular septum defect closure and pulmonary stenosis elimination concern to radical or palliative surgeries in patients with the tetralogy of Fallot?

- 1. -Radical**
2. Palliative

42. What is the essence of palliative surgeries in the tetralogy of Fallot?

- 1. -Introduction of inter-arterial collateral anastomosis**
2. Surgery of interventricular septum defect
3. Pulmonary artery constriction

43. In children of what age palliative operations for the tetralogy of Fallot treatment can be introduced?

1. Older than 3 years old
2. Older than 5 years old
- 3. -Younger than 3 years old**
4. At the age of 3-5 years old

44. What is the aim of palliative operations in surgery of Fallot's tetralogy?

- 1. -Supplementary oxygenate the blood entering aorta from the right ventricle**

2. Supplementary oxygenate the blood entering aorta from the left ventricle

45. What are the most frequent reasons of acquired heart diseases? 1. Rheumatism; 2. Bacterial endocarditis; 3. Myocardial infarction; 4. Chest traumas.

Right variants:

1. 1, 2
2. 3, 4
- 3. -All the variants are correct**

46. What stage of mitral stenosis according to New York Heart Association is characterized by clinical presentation of heart diseases in increased physical activity and valve area of 1,5-2?

1. 1st stage
- 2. -2nd stage**
3. 3rd stage
4. 4th stage
5. 5th stage

47. At what stage of mitral stenosis according to New York Heart Association a surgery can prevent the disease development and produce the best results?

1. At the 1st stage
- 2. -At the 2nd stage**
- 3 At the 3rd stage
4. At the 4th stage
5. At the 5th stage

48. At what stage of mitral stenosis according to New York Heart Association the most favourable terms for a surgery are missed, but it is still necessary?

1. At the 1st stage
2. At the 2nd stage
- 3. -At the 3rd stage**
4. At the 4th stage
5. At the 5th stage

49. What surgery is performed in patients with mitral stenosis and sinus rhythm if evident fibrous changes of the valve and its calcification are absent?

- 1. -Closed mitral commissurotomy**
2. Plastic operation

50. What surgery is performed in patients with mitral stenosis with evident valve changes?

1. Closed mitral commissurotomy
- 2. -Plastic operation**

51. At what stages of mitral incompetence the surgical intervention is necessary?

1. At the 1st stage
- 2. -At the 2nd and 3rd stages**
3. At the 4th stage

52. What method of X-ray contrast angiography helps to detect the stage of myocardial contractility disorder and valvular apparatus state?

- 1. -Left ventriculography**
2. Right ventriculography

3. Panaortography

3. Aortography of the aorta arch branches

53. Is the method of temporary counterpulsation used in the treatment of patients with myocardial infarction complicated by cardiogenic shock?

- 1. -Yes**
2. No

54. Give the most optimal variant of surgery in patients with coronary heart disease in coronary artery constriction:

1. Endarterectomy
2. Bypass surgery
- 3. -Balloon angioplasty and artery stents**

55. Give the most optimal variant of surgery in patients with coronary heart disease in multiple lesions of the coronary arteries:

1. Endarterectomy
- 2. -Bypass surgery**
3. Balloon angioplasty

56. In what luminal narrowing of coronary artery the coronary heart disease should be surgically treated?

1. 30-40%
- 2. -Exceeding 50%**
3. Less than 50%
4. 10-20%

57. What stage of mitral stenosis is characterized by ciliary arrhythmia, parietal and ball-valve thromboses in the auricle, arterial embolism and pulmonary fibrosis?

1. The 1st stage
2. The 2nd stage
- 3. -The 3rd stage**
4. The 4th stage
5. The 5th stage

58. In what stage of mitral stenosis a surgery is possible but prolongs life not for long?

1. In the 1st stage
2. In the 2nd stage
3. In the 3rd stage
- 4. -In the 4th stage**
5. In the 5th stage

59. During what period of time after the heart aneurysm formation is fatal outcome observed?

1. During 1 year
- 2. -During 2-3 years**
3. During 3-5 years

60. In what heart diseases are there accompanying disorders of coronary artery patency, threatening myocardial infarction development?

- 1. -Aortal**
2. Mitral

Unit 4. NONNEOPLASTIC DISEASES AND DAMAGES OF ESOPHAGUS

1. In an acute stage of the esophagus chemical burn the medical disposals are:

1. Mouth wash, gastric and esophagus lavage with drinking water,
2. Morphine preparations and sedatives intake,
3. Milk intake.

Right variants:

- 1. -All the variants are correct**
2. None of the variants is correct

2. Which of the following methods are used in case of ineffective therapy of fibro-ulcerative reflux-esophagitis:

1. Billroth`s operation 1
- 2. -Esophagofundoplication**
3. Selective proximal vagotomy
4. Stem vagotomy
5. Fundopexy

3. The basic method(s) of cardiospasm treatment is/are:

1. Geller`s cardioplasty
2. Nessen`s operation
- 3. -Cardiodiosis**
4. Different methods of extramucous plastic
5. Bouginage

4. The basic method of esophageal diverticulum diagnosing is:

1. Esophagoscopy

2. -Contrast esophagus X-ray examination

3. Ultrasonic scanning
4. Radioisotopic examination
5. Computed tomography

5. Pharyngo-esophageal diverticulum is localized:

1. In tracheal bifurcation area
2. Above the diaphragm
3. In the upper third of the esophagus

4. -In the pharyngoesophageal entry

5. Above the cardiac orifice

6. For the mediastinum neoplasm diagnosing can be used such methods as:

1. Pneumothorax
2. -Computer tomography

3. -NMR tomography

4. Bronchography

7. In the cervical esophagus diverticulum the medical disposals are:

1. Diverticulum intussusception
2. Enteral feeding

3. -Diverticulum extraction

4. Endoscopic dissection in the constriction area below the diverticulum
5. Everything mentioned above

8. What method(s) is/are not used in the diagnosing of foreign bodies in the esophagus:

1. Complaints and anamnesis gathering

2. -Esophageal intubation

3. Contrast esophagus X-ray examination
4. Esophagoscopy
5. Laryngoscopy

9. What kind of bouginage is preferable in the patients with tortuous and multiple postburn esophageal strictures:

1. Through the mouth
2. Under esophagoscopic control
3. Retrograde
4. Radio-opaque and with the help of dilatator along a metallic conductor

5. -Through the gastrostomy

10. What examinations should be prescribed in case of suspected cancer of esophagus:

1. Esophagomanometry;
2. Esophagoscopy with biopsy;
3. Radiological examination of esophagus and stomach;
4. Esophagus electrokymography;
5. Computer tomography.

Right variants:

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

11. The indications for operation on esophageal diverticulum are:

1. Diverticulum with the opaque meal retention less than 2 minutes (in R-examination);
2. Evident clinical presentation (dysphagy, regurgitation, sternal pain, backache);
3. Complicated diverticulum (esophagotracheal, esophagobronchial fistulas);
4. Diverticulum with the diameter less than 2 cm with the opaque meal retention less than 2 minutes (in R-examination).
5. Malignization

Right variants:

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

12. What enumerated clinical signs are characteristic of cardiospasm:

1. Ample vomiting with gastric material
- 2. -Regurgitation while eating**
- 3. -Selective dysphagy caused by some products and liquids (apples, oranges, sparkling water)**
- 4. -Paradoxical dysphagy**
5. Alternation of anorexia and bulimia

13. What method of cardiospasm treatment should be applied in persevering and lasting disease:

1. Medicamental
2. Hypnosuggestive
- 3. -Cardiodilatation**

4. Operative
5. Esophagus endoprosthesis replacement

14. During several years a patient had been treating the coronary heart disease. Medicamental treatment had no effect. Electrocardiogram didn't show convincing signs of coronary heart disease. The throes arise in the neck and behind the sternum after the meals. The relief came after vomiting and multiple regurgitations. The diagnosis is:

1. Coronary heart disease
2. Cardiospasm
3. Esophagus tumour
- 4. -Esophagus diverticulum**
5. Substernal goiter

15. Gullet bougienage after an burn should be started:

1. In 24-48 hours
2. In a month
- 3. -In 8-9 days**
4. In case of persevering dysphagy
5. In first hours

16. In cardiospasm the indications for operation are:

1. The absence of lasting effect in cardiodiosis (in refresher course of treatment);
2. Esophagus ruptures in cardiodiosis;
3. Impossibility to introduce cardiodilator into cardiac orifice;
4. Esophagitis, segmental esophageal spasm;
5. Lasting psychogenic background.

Right variants:

- a) -1, 2, 3**

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

17. What method of testing can be used to diagnose reflux esophagus disease: 1. Esophagoscopy;

- 2. Esophagomanometry;
- 3. Esophageal pH-testing;
- 4. Examination of barium passage through esophagus in Trendelenburg's position;
- 5. Esophagus ultrasonic scanning. Right variants:
- a) 1, 2, 3
- b) 3, 4, 5
- c) 2, 3, 4, 5
- d) -1, 2, 3, 4**
- e) all variants are right

18. The most frequent complications of esophagus diverticulum are:

- 1. Diverticulitis;
- 2. Perforation;
- 3. Bleeding;
- 4. Malignization;
- 5. Esophageal stricture.

Right variants:

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

19. What operation should be applied if the conservative treatment of fibro-ulcerative reflux-esophagitis is not effective:

- 1. Billroth's operation 1
- 2. -Fundoplication**
- 3. Selective-proximal vagotomy
- 4. Stem vagotomy
- 5. Fundopexy

20. What measures should be taken in the patients with acute stage of the esophagus chemical burn:

- 1. Mouth wash, gastric and esophagus lavage with drinking water;
- 2. Morphine preparations and sedatives intake;
- 3. Milk intake;
- 4. Total parenteral nutrition;
- 5. Insertion of permanent stomach probe.

Right variants:

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

21. Is a ``block phenomeno`` characteristic of the patients with esophageal diverticulum:

- 1. -Yes**
- 2. No

22. What surgical procedure is the operation of choice in esophageal diverticulum:

1. Diverticulum intussusception

2. -Diverticulum ectomy

3. Esophageal resection

23. What are indications for operation in the treatment of esophageal diverticulum:

1. -Large diverticula

2. -Diverticula with complications (bleeding, diverticulitis, perforation)

3. -Suspicion on malignization

4. -Ineffective conservative treatment

5. Reflux-esophagitis

24. What are the roentgenological stages of pharyngo-esophageal diverticula:

1. -Diverticulum's shape resembles a rose

2. -Diverticulum's shape resembles a mace

3. -Diverticulum's shape resembles a bag, that doesn't squeeze the esophagus

4. -Diverticulum squeezes and presses esophagus back anteriorly

5. Diverticulum's shape resembles hourglass

25. What are the roentgenological signs of esophageal perforation:

1. -Mediastinum and neck emphysema

2. -Dilatation and induration of the shadow in the esophageal space

3. -Esophagus and trachea shifting away from inflammation area

4. -Pneumohydrothorax

26. What methods of testing are used in diagnosing of esophageal perforation:

1. Esophagoscopy

2. -X-ray contrast testing of esophagus using oily contrast agents

3. -X-ray contrast testing of esophagus using water soluble contrast agents

4. -X-ray contrast testing of esophagus using barium solution

27. What surgical procedures should be applied in the first time after esophageal perforation:

1. - Mediastinum and pleural cavity sanitation with their drainage

2. -Closure of injured wall of esophagus

3. -Nasogastric drainage or transection of cervical esophagus with double-barrelled esophagostomy

28. What method of mediastinotomy is used for the sanitation of inflammatory process in superior mediastinum, situated not lower than IV-V thoracic vertebra:

1. -Sheboldaev-Razumovsky's mediastinotomy

2. Nasilov's mediastinotomy

3. Savinykh-Rosanol's mediastinotomy

29. What method of mediastinotomy is used for the drainage of the posterior inferior mediastinum:

1. Sheboldaev-Razumovsky's mediastinotomy
2. Nasilov's mediastinotomy
3. **-Savinykh-Rosanov's mediastinotomy**

30. What method is used for the sanitation of inflammatory processes in superior mediastinum, situated not lower than IV-V thoracic vertebra:

1. **-Tigel's method**
2. Nasilov's mediastinotomy
3. Savinykh-Rosanov's mediastinotomy

31. The lasting preservation of esophageal patency after dilation procedure can be the result of:

1. **-Esophageal lumen stenting**
2. Esophageal drainage with a gastric tube
3. The repeated lavage of esophagus with soda solution
4. Temporary gastrostomy

Unit 5. DIAPHRAGMATIC HERNIAS. MEDIASTINUM TUMORS AND CYSTS. MEDIASTINITES

1. The manifestation of sliding hernia of esophageal opening is/are:

1. Dysphagia
2. Frequent vomiting
3. **-Frequent heartburns**
4. Weight loss
5. None of the mentioned

2. Paraesophageal hernia can cause:

1. **-Stomach entrapment**
2. Malignization
3. Precardiac pains
4. None of the mentioned
5. Everything mentioned

3. Esophageal opening hernias usually have following manifestations:

1. Severe bleeding
2. Slight bleeding
3. Hypersecretion
4. **-Postprandial pains**
5. Asymptomatic course

4. Erosive-ulcerative esophagitis is the complication of:

1. Stomach cancer
2. Cardiospasm

3. -Sliding hernias of esophageal opening

4. Chronic gastritis

5. What conditions of X-ray examination can reveal the symptoms of esophageal opening sliding hernias:

1. Standing X-ray film
2. Semisitting X-ray film

3. -X-ray in Trendelenburg's position

4. Artificial duodenum hypotonia
5. Lateral recumbent X-ray film

6. What methods of testing are the least informative in esophageal opening hernias diagnosing:

1. Ultrasonic scanning
2. Intraesophageal pH-testing

3. -Esophagomanometry

4. Esophageal and stomach roentgenoscopy in Trendelenburg's position
5. Esophagogastroduodenoscopy

7. What symptoms are usually caused by sliding hernias of esophageal opening:

1. Heartburn;
2. Sternal pain;
3. Melena;
4. Bowel obstruction;
5. Vomiting.

Right variants:

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

8. Operative treatment is necessary first of all in:

1. Sliding hernia of esophageal opening;
2. Large para-esophageal hernia;
3. Reflux-esophagitis;
4. Cardioesophageal relaxation;
5. Detruncated esophagus.

Right variants:

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

d) 4, 5

e) -2, 5

9. What recommendations should be given to the patient with reflux-esophagitis caused by esophageal opening hernia:

1. Fractional food intake in small portions;
2. High position of the head end of the body in bed while sleeping;
3. Antacid intake;
4. Cerucal intake;
5. Not to lie down after meals.

Right variants:

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

e) -all variants are right

10. Periesophageal hernia can cause:

1. -Stomach entrapment

2. Malignization
3. Precardiac pains
4. None of the mentioned
5. Everything mentioned

11. What is the most frequent symptom of esophageal opening hernia:

1. Severe bleeding
2. Slight bleeding
3. Hypersecretion

4. -Postprandial pains

5. Asymptomatic course

12. Anterior mediastinum contains everything except:

1. Thymus
2. Ascending aorta, arch of aorta
3. Major vessels

4. -Thoracic duct flow

5. Trachea

13. Posterior mediastinum contains everything except:

1. Esophagus
2. Descending aorta
3. Thoracic duct flow

4. -Lung hilus, tracheal bifurcation

5. Azygos and hemiazygos vein

14. Most often mediastinum tumor is:

1. Thymoma
2. Teratodermoid tumor
3. Pericardial cyst
4. Enterogenous cyst

5. -Neurogenic cyst

15. The costal part of diaphragm starts in the inner surface of:

1. V rib pair
- 2. -VI rib pair**
3. VII rib pair
4. VIII rib pair
5. IX rib pair

16. The gap between thoracic and costal part of diaphragm on the right is called:

1. -Morgagni's triangle

2. Larrey's cleft
3. Bochdalek's triangle
4. Hesselbach's triangle

17. The thoracic part of the diaphragm begins:

1. -At the posterior surface of the xiphoid process

2. At the upper third of the sternum
3. At the middle third of the sternum
4. 2 cm lower the xiphoid process

18. In the peritoneum dissection the anterior crura of diaphragm acquire a fenestration with:

1. Anterior mediastinum
2. Medial mediastinum
- 3. -Posterior mediastinum**
4. Pleural cavity

19. What surgical operations are indicated in thoracoabdominal wounds:

1. Thoracotomy
2. Laparoscopy
- 3. -Pleural cavity drainage and laparotomy**

20. Stab-cutting wounds of diaphragm are stitched up by:

1. Circular catgut suture
- 2. -Interrupted unabsorbable suture**

3. Double-row interrupted suture
4. Circular suture with unabsorbable materials

21. What approach is recommended in esophageal opening hernias with detruncated esophagus:

1. Transthoracic
2. Laparotomy
3. -Thoracotomy

22. The incision of which intercostal space should be made for the approach to the lateral part of the costodiaphragmatic recess:

1. Ninth
2. Seventh
3. Tenth
4. Sixth
5. -Eighth

23. What measure(s) should be taken in the non-sliding esophageal opening hernia without cardiac orifice dysfunction and in the large sliding cardiofundic hernia without cardiac orifice dysfunction:

1. -Anteroposterior cruroplasty
2. Nissen's operation
3. Fundoplication
4. Kujawa's fundoplication

24. In diagnosing of the left hemidiaphragm the most informative method is:

1. Gastroscopy
2. -Irrigoscopy

3. Abdominal cavity ultrasonic scanning
4. Thoracoscopy

25. Acute mediastinitis arises as a result of:

1. Mediastinum open injury;
2. Esophageal foreign body perforation, instrumental examination and bougienage;
3. Insufficient sutures after esophageal surgery;
4. Extension of deep neck phlegmons to mediastinal fat or the contagion out of the pleural cavity;
5. Contagion to mediastinal fat out of tracheobronchial lymph nodes.

Right variants:

- a) 2, 3, 4
- b) 1, 2, 5
- c) 3, 4, 5
- d) 1, 3, 5
- e) -all variants are right

26. The clinical presentation of the acute mediastinitis is characterized by:

1. Shiver;
2. Fever;
3. Tachycardia;
4. Dyspnea;
5. Chest and neck pains increasing on throwing back the head - Gerke's symptom;
6. Forced attitude with forward flexion of head.

Right variants:

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

c) 3, 4, 5

d) 1, 3, 5

e) -all variants are right

27. All radiological signs of the acute mediastinitis are correct except:

1. The extension of mediastinum shadow

2. -The shifting of mediastinum to the sore side

3. Gas in the mediastinum

4. The outlet of contrast medium out of the hollow organ

28. What neoplasms can be found in the upper mediastinum:

1. Thymomas;

2. Duplication cysts;

3. Substernal goiter;

4. Lymphomas;

5. Pericardial cysts;

6. Bronchogenic cysts.

Right variants:

a) 2, 3, 4

b) 1, 2, 5

c) 3, 4, 5, 6

d) -1, 3, 4

e) All variants are right

29. What neoplasms can be found in the upper mediastinum:

1. Thymomas;

2. Dermoid cysts;

3. Teratomas;

4. Mesenchymal tumours;

5. Pericardial cysts;

6. Duplication cysts;

7. Bronchogenic cysts.

Right variants:

a) 2, 3, 4, 7

b) -1, 2, 3, 4

c) 3, 4, 5

d) 1, 3, 5, 7

e) All variants are right

30. What neoplasms can be found in the posterior mediastinum:

1. Neurogenic tumours;

2. Pericardial cysts;

3. Duplication cysts;

4. Bronchogenic cysts.

Right variants:

a) 2, 3, 4

b) 1, 2

c) 3, 4

d) -1, 3

e) all variants are right

31. What are the diagnostic characteristics of the esophageal relaxation:

1. Lung compression;

2. Pneumothorax;

3. The shifting of mediastinum to the relaxed cupula;

4. The shifting of mediastinum to the opposite side;

5. Diametrical and longitudinal gastric torsion;

6. The torsion of the large intestine splenic flexure.

Right variants:

a) 2, 3, 4, 5

b) 1, 2, 5, 6

c) 3, 4, 5

d) -1, 4, 5, 6

e) all variants are right

32. The surgical procedures in esophageal relaxation are:

1. -The bringing down of the shifted abdominal organs to the normal position and duplication formation of the thinning diaphragm or its plastic fixation with synthetic explants

2. The bringing down of the shifted abdominal organs to the normal position and Nessen's esophagofundoplication

3. The bringing down of the shifted abdominal organs to the normal position and Dor's esophagofundoplication

33. What endoscopic signs has an esophageal opening hernia:

1. Cardiac sphincter opening;

2. ``Sereal symptom``;

3. Diverticulum;

4. Esophagitis.

Right variants:

a) 2, 3, 4

b) 1, 2

c) 3, 4

d) -1, 4

e) all variants are right

34. What are possible complications of esophageal opening hernias:

1. Incompetence of cardia with erosions, ulcerations and bleedings;

2. Biliary dyskinesia;

3. Dysphagy;

4. Reflux gastritis.

Right variants:

a) 2, 3, 4

b) 1, 2

c) 3, 4

d) -1, 3, 4

e) all variants are right

35. What surgical methods of esophageal opening hernias treatment are most known:

1. Esophageal opening sides suturing (cruroraphy);

2. Nessen's operation;

3. Kanshin's fundoplication;

4. Dor's fundoplication.

Right variants:

a) 2, 3, 4

b) -1, 2

c) 3, 4

d) 1, 4

e) all variants are right

Unit 6. CHRONIC PANCREATITIS AND ITS COMPLICATIONS

1. The patient is hospitalized with complaints of epigastric pains, nausea and vomiting. Weight loss in 6 months is 15kg. The X-ray stomach examination shows its anterior edging. What is the diagnosis:

1. Pyloric stenosis
- 2. -Pancreas tumour**
3. Gastric ulcer
4. Stomach cancer
5. Large intestine tumour

2. What are the typical complications of the primary chronic pancreatitis:

1. Choledocholithiasis;
2. Cyst, fistulas, regional portal hypertension;
3. Jaundice, constriction of the duodenum;
4. Gastrorrhagia;
5. Colitis.

Right variants:

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

3. What are the signs of the pancreas incretory impairment in chronic pancreatitis:

1. Jaundice
2. Frequent losses of consciousness
- 3. -High sugar in blood and urine**
4. Large liver mass, palpable cholecyst

5. Creatorrhoea, steatorrhoea

4. The patient has chronic pancreatitis for 15 years. What is the simplest way to detect the pancreas calcinosis:

1. Explorative laparotomy
2. Laparoscopy
3. Irrigoscopy
4. Cholangiography

5. -Plan X-ray film of abdominal cavity

5. What are the symptoms characteristic of exocrinous pancreas function:

1. Dry cutaneous covering
2. Diabetes

3. -Weight loss, creatorrhoea, steatorrhoea

4. Anteroventral venous distensibility
5. Renal-hepatic impairment

6. The patient, 45 years old. 6 months after recent pancreatic necrosis ultrasonic scanning has detected a pancreatic cyst. What are the surgical variants:

1. External drainage
- 2. -Cystoenteroanastomosis**
3. Pancreaticoduodenal resection with duct sealing in the distal part of the pancreas
4. Marsupialization
5. Cytogastroduodenostomy

7. The patient, 40 years old, has been suffering from chronic recurrent pancreatitis for 10 years. During the

operation there was suspected pancreas cancer. What are your further actions:

1. Pancreas resection
- 2. -Cystology and histology testing of the bioptic material (urgent)**
3. Pancreatectomy
4. External T-drainage of Wirsung's duct Marginal neurotomy

8. 8 days after pancreas resection there appeared a pancreatic fistula. What method can confirm the postresectional complication:

1. Endoscopic pancreatography
2. Laparoscopy
- 3. -Fistulography**
4. Ultrasonic echolocation
5. Telecholangioscopy

9. During the surgery for the chronic pancreatitis the full information about the Wirsung's duct gives:

1. Puncture biopsy
- 2. -Perioperative pancreatography**
3. Histologic study of pancreas areas
4. Cholangioscopy
5. Flowmetry of the bile ducts

10. The external drainage of the pancreas cyst should be used in:

1. Malignization
- 2. -Cyst suppuration**
3. Obstructive jaundice

4. -Bleeding into the cyst lumen

5. There are no indications for this operation

11. Which of the laboratory tests detects the pancreas excretory function:

- 1. -Blood insulin**
2. Blood secretin
3. Blood pancreaticozym
4. Blood enzymes
5. Blood adrenalin

12. What digestive hormones take part in pancreatic juice secretion regulation:

1. Kallikrein
- 2. -Secretin, pancreaticozym**
3. Bradykinin
4. Trypsin
5. Adrenalin

13. The patient, 70 years old. During the operation the large pancreatic cyst intimately connected with the posterior wall of stomach was detected. The recommended surgery is:

1. Melnikov's cystectomy
- 2. -Cystogastroanastomosis**
3. Cystoduodenoanastomosis
4. Cystoenteroanastomosis
5. Resection of the stomach with a cyst

14. In the patient with chronic pancreatitis during the retrograde cholangiopancreatography 0,8 cm bile papilla stenosis was detected. The recommended surgery is:

1. Choledochoduodenal anastomosis
- 2. -Endoscopic papillotomy**
3. Cholecystoenteroanastomosis
4. Transduodenal papillosphincteroplasty
5. External choledoch drainage

15. During the operation there was detected a 3-4 cm neoplasm in the pancreas. The patient has been suffering from the diabetes for a long time. The histologic study showed the d-cell tumour. What kind of tumour is it?

1. Gastrinoma
- 2. -Glucagonoma**
3. Acinar cancer
4. Epidermoid cancer
5. Insulinoma

16. During the surgery for the indurative chronic pancreatitis there was detected cancer of the head of pancreas. The pancreas is mobile. Absence of metastases. Choose the radical surgery:

1. Pancreas resection
- 2. -Pancreoduodenal resection**
3. Cystoenteroanastomosis
4. Gastroenteroanastomosis
5. Pancreatoenteroanastomosis

17. The characteristics of the pancreas cancer are:

- 1. -Intensive weight loss**

2. Moderate irritation of peritoneum
3. Lipasemia
4. Korte's symptom
5. Cullen's symptom, Mondor's symptom, Holsted's symptom

18. Point the benign epitheliomas of the pancreas:

- 1. -Adenoma, cystadenoma**
2. Lipoma
3. Neurinoma, gastrinoma
4. Papilloma
5. Insuloma

19. During the surgery for the obstructive jaundice there was detected cancer of the head of pancreas with the single metastases into the liver. The recommended surgery is:

1. Pancreoduodenal resection
- 2. -Cholecystoenteroanastomosis**
3. Cholecystectomy
4. Choledochoduodenal anastomosis
5. External choledoch drainage

20. The patient, 70 years old, has been suffering from the obstructive jaundice for a month. The symptoms are: skin itch, appetite and weight loss. The cholecyst is enlarged, painless. What is the possible diagnosis:

1. Cholecyst cancer
- 2. -Cancer of the head of pancreas**
3. Liver cancer
4. Stomach cancer

5. Colon cancer

21. All the statements about the pancreas are right except:

1. It is situated retroperitoneally at the level of the 1st-2nd lumbar vertebra and stretches from the duodenum to the hilum of the spleen
2. The pancreas length is 10-23 cm, width is 3-9 cm, thickness is 2-3 cm, weight is 70-90 g.
3. The pancreas consists of the body, head and tail
- 4. -The pancreas fulfills the excretory function only.**
5. It is intimately connected with the vertical part of the wall of duodenum and has the common blood supply with it.

22. All the statements about the pancreatic ducts are right except:

1. The major pancreatic duct is formed by fusion of the small lobular ducts
2. The length of the major pancreatic duct is 9-23 cm, diameter is 0,5-2mm in the tail part, 4 mm in the body and 2-8 mm in the head
3. Most often (80%) the major pancreatic duct and the common bile duct fall into the duodenum jointly, forming the common ampula in the area of large duodenal papilla
4. In the head of pancreas the major duct is most often connected with the accessory pancreatic duct.
- 5. -The accessory pancreatic duct serves for the secretion outflow out of the pancreatic islet.**

23. Arterial branches take part in the pancreas blood supply, except:

1. Hepatic artery
2. Superior mesenteric artery
- 3. -Inferior mesenteric artery**
4. Splenic artery

24. Pancreas secretion stimulants are all the preparations, except:

- 1. -Atropine**
2. Morphine
3. Insulin
4. Acid
5. Pilocarpine

25. The methods of the pancreas examination are the following, except:

1. The study of diastase (amylase), tripsin, lipase blood content in the duodenal content accompanied by the pancreatic secretion stimulation by the secretin and pancreozymin.
2. Pancreas ultrasonic scanning
3. Computed tomography
- 4. -Colonoscopy**
5. Laparoscopy, selective angiography, retrograde cholangiopancreatography

26. In the pancreas pathology the external pancreatic secretion disorders can be manifested as:

1. Increment in enzyme activity in normal or high bicarbonate concentration and in normal or high secretion volume

2. High secretion volume without enzyme activity change and bicarbonate level
3. High enzyme activity in normal bicarbonate content
4. Low enzyme activity and bicarbonate content in normal secretion volume.

5. -All variants are right

27. All mentioned cysts are acquired, except:

1. Retention cyst
2. Degeneration cyst
3. Proliferative cyst

4. -Dysontogenetic cyst

5. Parasitic cyst

28. Everything is characteristic of pancreatic cysts except:

1. Pains in the upper part of the stomach
2. Dispeptic phenomena
3. Tumor-like neoplasm in the epigastrium
4. Roentgenologically observed stomach and duodenal shifting

5. -Dysuric disorder

29. All operations are applied in the pancreatic pseudocysts treatment, except:

1. External drainage
2. Marsupialization
3. Endoscopic cystogastrostomy
4. Cystogastrostomy, cystoduodenostomy, cystojejunostomy

5. -Gastrocolic fistula application

30. Everything is characteristic of stomach fistula, except:

1. There are external and internal fistulas
2. There are complete and incomplete fistulas
3. Fistulas are formed after traumas, pancreatic surgeries or pancreatonecrosis
4. Fistulas lead to skin maceration around external fistula

5. -Ph-discharge is lower than 3

31. Everything is applied for the stomach fistula treatment:

1. Cytostatic agents, spasmolytics, diets, deep roentgenotherapy
2. Introduction of antienzymes, antibiotics, weak solutions of lactic acid, antiseptic in the fistula lumen
3. Fistula excision and persistent fistula tube transplantation into the stomach or small intestine.
4. Fistula excision with the single-stage resection of the pancreas and pancreatojejunostomy forming

5. -Pyloroplasty

32. Pancreatic fistulas are classified according to:

1. Etiology: after the destructive pancreatitis, trauma, external drainage of pancreatic cyst
2. Interrelation with the pancreatic duct: the fistula is connected with Wirsung's duct or is not connected with Wirsung's duct
3. Localization: comes from the head, body and tail of pancreas, fistula's outlet can be external, internal or externo-internal
4. Combination of pancreatic fistula with biliary fistula or intestinal fistula

5. -All variants are right

33. The patient underwent acute pancreatitis 4 months ago. 16 cm uninflamed pancreatic cyst was diagnosed. The most rational therapeutic approach is:

- 1. -Examination of the cholecyst, bile-excreting ducts. In chronic calculous cholecystitis detection – cholecystectomy, biliary decompression including papillotomy if necessary, cystogastrostomy**
2. Endoscopic gastrocystostomy with the further cholecyst and bile ducts examination
3. To carry out the surgery only in case of another exacerbation.
4. Emergency operation
5. Surgery is contraindicated, only conservative treatment

34. Point the factor, determining the time of the emergency operation for pancreatic cyst:

1. Detection of the pancreatic cyst
 2. Absence of cyst suppuration signs
- 3. -Suppuration of the cystic fluid**

35. Point the optimal extent of operation in the persistent pancreatic pseudocyst without inflammation signs:

- 1. -Internal drainage**
2. Pancreatic resection
3. Cholecystectomy
4. Longitudinal pancreatojejunostomy
5. Surgery is not indicated, the treatment is conservative

36. Point the optimal extent of operation in the nonpersistent pancreatic pseudocyst with its suppuration

1. -Extenal drainage

2. Internal drainage
3. Longitudinal pancreatojejunostomy
4. Abdominization of the pancreas
5. Pancreatectomy

37. Point the optimal surgery term for the pancreatic pseudocyst:

1. 3 days after the attack of acute pancreatitis
 2. 10 days after the attack of acute pancreatitis
- 3. -3-4 months after the attack of acute pancreatitis in case of a persistent cyst**
4. Surgery is not indicated, the treatment is conservative
 5. A month after the attack of acute pancreatitis

38. What is the optimal surgery in the presence of the pancreatic neoplastic cyst:

1. Extenal cyst drainage
 2. Internal cyst drainage
- 3. -Resection of the pancreas with a cyst**
4. Endoscopic cytogastrostomy
 5. Cholecystectomy

39. What is the optimal surgery term for the pancreatic fistula:

- 1. -2-4 months after its formation**
2. 7-10 days after its detection
3. Suregery is not carried out
4. Right after the decrease of acute inflammatory process in the bile-excreting ducts and pancreas
5. Depends on a patient's agreement to a surgery

40. What operation for chronic pancreatitis has the best immediate and distant curative effect:

- 1. -Longitudinal pancreatojejunostomy**
2. Pancreaticoduodenal resection
3. Yoshioka Wakabayashi postganglionic neurotomy
4. Splanchnicectomy with the celiac plexus ganglia resection
5. Suregeries are not carried out, as they are ineffective in chronic pancreatitis.

41. The causes of chronic pancreatitis are all except:

1. Cholelithiasis and other pathologies of biliary system
2. Stomach and duodenal diseases

3. -Kidney diseases

4. Alcoholism, metabolic disorders
5. Recent acute pancreatitis, pancreatic traumas

42. In chronic pancreatitis there are no:

1. Pains
2. Dyspeptic disorders, absorption processes disorders
3. Jaundice
4. Epigastric pains, pancreas enlargement determined by palpation

5. -High temperature of hectic character

43. In the chronic pancreatitis diagnosing all examinations are of great importance, except:

1. Ultrasonic scanning of the pancreas and computed tomography
2. Coprological survey, creatorrhoea and steatorrhea detection

3. Retrograde pancreatography, celiacography, radioisotope scanning

4. -Irrigoscopy

5. Examinations of pancreatic enzymes in blood, urine, duodenal content, bilirubin and sugar in blood

44. The most informative diagnosing technique of chronic pancreatitis is:

1. Fibrogastroduodenoscopy
- 2. -Ultrasonic scanning of the pancreas**
3. Duodenal probing
4. Plain radiography
5. Irrigoscopy

45. The differential diagnosis of chronic pancreatitis should be carried out in all diseases except:

1. Cholecyst and extrahepatic biliary tracts diseases

2. -Perforated ulcer

3. Gastric ulcer, gastritis, duodenitis
4. Abdominal ischemic syndrome
5. Pancreatic cancer

46. In chronic pancreatitis treatment it is not reasonable to apply:

1. Diets rich in plant food, high-caloric feeding with limitations on fat, salt, spicy, fried food; parenteral nutrition

2. -Antibiotics

3. Spasmolytics (papaverine, atropine)
4. Enzymatic agents, replacing the disturbed exocrine function of the pancreas (pancreatine, panzynom, festal),

stimulants of pancreatic juice production and flow (mineral water, medicinal herbs)

5. Principles of the conservative treatment of the acute pancreatitis in exacerbation.

47. What method of physiotherapy is the most effective in killing the pain syndrome in chronic pancreatitis:

1. -Electrophoresis with novocaine

2. Ultrasound

3. Currents to Bernard

4. Laser irradiation

5. Paraffin

48. What preparation is the most effective in pseudotumorous form of chronic pancreatitis:

1. Festal

2. Metamizole sodium

3. Papaverine and no-spa

4. -Sandostatin

5. Hidrocortisone

49. All the following surgeries are applied in chronic pancreatitis, except:

1. Pancreas surgeries

2. Biliary tract surgeries

3. Stomach and duodenal surgeries

4. -Colon surgeries

5. Vegetative nervous system surgeries

50. The surgery is indicated in chronic pancreatitis if:

1. The pseudocyst has 5 cm in diameter and there is pancreatic abscess

2. There is a stenosis of the common bile duct and Wirsung's duct or Wirsung's duct stone.

3. There is a biliary pancreatitis in the presence of concrements in the cholecyst and the common bile duct

4. There are organicity in the stomach and duodenum, causing chronic pancreatitis (diverticulum, stomach ulcer, duodenostasis, cyst)

5. -In all the cases

51. The patient with chronic pancreatitis has moderate pain syndrome in the absence of the duct system block. Choose the acceptable methods of treatment:

1. Longitudinal duodenoscopy

2. Pancreatectomy with the extent to 95%

3. Distal pancreatectomy with the intestinal drainage of the Wirsung's duct

4. -Medicamental, conservative treatment

5. Papillosphincteroplasty

52. What pancreatic cyst complications demand the emergency intervention:

1. -Cyst suppuration and rupture with the development of the generalized peritonitis

2. -Haemorrhagic or purulent pleurisy in a cyst rupture into the pleural cavity

3. -Cyst cavity bleeding

4. Chronic duodenal obstruction

53. Which kind of testing is the simplest and the most acceptable method of the final diagnosing of the external pancreatic fistula:

1. Computed tomography of the pancreas
2. Ultrasonic scanning of the pancreas

3. -Fistulography

4. Detection of the pancreatic enzymes activity in the vulnerary or fistulous drainage
5. Duodenal retrograde cholangiopancreatography

54. What C. Frey's operation is applied in the chronic pancreatitis:

1. -Ventral resection of the pancreatic head, body and tail, anastomosis with the jejunum, Roux operation
2. Transection of the celiac plexus preganglionic nerve trunks
3. Transection of the celiac plexus postganglionic nerve trunks
4. Drainage of the greater omentum cavity

Unit 7. POSTCHOLECYSTECTOMIC SYNDROME

1. The patient had cholecystectomy for the calculous cholecystitis two years ago. 6 months later there appeared pains in the right hypochondrium and dark urine. Bilirubin is 120 $\mu\text{mol/l}$. The method of diagnosing for the obstacle level is:

1. Ultrasonic scanning
2. Liver scintigraphy
3. Intravenous cholangiography
4. -Endoscopic retrograde cholangiopancreatography
5. Percutaneous transhepatic cholangiography

2. The patient had cholecystectomy 4 years ago. A year later the girdle pains in the right hypochondrium reactivated. On admission to hospital bilirubin is 21 $\mu\text{mol/l}$, alkaline phosphatase is 346 u/l. The patient has intolerance to iodic preparations. The diagnostic technique of the biliary tree:

1. Liver scintigraphy
2. Ultrasonic scanning
3. -Endoscopic retrograde cholangiopancreatography
4. Peroral cholangiography
5. Rheohepatography

3. The patient has sharp pains in the right hypochondrium with irradiation to the back, emesis without bile impurity. Light skin and sclera icteritiousness. The medical examination shows the muscular defense in the epigastrium, moderate painfulness, the stomach is swelled. Amylase is 90 u/l. A year ago had cholecystectomy. The probable cause for this condition is:

1. Stenosis of the large duodenal papilla
2. -The stone impacted in the large duodenal papilla
3. Corrosive stricture of the choledoch
4. Chronic pancreatitis
5. Acute hepatitis

4. The patient has postcholecystectomy syndrome, moderate obstructive jaundice. The conservative treatment and endoscopic papillosphincterotomy are not

effective. The jaundice is growing. The therapeutic approach is:

1. Artificial diuresis
- 2. -The urgent surgery on the 5th-7th day of therapy**
3. Surgery on the 10th-12th day of intensive therapy
4. Surgery on the 2nd-3rd day of conservative therapy
5. Nasobiliary probe

5. The patient with postcholecystectomy syndrome was hospitalized with the severe obstructive jaundice. The percutaneous transhepatic cholangiography had been applied. 6 hours later the patient felt pains in the right half of the stomach, tachycardia increased, blood pressure was 100/60 mm/Hg. Complication diagnosis after percutaneous transhepatic cholangiography is:

1. Acute pancreatitis
2. Acute cholangitis
3. Hepatargia
- 4. -Biliary excretion into the abdominal cavity**
5. Pain shock

6. The patient with postcholecystectomy syndrome had cholecystectomy 2 years ago. The pains repeated 5-6 months after the surgery. On hospitalization the condition was moderately severe, skin and sclera icteritiousness. The most reliable diagnosing technique is:

1. Bilirubin testing of blood, urine and feces
2. Blood enzymes testing
3. Laparoscopy with the liver biopsy
- 4. -Endoscopic retrograde cholangiopancreatography**
5. Fistulography

7. Choose the basic roentgenographic evidence of chronic duodenal obstruction:

1. Slow barium evacuation along the duodenum (1-3 min);
2. Widening of the duodenal diameter;
3. Fast barium evacuation;
4. Large retrogastral space;
5. Stomach edging from without;
6. Filling defect;
7. Pendular movements of barium in the duodenum.

Right variants:

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

8. The most effective treatment mode of choledocholithiasis in the patients with postcholecystectomy syndrome is:

- 1. -Endoscopic papillosphincterotomy**
2. Choledochotomy
3. Choledochoduodenoanastomosis
4. Lithotripsy
5. Choledochenterostomy

9. What additional diagnosing should be applied in the patient with postcholecystectomy syndrome and residual choledocholithiasis:

1. Scintigraphy of the bile ducts
2. Computed tomography of the abdominal organs

3. **-Retrograde cholecystpancreatography**
4. Percutaneous transhepatic cholangiography

10. What complications can arise in the patient with transhepatic drainages, operated for iatrogenic bile ducts damage?

1. Hemobilia
2. Obstructive jaundice
3. Recurrent cholangitis
4. Incomplete fistula of the small intestine
5. Stricture of the biliary-enteric bypass
6. **-Everything mentioned above**

11. The patient with transhepatic drainages of the bile ducts acquired a biliary-vascular fistula, that declared itself through hemobilia episodes of different intensity. What is the initial diagnosing and therapeutic technique:

1. Surgery for the панкреой tract revision and for the stable homeostasis creation
2. Removal of the transhepatic drainage
3. Removal of the transhepatic drainage and its reconducting through the puncture of another hepatic segment
4. Conservative hemostatic therapy

5. -Hepatic angiography for the conformation of the biliary-vascular fistula and selective embolization of a bleeding vessel

12. Point the simplest method of the bile ducts state evaluation in the patient with an external biliary fistula:

1. Ultrasonic scanning
2. Retrograde cholecystpancreatography

3. Percutaneous transhepatic cholangiography
4. **-Fistulocholangiography**
5. Hepatic scintigraphy

13. The restorative surgeries in case of the biliary tracts strictures are:

1. Heineke-Mikulicz plasty
2. **-Bihepaticojejunoanastomosis formation**
3. **-Rehepaticojejunoanastomosis**
4. **-Biliobiliary anastomosis**
5. **-Percutaneous transhepatic cholangiography**

14. Which complication is not connected with the stone shifting from the cholecyst to the bile ducts:

1. Biliary colic
2. Jaundice
3. Purulent cholangitis
4. Obstructing papillitis
5. **-Portal hypertension**

15. What can cause the postcholecystectomy syndrome?

1. Cicatrical stenosis of the common bile duct;
2. Cancer of the large duodenal papilla, overlooked during the operation;
3. Large duodenal papilla stenosis;
4. Residual choledoch stone;
5. Long stump of the cystic duct.

Right variants:

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

d) 2, 3, 4, 5

e) -all variants are right

16. What doesn't relate to intraoperative methods of the extrahepatic bile ducts examination?

1. Choledoch palpation
2. Cholangiomanometry

3. -Intravenous cholegraphy

4. Cholangioscopy
5. Intraoperative cholangiography

17. In what situations is an intraoperative bile ducts examination indicated?

1. Cholangitis;
2. Choledoch widening;
3. Surgical jaundice;
4. Multiple small cholecyst concretions;
5. Obstructive jaundice in past history.

Right variants:

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

e) -all variants are right

18. Obstructive jaundice can't be caused by:

1. Head of pancreas cancer
2. Large duodenal papilla neoplasm
3. Chronic indurative pancreatitis
- 4. -Cystic duct stone**
5. Common bile duct stone

19. What are the causes for the postcholecystectomy syndrome, determined by the primary surgery defects:

1. Residual stone of the common bile duct;
2. Long stump of the cystic duct;
3. Duodenal ulcer;
4. Large duodenal papilla stenosis;
5. Narrowing of the common bile duct by the ligation of the cystic duct. **Right variants:**

a) -2, 5

b) 1, 2, 4, 5

c) 4, 5

d) 1, 2

e) all variants are right

20. What signs are characteristic of the obstructive jaundice?

1. High conjugated bilirubin of blood serum;
2. High unconjugated bilirubin of blood serum;
3. Bilirubinuria;
4. Hypercholesterolemia;
5. High faecal stercobilin.

Right variants:

a) 1, 3, 5

b) -1, 3, 4

c) 2, 3, 4

d) 2, 3, 4, 5

e) 2, 3

21. What symptoms are characteristic of an obstructive jaundice, caused by the obturation of the common bile duct terminal portion?

1. Colicky pain like in biliary colic;
2. Gradual jaundice development;
3. Fast jaundice development after the three;
4. Absence of pain syndrome;
5. Nonintensive skin itch;
6. Acholic stool.

Right variants:

a) -1, 3, 5, 6

b) 1, 3, 4

c) 2, 3, 4

d) 2, 3, 4, 5, 6

e) 2, 3

22. In high obturation of the bile ducts the first symptom is:

1. Fast jaundice development;
2. Pale yellow urine;
3. Intense skin itch;
4. Sthenic fever;
5. Dark stool;
6. Dyspeptic disorders.

Right variants:

a) 1, 3, 5

b) -1, 3, 4, 6

c) 2, 3, 4

d) 2, 3, 4, 5

e) 2, 3

23. What can cause the corrosive stricture of the extrahepatic bile ducts:

1. Cholestasis;
2. Bile hypertension;
3. Concrements and inspissated bile development;
4. Obstructive jaundice;
5. Pancreatitis.

Right variants:

a) 1, 3, 5

b) -1, 2, 3, 4

c) 2, 3, 4

d) 2, 3, 4, 5

e) 2, 3

24. What are the indications for an intraoperative cholangiography

1. Obstructive jaundice;
2. Hepatitis;
3. The common bile duct widening;
4. Gangrenous cholecystitis;
5. Choledocholithiasis;
6. Strictures or large duodenal papilla neoplasms.

Right variants:

a) -1, 3, 5, 6

b) 1, 3, 5

c) 2, 3, 4

d) 2, 3, 4, 5

e) 2, 3

25. What are the indications for the intraoperative choledochotomy:

1. Stones, detected by palpation;
2. Duct diameter increase;
3. Episodes of jaundice;
4. Cholangitis;
5. Small stones in the cholecyst with the wide cystic duct.

Right variants:

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

e) -all variants are right

26. What are the aims of the bile ducts drainage:

1. Intestinal decompression;
2. The removal of the infected bile in cholangitis;
3. Temporal bile ducts decompression in the inflammation of the hepaticocholedoch, pancreas and Vater's papilla;
4. In case of impossibility to complete the choledochotomy by other means;
5. Prevention of cicatricial changes in the bile ducts after the suturing, biliary-enteric bypass and plastic operation;
6. Bile diversion in the patients with jaundice.

Right variants:

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

27. What are the basic methods of the bile ducts external drainage?

1. T-tube by Kher;
2. By Yurash;
3. By Vishnevsky;
4. By Finsterer;
5. By Korte;
6. By Holsted-Picovsky;
7. External transpapillar drainage by Doliotty.

Right variants:

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

28. What clinical presentation is characteristic of cholangitis:

1. Fever, often hectic;
2. Pollakiuria;
3. Shiver, hyperhidrosis;
4. Intractable vomiting;
5. Thirst;
6. Dry mouth, enlarged spleen.

Right variants:

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

29. The classic Charcot's triad consists of:

1. Enlarged cholecyst;

2. Dispeptic disorders;
3. Fever;
4. Jaundice;
5. Aches.

Right variants:

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

30. What can cause the main bile ducts disorders:

1. The application of the electrocoagulation near the ducts;
2. Congenital anomalies and variability of the bile topography;
3. Inflammatory-infiltrative changes in the area of hepatoduodenal ligament;
4. Rough bile examination with probes, bougies, scoops and other appliances;
5. Technical and tactical surgical mistakes.

Right variants:

- a) 1, 3, 5
- b) 1, 3, 4
- c) 2, 3, 4
- d) 2, 3, 4, 5
- e) -all variants are right**

31. What are the methods of elimination of the extrahepatic bile ducts damages:

1. Autovein plasty of a duct;

2. The damaged duct suture by the interrupted sutures using the atraumatic needle;
3. Bile ducts plasty with a synthetic prosthesis;
4. Duct suturing using T-/G-drainage;
5. Biliary-enteric bypasses with the duodenum or the jejunum.

Right variants:

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

32. What can cause the true postcholecystectomy syndrome?

1. Bile ducts motility disorders;
2. Concomitant diseases of the liver, stomach, pancreas and duodenum;
3. Cystic duct stump stone;
4. Oddi's sphincter stenosis;
5. A stone left in the common bile duct;
6. Bile passages strictures.

Right variants:

- a) 1, 3, 5
- b) -1, 3, 4, 5**
- c) 2, 3, 4
- d) 2, 3, 4, 5
- e) all variants are right

33. What are the reasons of the false postcholecystectomy syndrome?

1. Esophageal opening hernias;
2. Chronic stomach and duodenal ulcer;
3. Pancreatitis;
4. Irritable small intestine syndrome;
5. Cicatricial duct strictures;
6. Malabsorption syndrome.

Right variants:

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

34. In what cases can the plain X-ray film detect gas in the bile ducts:

1. Fistula between the choledoc and the duodenum;
2. Choledochoduodenostomy;
3. Cholecystojejunostomy;
4. Cholangitis;
5. Mirizzi's syndrome.

Right variants:

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

35. What are the indications for the anastomosis of the biliary tracts and duodenum:

1. Full ducts obturation if damaged;
2. Cicatricial strictures;

3. Indurative pancreatitis;
4. Pancreas tumours.

Right variants:

- a) 1, 3
- b) 1, 3, 4
- c) 2, 3, 4
- d) 2, 3, 4
- e) -all variants are right**

36. What are the methods of the choledochoduodenal fistulisation:

1. Yurash's method;
2. Vishnevsky's method;
3. Korte's method;
4. Fliorkin's method;
5. Finsterer's method.

Right variants:

- a) -1, 4, 5**
- b) 1, 3, 4

37. What are the methods of the intraoperative biliary ducts examination:

1. Fluorescence method;
2. Choledochoscopy;
3. Hepatoscopy;
4. Duodenoscopy;
5. Probing.

Right variants:

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

d) 2, 3, 4, 5

e) all variants are right

38. What methods relate to transhepatic biliary tracts drainage:

1. -Proderi drainage
2. Duval drainage
3. Holsted-Picovsky drainage
4. Kher drainage

39. What symptoms are characteristic of purulent cholangitis?

1. Epigastric pains, paresthesia, jaundice
2. Mild pyrexia, cachexia, vomiting
3. -Pains in the right hypochondrium, hectic temperature with shivers, jaundice

Unit 8. PORTAL HYPERTENSION

1. What reasons do not cause portal hypertension:

1. Inferior vena cava thrombosis at the level of the hepatic veins
2. Stenosis, portal vein phlebothrombosis
3. -Inferior vena cava thrombosis at the bifurcation level

2. Subhepatic block of the portal blood flow can't be caused by:

1. -Chiari's syndrome
2. -Budd-Chiari syndrome
3. -Liver cirrhosis
4. Portal vein thrombosis

3. Intrahepatic block of the portal blood flow can't be caused by:

1. Biliary cirrhosis
2. Postnecrotic cirrhosis
3. Portal cirrhosis
4. -Portal vein thrombosis

4. Subhepatic block of the portal blood flow can't be caused by:

1. Phleboscclerosis, portal vein or its branches thrombosis
2. -Biliary cirrhosis
3. -Budd-Chiari syndrome

5. High portal bed pressure can't be caused by:

1. Dilated esophageal veins bleeding
2. Anteroventral veins dilatation
3. -Erosive jejunitis
4. Ascites

6. Portal hypertension is not accompanied by:

1. Hypersplenism
2. Esophageal varicose veins dilatation
3. -Severe epigastric pains

7. What methods are not applied in portal hypertension diagnosing:

1. -Abdominal plan radiography
2. Computed tomography
3. Laparoscopy
4. Fibroesophagogastrosocopy

8. What methods are not applied in liver cirrhosis treatment:

1. Surgeries, aimed to create new blood outflow tracts out of portal system
2. Surgeries, aimed to increase liver regeneration
3. Surgeries, aimed to cease stomach and esophagus veins connection

4. -Vagotomy with a stomach drainage

9. What methods are not applied to stop esophageal varicose dilated veins bleeding:

1. Blakemore probe application
2. Intravenous introduction of 10%-20,0 calcium-chloride solution
3. Patsiora's operation

4. -Laparoscopy

10. The normal pressure of the portal vein is:

1. 50-100 mmH₂O
2. -120-180 mmH₂O
3. 200-400 mmH₂O
4. 150-200 mmH₂O

11. The most probable cause for the portal hypertension gastrointestinal bleeding is:

1. Erosive gastritis
2. Acute stomach ulcer
3. Chronic duodenal ulcer
4. -Lower third esophageal varicose veins dilatation

12. What treatment mode is more preferable in the prevention of the recurrent esophageal varicose dilated veins bleeding:

1. Complex medicamentous hemostatic therapy + hemotransfusion

2. -Surgical treatment

13. The patients with a full-blown liver function disorder shouldn't take:

1. Carsil
2. Essentiale

3. -Tetracycline

4. Rheoporyglucnum

14. The clinical representation of the intrahepatic portal block syndrome doesn't have:

1. General weakness
2. Liver and spleen pains
3. Fast weight loss
4. Enlarged liver

5. -Acute abdomen

15. Clinical picture of the intrahepatic portal hypertension doesn't include:

1. Splenomegaly with hypersplenism or without it
2. Splenomegaly with hypersplenism, esophageal and stomach varicose dilated veins
3. Ascites

4. -All variants are wrong

16. Budd-Chiari syndrome is characterized by:

1. -Thrombotic occlusion of the inferior vena cava at the level of the hepatic vein entering into it
2. Endophlebitis of the hepatic veins

17. Esophageal and stomach radiographic contrast study in portal hypertension can detect:

1. -Varicose dilated veins of the esophagus and forestomach
2. Lower third esophageal stenosis

18. What signs don't belong to the laporospic signs of the portal hypertension:

1. Thickening of the round ligament of the liver
2. Vessel dilatation and tortuosity of the round ligament of the liver
3. Parietal peritoneum varicose vein dilatation
4. -Peritonitis

19. Surgery of the portal hypertension includes:

1. -Surgeries, aimed to create new blood outflow tracts out of portal system
2. -Surgeries, aimed to ascitic fluid diversion out of abdominal cavity
3. -Surgeries, aimed to cease stomach and esophagus veins connection with the portal veins
4. -Surgeries, aimed to increase blood inflow into the postal system
5. Stomach resection

20. What are the indications for the abdominal cavity puncture in ascites:

1. -Intense ascites
2. Peritonitis

21. The abdominal cavity puncture in ascites is taken:

1. -By trocar conduction into the abdominal cavity along the midline 2 cm lower the navel
2. By trocar conduction into the abdominal cavity in the right iliac area
3. By trocar conduction into the abdominal cavity in the hypochondrium

22. What operations are aimed to increase liver regeneration in portal hypertension:

1. -Resection of the left lobe of liver
2. -Coagulation of the surface of liver

23. What operations are aimed to create new blood outflow tracts out of portal system:

1. -Porto-caval vascular anastomoses
2. Splenectomy
3. Aortocoronary bypass surgery

24. The anastomosis between portal and inferior vena cava in portal hypertension leads to:

1. -Encephalopathy
2. Blood supply disturbance of the internals
3. Peritonitis

25. The term ``portal hypertension`` characterizes the changes, appearing in:

1. -Obstruction of blood flow in the portal system

2. Slowing of blood flow along the inferior vena cava
3. Peritonitis

26. What causes the venous circulation

1. -Liver cirrhosis
2. Splenomegaly
3. Stomach ulcer

27. What signs are not observed in the liver cirrhosis progression:

1. Increase in vascular resistance of the portal vein
2. Ascites
3. -Acute pancreatitis

28. The portal hypertension can cause:

1. -Anteroventral veins dilatation
2. Acute pancreatitis
3. Acute appendicitis

29. The symptoms of portal hypertension include:

1. -Enlarged spleen
2. Enlarged pancreas

30. TIPS-transjugular intrahepatic portosystemic shunting is applied to decrease the portal hypertension complications:

1. -Gastro-esophageal bleedings
2. Ascites
3. Hypoproteinemia
4. Jaundice

Unit 9. 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. Tumours 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. -Intravenous 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 corresponds 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, tuberos 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. Intraabdominally

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. Klobier'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, 13

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 their 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 phlebosclerosis
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. Laparotomy 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 cholangitis
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 cholangiography
2. Percutaneous transhepatic cholangiography
3. Laparoscopic 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 10. SPLEEN DISEASES AND INJURIES. BLOOD DISEASES REQUIRING SPLENECTOMY

1. Splenic infarction develops in:

- 1. -Embolism of spleen vessels**
- 2. -Thrombosis of spleen vessels**
3. Liver cirrhosis

2. In moderate splenic infarctions:

- 1. -Lesion focus is being resolved**
- 2. -Lesion focus softens with the formation of a pseudocyst**
- 3. -Spleen abscess is being formed**
4. Parasitic cyst is being formed

3. Splenic infarction is accompanied with:

- 1. -Pains in left hypochondrium**
- 2. -Increase of temperature to 39°C**
3. Peritonitis

4. What stimulates the suppuration of the splenic infarction:

- 1. -Supercooling**
2. Peritonitis
3. Kidneys diseases

5. The treatment of spleen abscess includes:

1. Conservative treatment
- 2. -Splenectomy**
- 3. -Abscess drainage under ultrasonic control**
4. Stomach resection

6. Spleen cysts are subdivided into:

- 1. -Nonparasitic**
- 2. -Parasitic**
3. Mixed

7. The formation of congenital spleen cysts is connected with:

- 1. -Disorder of embryonal development**
2. Neogenesis

8. Acquired spleen cysts appear because of:

- 1. -Traumas**
- 2. -Infarction**
3. Tuberculosis
4. Disorder of embryonal development

9. Spleen cysts are located:

- 1. -Subcapsularly**
- 2. -Intrasplenically**
3. In the spleen circle

10. Spleen cysts contain:

- 1. -Dark-red fluid**
2. Crimson fluid

3. Dense mass

11. What is detected in spleen cysts:

1. **-Stomach asymmetry**
2. Acute pancreatitis
3. Acute peritonitis

12. Differential diagnosing of hypersplenism is applied in:

1. Acute intestinal obstruction
2. Acute pancreatitis
3. **-Cyst of pancreas**
4. Stomach cancer

13. Parasitic cyst occur because of:

1. **-Echinococcosis**
2. **-Alveococcosis**
3. Ascariasis

14. Spleen alveococcus looks like:

1. Multicamerate node:
2. Small vesicles
3. **-Anhistous tumour**

15. The parasitic cysts treatment presupposes:

1. **-Surgical therapy**
2. Conservative therapy

16. Spleen abscess develops because of:

1. **-Hematogenous infection permeation along the veins and arteries**
2. **-Festering of spleen haematomas**

3. Portal hypertension

17. The clinical representation of spleen abscess is:

1. Abdominal outpouching in the right hypochondrium
2. **-Palpatory spleen tenderness**
3. **-Pain in left hypochondrium**

18. The X-ray examination of spleen parasitic cysts detects:

1. Decline of right cupula of diaphragm motion
2. **-High-riding of left cupula of diaphragm**
3. **-Signs of left-side pleurisy**
4. Distal left pneumonia
5. **Enlarged liver**

19. Differential diagnosing of spleen abscesses is applied in:

1. **-Spleen infarction**
2. **-Subdiaphragmatic abscess**
3. **-Perisplenitis**
4. Pancreatitis

20. Spleen tumours can be:

1. Nonparasitic
2. **-Benign**
3. **-Malignant**
4. Parasitic

21. Name the benign spleen tumours:

1. **-Hemangiomas**
2. Lymphosarcomas

3. Reticulosarcomas
4. Chondromas
5. Sarcomas

22. Diagnising of spleen tumours are:

1. -Ultrasonic scanning
2. -Computer tomography
3. -Histologic study of spleen punctuate
4. Plan abdominal radiography

23. Name the malignant spleen tumours:

1. -Sarcomas
2. -Lymphosarcomas
3. -Reticulosarcomas
4. Hemangiomas

24. Enumerate the blood system diseases, demanding splenectomy:

1. -Thrombocytopenic purpura
2. -Hemolytic anemia
3. -Hypoplastic anemia
4. -Gaucher's disease
5. -Chronic leucosis
6. Liver cirrhosis

25. Spleen damage arise as a result of:

1. -Nonpenetrating wound of abdominal cavity
2. -Penetrating wound of abdominal cavity
3. -Compression of an abdominal and thoracic cavity after fall from a height
4. Purulent peritonitis

26. Clinical picture of spleen damage is:

1. -Internal hemorrhage
2. -Shock phenomena
3. -Pain in the left hypochondrium
4. -Underbelly pains

27. Clinical picture of subcapsular spleen damage is accompanied with:

1. -Feeling of weight in the left hypochondrium
2. -Local painfulness in the left hypochondrium
3. -Percussionally enlarged spleen borders
4. Gastro-intestinal bleeding

28. Name the signs of liver damage:

1. -Percussionally enlarged borders of spleen flattening
2. -Palpatory tenderness in the left hypochondrium
3. -Plan radiography shows high-riding left cupula of diaphragm and its motion restriction.
4. Bartome-Michelson syndrome

29. The damaged spleen treatment presupposes:

1. -Urgent surgery
2. Conservative therapy

30. The indications for splenectomy are:

1. -Limphoproliferative diseases with splenomegaly and hypersplenism
2. Enlarged spleen
3. -Often hemolytic crises in hemolytic anemia
4. Splenomegaly and palpable spleen

Unit 11. TRANSPLANTATION OF ORGANS AND TISSUES

1. For successful transplantation tissue typing must be done with the data of

1. PCHR-DIAGNOSTICS (polymerized chain reaction)
2. System ABO
3. System HLA
- 4. -Systems HLA and ABO**

2. Transplantation of an intrahuman kind it is-

1. Heterotransplantation
- 2. -Allotransplantation (gomo-)**
3. Autotransplantation
4. Xenotransplantation

3. The replaced liver lobe from mother to the child is -

1. Isotransplant
2. Heterotransplant

3. -A-allograft, Allotransplant

4. Autotransplant
5. Xenotransplant

4. Rendering of transplantological care to the citizen of Belarus is carried out on a basis:

1. United Nation's Charters of human rights;
2. The order of Byelorussian Ministry of Health «About the further development transplantological care to the population» № 150 20.06.1997;

3. Civil code of Belarus;

4. Instructions «About ascertaining of death and an order of taking the organs for transplantation»;

5. The decision of the Council of Belarus «About indemnification of the expenses caused by necessity of recovery of health due to a donor service of organs or tissues»;

6. The order of Byelorussian Ministry of Health «About indemnification of expenses to donors of bodies or tissues»;

7. The instruction on taking the tissue transplants of the person.

Correct will be:

1. 1, 2, 3, 4, 6, 7
- 2. -2, 4, 5, 6, 7**
3. All listed

5. Isotransplantation is

1. Change of organs from a rabbit to a rabbit
2. Change of tissues from the person to the person

3.-Change of organs of the cloned individuals

4. Change of organs and tissues from an animal to the person
5. Change of artificial organs

6. The histocompatibility HLA system is:

1. A set of antigens of erythrocytes of the person
2. A set of antigens of erythrocytes of monkeys
- 3. -A-set of antigens of leukocytes (lymphocytes) of the person**
4. A set of antigens of collagen of the person

7. The scheme of prevention of rejection crisis (host

reaction) includes a triplet:

1. Tienam, Digoxin, Trental
2. Cyclosporin A, Cyclophosfan, Cyclodol
3. Tienam, Trigan, Trental
4. **-Prednizolon, Cyclosporin A, Azathioprine**

8. The donor of bodies and tissues for allotransplantation can be:

1. Any human body irrespective of a sex, age and a cause of death
2. The persons which cause of death was cancer disease
3. **-The people who have died of a tumour of a brain**
4. The people who have died from sudden cardiac arrest due to a systemic atherosclerosis

9. Cyclosporin A directed on prevention of rejection crisis concerns to the group:

1. Antibiotics of a microbic origin
2. Synthetic antibacterial drugs
3. **-Antibiotics of a fungoid origin**
4. Derivatives of 8-oksihinolin
5. Derivatives of purine compound

10. For preservation and perfusion of perivital organs it is used:

1. Physiological 0,9 % NaCl solution
2. **-Collins's solution**
3. Solution Ringer-Lock
4. An antiseptic solution «Septocid»
5. Absolute spiritus
6. A solution «Reopolyglucin»

7. Solution Darrow

11. Organocomplex heart-lungs can be used for transplantation:

1. **-Was directly after a capture of donor's organs**
2. Later 4 hours from the moment of a capture of donor's organs
3. Within days from the moment of a capture of donor's organs
4. Within 48 hours from the moment of a capture of donor's organs

12. The decision on approach of death of patients and possibility of their use as donors of organs and tissues is accepted by a consultation of doctors in structure:

1. **-Attending physicians (the anaesthesiologist-reanimatolog and the neuropathologist or the neurosurgeon), the medicolegal (forensic medical) expert, chief of the intensive care department, vice-chief of the hospital on medical questions (deputy head doctor for medical issues)**
2. Brigades of intensive care doctors on duty
3. Brigades of surgeons on duty and the senior (responsible) doctor on duty
4. Heads of medical institution and the representative of governmental medical structures

13. In clinic for the first time heart allotransplantation has carried out:

1. K.Barnard (Republic of South Africa) 1968г.
2. M.Kuli (USA) 1963г.

3. R de Bekey (USA) 1967г.
4. V.N.Demihov (USSR) 1953
- 5. -K.Barnard (Republic of South Africa) 1967 г**
6. M.Kuli (USA) 1967г.
7. V.I. Shumakov (USSR) 1976 г

14. Indications for heart transplantation are all, except

- 1. -Kardionevrosis**
2. Terminal stage IHD
3. Kardiomyopathy
4. Impossibility of rehabilitation of the patient after a myocardium heart attack

15. Allogenic tissue transplantation technologies (implantation of cultures of cells) are the most widely and often used at transplantation of....

- 1. -Pancreas**
2. Intestine
3. Heart
4. Spleen
5. Liver

16. Indications to intestine transplantation is:

1. Nonspecific ulcerative colitis
2. Dolychosygma
- 3. -Syndrome of a short gut**
4. Double localisation of a tumour of a small intestine
5. Total damage of intestines by a typhoid fever

17. The big number of complications and relative unsuccessfulness of transplantation of intestines are

caused:

1. Peculiarities of vessel bed of mesenterium
2. Smooth muscle structure of a middle layer of a gut
3. Contamination of guts by anaerobic flora and bacteroides
- 4. -Congestions of a lymphatic tissue in the wall of a gut**

18. Indications to liver transplantation are:

1. Liver cyst
2. Hydatid disease of liver
3. Disease of Caroli
4. Hepatocelular cancer with metastasis
5. Liver cirrhosis
- 6. -Points 3 and 5**
7. All listed
8. Points 1, 2, 3, 5

19. Process of transplantation of artificial heart is called:

1. Xenotransplantation
- 2. -Implantation**
3. Autotransplantation
4. Mechanotransplantation
5. Cardiomechanotransplantation

20. The most common and serious complication during implantation of an artificial heart is:

1. The reaction of rejection
2. Intolerance of metal constructions
3. Electric shock
- 4. -Embolisation of various vascular systems**

21. Transplantation of pancreas is possible in the form of:

1. Whole organ
2. Segments of the pancreas
3. Isolated islet cells
4. Answers 1 and 2
5. Answers 2 and 3
6. **-All the answers are correct.**

22. The reaction of rejection after heart transplantation is:

1. Acute, subacute, chronic
2. Primary, secondary, recurrent
3. Hyperacute, extended, long-term
4. **-Hyperacute, acute, chronic**

23. Genes of major histocompatibility complex (MHC) - a set of genes that control the synthesis of the major histocompatibility Ag in humans are:

1. **-In the short arm chromosome 6**
2. In the long arm of chromosome 6
3. In the center of chromosome 8
4. At the end of the 10 chromosomes

24. The first transplantation of complex heart-lungs was performed in:

1. **-Stanford University (USA)**
2. Scientific research Institute of Transplantology and artificial organs (USSR)
3. The surgical clinic of the University of Wisconsin (USA)
4. Medical College of Capetown (South Africa)

25. In clinical practice, most widely for the treatment of

severe septic complications used (found) a method:

1. Splenectomy
2. Transplantation of spleen
3. Splenectomy and autotransplantation of spleen
4. **-Extracorporeal perfusion of the blood through the separate donor xenospleen**
5. Heterotopic implantation of the spleen's cells culture.

26. Protocol of patient death and the possibility of using him as a donor of organs and tissues to be signed:

1. The resuscitators on duty
2. The surgeons on duty
3. The surgeons and resuscitators on duty
4. **-Anaesthesiologist-resuscitator, neurosurgeon, expert in forensic medicine, head of the resuscitation unit, Deputy head doctor for medical issues**
5. **-Anaesthesiologist-resuscitator, neurosurgeon, expert in forensic medicine, senior attendant resuscitation, senior doctor on duty**

27. In the Republic of Belarus is performed transplantation of the:

1. Heart
2. Bone marrow
3. Kidneys
4. Liver
5. Pancreas

6. -All the answers are correct

28. Explantation of organs for transplantation is possible after ... (time) if there is evidence of the brain death and it

is not possible to perform EEG:

1. 12 hours
2. **-24 hours**
3. 48 hours
4. 3 day
5. 18 hours

29. Heart transplantation can be performed:

1. **-Orthotopic**
2. Ortho - and heterotopic
3. Heterotopic
4. All the answers are correct

30. Explantation of organs for transplantation is not allowed:

1. From a living donor, under 18 years
2. From the person, recognized in the prescribed manner incapacitated
3. From the person who is on a business or personal depending on the recipient
4. **-All the answers are correct**

31. The main problem of transplantation of organs and tissues at the present time:

1. **-Graft rejection**
2. Shortage of donors
3. Operating surgical technique
4. Lack of adequate legislation

32. Currently, the main method of allografts preservation is:

1. Biological perfusion
2. The method of deep freezing (cryopreservation)
3. **-Method of pharmacological cold preservation without perfusion**
4. Hypothermic perfusion

33. Which of the following drugs can be used for posttransplant immunosuppression?

1. Cyclosporine A
2. Sandimmune
3. Azathioprine
4. Imuran
5. **-All the answers are correct**

34. In acute rejection in heart transplant, the introduction metilprednizolone dose to

1. 5-10 mg
2. 50-100 mg
3. 200-300 mg
4. **-500-1000 mg**

35. Heart transplantation is carried out using the following surgical approach:

1. **-Median sternotomy**
2. Left- thoracotomy
3. Median sternotomy with resection of the sternum
4. Total Shore's access
5. All the answers are correct

36. Preservative compounds Collins, Ross-Marshall, a solution of the University of Wisconsin, Stanford

University, etc., similar in composition to:

1. -Solutions such as intracellular fluid

2. Solutions such as extracellular fluid

3. Alcohol-containing solutions

4. All the answers are correct

1. High-strength stainless steel

2. Metal alloys of cobalt, chromium, molybdenum

3. Ceramics and plastics

4. Silicone rubbers and wax-like plastics

5. -All the answers are correct

37. Absolute contraindications for heart transplantation are:

1. Severe Pulmonary Hypertension

2. Infectious disease

3. Malignancy

4. -All the answers are correct

38. Limited indication for allotransplantation of the spleen is

1. Spleen tumor

2. Cysts of the spleen

3. -Severe form of hemophilia A

4. Infectious diseases

5. Severe forms of connective tissue disorders

39. Transplantation and cell therapy can have certain advantages over organ transplantation due to:

1. Cell culture is the unique model of the whole organ

2. Cultivation implanted cells reduces their antigenicity

3. It is possible to place the culture of cells in biological capsule

4. -All the answers are correct

40. Mechanical organs and prostheses for implantation in the human body can be made of:

Surgery

Tests for the 5th year students of the Faculty of
Foreign Students

Authors: Batvinkov Nikolai Ivanovich
Vasilevsky Vladimir Petrovich
Maslakova Natalya Dmitrievna
Mozheiko Mickhail Aleksandrovich
Mogilevec Eduard Vladislavovich

Responsible for edition:

Computer make-up:
Proof-reader: