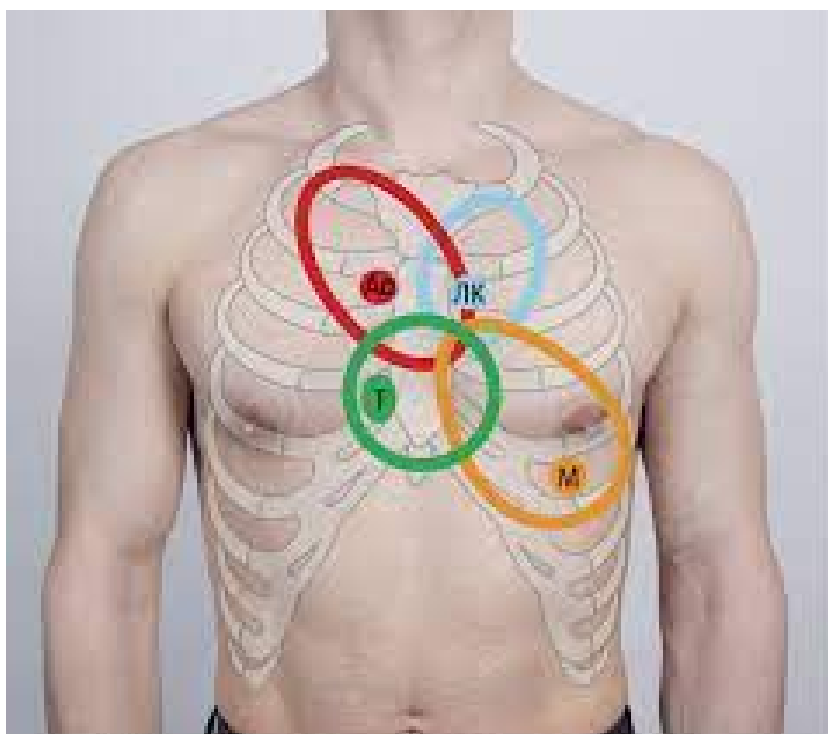


MINISTRY OF HEALTH OF UKRAINE
ZAPORIZHZHIA STATE MEDICAL AND PHARMACEUTICAL UNIVERSITY
DEPARTMENT OF GENERAL PRACTICE – FAMILY MEDICINE
AND INTERNAL DISEASES

PROPEDEUTICS OF INTERNAL MEDICINE

TESTS
for II year students
speciality 221 «Dentistry»



Zaporizhzhia
2023

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Tests compiled in accordance with the program of « Propedeutics of internal medicine ». Guidelines are intended to help students prepare for practical classes and learn the material. Can be used for training of 2nd years students of international faculty, speciality 221 «Dentistry».

Збірник тестових завдань складений відповідно до програми «Пропедевтика внутрішньої медицини». Видання має на меті сприяти кращому засвоєнню теоретичних знань студентами під час підготовки до практичних занять. Збірник рекомендований для використання студентами II курсу міжнародного факультету, спеціальність «Стоматологія».

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PREFACE

Propaedeutics of Internal Medicine is an introductory course of internal medicine. During their first years medical students study the main methods of examination, symptoms of internal diseases, and principles of their diagnosis.

The tests for II year students of international faculty for the universities of III-IV accreditation level was made in the absence of such publications in Ukraine and urgent need in high level preparation of future dentists on the undergraduate stage in terms of health care reform.

The tests for the final control of students' knowledge is compiled in accordance with the program of educational discipline "Propaedeutics of Internal Medicine ". The work includes tests on Introduction in the clinic of internal diseases, main rules of the interview and examination of patients, the scheme and the basic methods of the examination of patients, their general inspection, the inspection of separate parts of a body, basic symptoms and syndromes of cardiovascular diseases, main diagnostic methods of the examination of the digestive system, changes in the oral cavity, the principles of the emergency, etc.

The publication aims to facilitate the better acquisition of theoretical knowledge by the students of the II course of the international faculty during the preparation for the final control.

The cover image was downloaded from website: [https://empendium.com/ua/chapter/B27.I.1.40](https://empendium.com.ua/chapter/B27.I.1.40).

The tests is designed for the students of the II course of the international faculty, interns, as well as teachers involved in the preparation of future dentists. These tests are being published for the first time.

TOPIC 1

INTRODUCTION IN THE CLINIC OF INTERNAL DISEASES. MAIN RULES OF THE INTERVIEW AND EXAMINATION OF PATIENTS. THE BASIC METHODS OF THE EXAMINATION OF PATIENTS. THE SCHEME OF THE EXAMINATION OF PATIENTS. THE GENERAL INSPECTION OF THE PATIENT. THE INSPECTION OF SEPARATE PARTS OF A BODY

1. To which section of the case history is the complaint of dyspnea entered:
 - A. Present complaints
 - B. Details of the complaints
 - C. Questioning about the organs and systems
 - D. Anamnesis morbi
 - E. Anamnesis vitae

2. Inheritance linked to the gender is characteristic:
 - A. Ulcer disease
 - B. Hypertension disease
 - C. Diabetes mellitus
 - D. Hemophilia
 - E. Bronchial asthma

3. Previous diseases are described in the following section:
 - A. Anamnesis vitae
 - B. Passport part
 - C. Questioning about organs and the systems
 - D. Present complaints
 - E. Anamnesis morbi

4. Which section of the case history is called medical biography:
 - A. Present complaints
 - B. Passport part
 - C. Anamnesis vitae
 - D. Anamnesis morbi
 - E. Asking about the organs and systems

5. A 28-year-old patient complains of a pronounced productive cough, weakness, perspiration, fatigue, loss of appetite. His main complaint is:
 - A. Weakness
 - B. Fatigue
 - C. Loss of appetite
 - D. Perspiration
 - E. Productive cough

6. To which section is the complaint of weight loss entered?
 - A. Asking about general condition
 - B. Present complaints
 - C. Anamnesis vitae
 - D. Anamnesis morbi
 - E. Asking about organs and systems

7. A detailed description of the complaints is entered to the following section:

- A. Asking about organs and systems
- B. Present complaints
- C. Anamnesis morbi
- D. Anamnesis vitae
- E. Passport part

8. Asking about the systems is started from:

- A. The system the patient complains on
- B. Nervous system
- C. Cardiovascular system
- D. Genitourinary system
- E. Respiratory system

9. In which section of the case history are unhealthy habits described?

- A. Present complaints
- B. Anamnesis morbi
- C. Anamnesis vitae
- D. Asking about organs and systems
- E. Asking about general condition

10. History taking is:

- A. Subjective method
- B. Objective method
- C. Additional method
- D. Laboratory method

E. Instrumental method

11. The patient aged 41 have suddenly fallen ill after cold. He complains of cough with sputum discharge, pain in the chest, weakness, and elevated body temperature (39⁰C), loss of appetite. Fatigue, perspiration. Right-sided pleuropneumonia was diagnosed. What are his main complaints:

- A. Cough with sputum discharge, pain in the chest
- B. weakness
- C. perspiration
- D. perspiration
- E. loss of appetite

12. A patient aged 50 has 8-year history of bronchial asthma. He was admitted with complains on attacks of shortness of breath with expiratory dyspnea twice a day, perspiration, pain in the chest, perspiration, fatigue. Which complaints are secondary?

- A. Shortness of breath
- B. Expiratory dyspnea
- C. Headache
- D. Pain in the chest
- E. Fatigue

13. When investigating secondary complains of a 39-year old patient the physician revealed complaints of insomnia, decreased

memory, headache. Which system is involved?

- A. Respiratory
- B. Nervous
- C. Cardiovascular
- D. Digestive
- E. Urinary

14. A 20-year old patient developed edema of the face, pain in the lumbar area 3 days after tonsillitis. Changes in the urine were revealed. Which system can be involved?

- A. Nervous
- B. Respiratory
- C. Cardiovascular
- D. Genitourinary
- E. Digestive

15. A 53-year-old patient with a 10-year history of hypertension complains on headache, pain in the heart. His father and grandfather on the father's side also have hypertension disease. Which section of the case history are the type of inheritance and pedigree entered to?

- A. Anamnesis vitae
- B. Present complaints
- C. Asking about organs and systems
- D. Anamnesis vitae
- E. Passport part

16. A 73-year-old patient with a 10-year history of coronary artery disease

complains of pain in the precordial area, dyspnea. Which type of dyspnea is typical for heart diseases?

- A. Expiratory
- B. Inspiratory
- C. Mixed
- D. Dyspnea of effort
- E. Fit-like dyspnea

17. A 48-year-old patient with diabetes mellitus complains of itching, dryness in the mouth, increased appetite, polyuria, weakness. Which is a secondary complaint?

- A. Itching
- B. Dryness in the mouth
- C. Increased appetite
- D. Weakness
- E. Polyuria

18. The father of the 48-year-old patient with hemophilia is also ill with hemophilia. What is the type of inheritance?

- A. Inheritance linked to the sex chromosome
- B. Autosomal-recessive
- C. Autosomal dominant
- D. Genetic mutations
- E. Polygenic type

19. Which method aid in specifying the role of inheritance in forming the

pathology when questioning the patient with an inherited disease?

- A. Genealogical
- B. Subjective
- C. Objective
- D. Subjective and objective
- E. Specific methods are absent

20. A 64-year-old patient developed a severe retrosternal pain, weakness, nausea, dyspnea, anxiety after an emotional stress. A diagnosis of acute myocardial infarction was made. What is the main complaint of the patient?

- A. Retrosternal pain
- B. Nausea
- C. Dyspnea
- D. Weakness
- E. Anxiety

21. Which forced posture of the patient is typical in peritonitis:

- A. Lying with the face up
- B. Lying with the face down
- C. Sitting posture
- D. Knee-elbow posture
- E. On one side

22. Which forced posture of the patient is typical in dry pleurisy:

- A. On healthy side
- B. On affected side
- C. Lying with the face up
- D. Lying with the face down

E. Sitting posture

23. Forced posture of the patient on affected side is typical in:

- A. Bronchial asthma
- B. Peritonitis
- C. Ribs fracture
- D. Pulmonary abscess
- E. Liver cirrhosis

24. The patient is sitting in bed with his hand supporting the edge of the bed, the legs are lowered down. This is typical for:

- A. Attack of bronchial asthma
- B. Heart failure
- C. Gastric ulcer
- D. Cholecystitis
- E. Appendicitis

25. The patient is sitting in bed thrown back with his legs lowered down. This is typical for:

- A. Attack of bronchial asthma
- B. Heart failure
- C. Angina attack
- D. Appendicitis
- E. Cholecystitis

26. The patient is in bed with his head thrown back and the legs pressed against the abdomen. This is the sign of:

- A. Cranial injury
- B. Appendicitis

- C. Meningitis
- D. Cholecystitis
- E. Ulcer disease

27. The patient's position is forced, he is in knee-elbow position. This is the sign of:

- A. Bronchial asthma attack
- B. Gastric ulcer
- C. Attack of renal colic
- D. Attack of cardiac asthma
- E. Cholecystitis

28. Which face is observed in the patients with heart failure:

- A. Facies Hippocratica
- B. Facies Corvisart's
- C. Facies leontina
- D. Facies mitrale

- E. Facies basedovica

29. Which face is observed in the patients with thyrotoxicosis:

- A. Facies Hippocratica
- B. Facies Corvisart's
- C. Facies leontina
- D. Facies mitrale
- E. Facies basedovica

30. Which face is observed in the patients with peritonitis:

- A. Facies Hippocratica
- B. Facies Corvisart's
- C. Facies leontina
- D. Facies mitrale
- E. Facies basedovica

TOPIC 2

PHYSICAL AND INSTRUMENTAL METHODS OF EXAMINATION OF THE BRONCHO-PULMONARY SYSTEM. THE INTERVIEW AND THE GENERAL EXAMINATION OF PATIENTS WITH THE RESPIRATORY SYSTEM PATHOLOGY. THE BRONCHOOBSTRUCTIVE SYNDROME. THE ANALYSIS OF THE RESPIRATORY FUNCTION. CHANGES IN THE ORAL CAVITY IN PATIENTS WITH BRONCHO-OBSTRUCTIVE SYNDROME

1. Paralytic chest shape is observed in:
 - A. Acute bronchitis
 - B. Pneumonia
 - C. Bronchopneumonia
 - D. Lungs tumor
 - E. Exudation pleurisy
2. A Boat-shaped chest is observed in:
 - A. rachitis
 - B. scoliosis
 - C. syringomyelia
 - D. tuberculosis
 - E. bronchitis
3. Barrel-shaped chest is typical for:
 - A. pulmonary tuberculosis
 - B. emphysema of the lungs
 - C. exudation pleurisy
 - D. pneumothorax
 - E. acute bronchitis
4. Enlargement of one part of the chest is observed in:
 - A. hydrothorax
 - B. pneumosclerosis
 - C. obstructive atelectasis of the lung
 - D. bronchopneumonia
 - E. bronchitis
5. Diminished one part of the chest is observed in:
 - A. Exudation pleurisy
 - B. pneumothorax
 - C. bronchopneumonia
 - D. pneumosclerosis
 - E. pulmonary emphysema
6. Kussmaul respiration is observed in:
 - A. diabetic coma
 - B. stroke
 - C. heart failure
 - D. lung failure
 - E. pulmonary tuberculosis
7. Lateral curvature of the spine is observed in:
 - A. lordosis
 - B. scoliosis
 - C. kyphosis

- D. rachitis
- E. kyphoscoliosis

8. Cheyne-Stocks respiration is typical for:

- A. acute insufficiency of the brain circulation
- B. pulmonary emphysema
- C. pneumothorax
- D. bronchial asthma
- E. hydrothorax

9. Increased voice resonance is observed in:

- A. hydrothorax
- B. compression atelectasis
- C. pulmonary emphysema
- D. pneumothorax
- E. pneumothorax

10. Decreased voice resonance is observed in

- A. hydrothorax
- B. exudation pleurisy
- C. pulmonary emphysema
- D. pneumothorax
- E. Acute pneumothorax

11. The patient has an attack of dyspnea. His position is forced; he is sitting resting his hands on the edge of the bed. The voice resonance over the lungs is weak. What diagnosis can be supposed?

- A. Pulmonary emphysema
- B. Bronchial asthma
- C. Kussmaul respiration

- D. atelectasis
- E. Cheyne-Stokes respiration

12. The examination has revealed delay in the act of respiration of the right part of the thorax. What diagnosis can be supposed?

- A. pneumothorax
- B. hydrothorax
- C. pulmonary emphysema
- D. obturation atelectasis
- E. pneumonia

13. The right part of the thorax is protruding, delays in the act of respiration, the voice resonance is not observed. The respiration is superficial. The respiratory rate is 32 per min. What diagnosis can be supposed?

- A. Pneumonia
- B. Hydrothorax, pneumothorax
- C. Pulmonary emphysema
- D. atelectasis
- E. bronchial asthma

14. The chest is asymmetrical, its right half protrudes. The voice resonance downward the middle of the scapula is weak. What diagnosis can be supposed?

- A. Hydrothorax, pneumothorax
- B. Pulmonary emphysema
- C. atelectasis
- D. pneumonia
- E. cavity in the lung

15. The chest is ball-shaped. The ratio of anterior-posterior size to transverse size is 8.0. The area of the costal cartilages is thickened. What diagnosis can be supposed?
- Asthenic chest
 - Rachitic chest
 - Hypersthenic chest
 - Emphysema chest
 - Paralytic chest
16. The right part of the thorax protrudes, delays in the act of respiration, the voice resonance is not heard. The respiration is superficial, 32 per min. What diagnosis can be supposed?
- Hydrothorax, pneumothorax
 - Pulmonary emphysema
 - Pneumonia
 - Atelectasis
 - Cavity in the lung
17. Respiratory movements are interrupted with pauses lasting up to 30 seconds. What diagnosis can be supposed?
- Biots respiration
 - Cheyne-Stocks respiration
 - Bronchial asthma
 - pneumothorax
 - Kussmaul respiration
18. The left part of the thorax delays in the act of respiration, the voice resonance is increased along the paravertebral, scapular, posterior-, mid-, and anterior axillary lines downwards the fifth interspace. What diagnosis can be supposed?
- atelectasis
 - hydrothorax
 - pneumothorax
 - Cavity in the lung
19. The patient has dyspnea and cyanosis. The right half of the chest protrudes, delays in the act of respiration. The voice resonance is decreased downward the middle of the scapula. What diagnosis can be supposed?
- Hydrothorax, pneumothorax
 - Cavity in the lung
 - Pulmonary emphysema
 - Atelectasis
 - Pneumonia
20. How do the physical properties of the lung tissue at dull sound?
- Increase of air content
 - Increase of density
 - Reduction of air content
 - Reduction of density
21. How do the physical properties of the lung tissue at tympanic sound?
- Increase of air content
 - Reduction of air content
 - Increase of density
 - Reduction of density

22. There is dullness over the chest on the left along the scapular and posterior axillary lines from the 8th to the 10th interspace. What diagnosis can be supposed?
- Pneumonia
 - Lung congestion
 - Lung infarction
 - Exudation pleurisy
 - Pulmonary emphysema
23. There is dullness over the chest on the left of posterior lateral portions from the 10th to the 11th interspace. What diagnosis can be supposed?
- Pneumonia
 - Lung infarction
 - Lung congestion
 - Exudation pleurisy
 - Obstructive atelectasis
24. There is dullness over the chest beginning from the 5th rib along the posterior axillary line, from the 8th rib along the paravertebral line, from the 7th rib along midaxillary line to the lower border of the lungs. What diagnosis can be supposed?
- Pneumonia
 - Lung infarction
 - Lung cornification
 - Exudation pleurisy
 - Congestion in the lungs
25. There is dull tympanic sound over the chest on the left along the posterior and midaxillary line from the 7th to the 9th interspace. What diagnosis can be supposed?
- Pneumonia
 - Pulmonary emphysema
 - Cavity in the lungs
 - Incomplete obstructive atelectasis
 - Exudation pleurisy
26. There is bandbox sound along the anterior surface of the chest. What diagnosis can be supposed?
- Cavity in the lungs
 - Pneumothorax
 - Lung emphysema
 - Incomplete obstructive atelectasis of the lungs
 - Exudation pleurisy
27. There is tympanic sound from the 2nd rib to the lower border of the lungs on the right side of the chest. What diagnosis can be supposed?
- Pulmonary emphysema
 - Cavity in the lungs
 - Pneumothorax
 - Incomplete obstructive atelectasis
 - Exudation pleurisy
28. There is tympanic sound from the 7th to the 9th interspace in the left axillary

area, the sound is dull under this area. What diagnosis can be supposed?

- A. Pneumonia
- B. Pulmonary emphysema
- C. Pyopneumothorax
- D. Pneumothorax
- E. Exudation pleurisy

29. There is tympanic sound on the right along the parasternal and midaxillary areas from the 2nd to the 4th ribs. What diagnosis can be supposed?

- A. Pneumothorax
- B. Cavity in the lungs
- C. Pulmonary emphysema
- D. Pneumonia
- E. Exudation pleurisy

30. Which respiratory sounds are the main:

- A. Harsh respiration
- B. Dry rales
- C. Crepitation
- D. Moist rales
- E. Pleural friction sound

31. Indicate the site of vesicular breathing origination:

- A. Main bronchus
- B. Vocal slit
- C. Bronchioles
- D. Alveoli
- E. Pleural cavity

32. Harsh respiration is heard in:

- A. Dry pleurisy
- B. Pulmonary tuberculosis
- C. Lung tumor
- D. Acute pneumonia
- E. Bronchial asthma

33. Indicate the site of dry rales origination:

- A. Bronchus
- B. Vocal slit
- C. Cavity in the lung
- D. Alveoli
- E. Pleural cavity

34. Moist rales (crackles) are heard in patients with:

- A. Acute lobar pneumonia (initial stage)
- B. Acute lobar pneumonia (consolidation stage)
- C. Bronchial asthma
- D. Pulmonary edema
- E. Effusive pleurisy

35. Crepitation is heard in the patients with:

- A. Bronchial asthma
- B. Acute bronchitis
- C. Chronic bronchitis
- D. Acute lobar pneumonia (consolidation stage)
- E. Acute lobar pneumonia (initial stage)

36. Pleural friction sound is heard in patients with:

- A. Dry pleurisy

- B. Acute bronchitis
- C. Acute lobar pneumonia (initial stage)
- D. Bronchial asthma
- E. Pulmonary emphysema

37. In the right subscapular and axillary area the voice resonance is increased, the percussion sound is dull, there is bronchial respiration. What diagnosis can be suggested?

- A. Bronchitis
- B. Exudation pleurisy
- C. Bronchial asthma
- D. Pulmonary emphysema
- E. Acute lobar pneumonia (consolidation stage)

38. Voice resonance is weak over the lungs, band-box sound in percussion, decreased vesicular respiration. What diagnosis can be suggested?

- A. Exudation pleurisy
- B. Bronchitis
- C. Pneumonia
- D. Pulmonary emphysema
- E. Lung cancer

39. The patient has a constant fever. On the left side along all lines from the 4th interspace downward all lines there is intermediate percussion sound, decreased vesicular respiration. What diagnosis can be suggested?

- A. Initial stage of lobar pneumonia
- B. Exudation pleurisy
- C. Lung cancer
- D. Bronchitis
- E. Pulmonary emphysema

40. On the right over the lungs there is weak voice resonance, tympanic percussion sound, the respiration is not heard. What diagnosis can be suggested?

- A. Pulmonary emphysema
- B. Pneumothorax
- C. Bronchial asthma
- D. Obstructive bronchitis
- E. Exudation pleurisy

41. There is clear percussion sound and harsh respiration over the lungs is heard. What diagnosis can be suggested?

- A. Bronchial asthma
- B. Pulmonary emphysema
- C. Bronchitis
- D. Pneumonia
- E. Lung cancer

42. The patient's chest is barrel-shaped, band-box percussion sound and decreased vesicular respiration is heard. What diagnosis can be suggested?

- A. Acute lobar pneumonia (initial stage)
- B. Acute lobar pneumonia (resolution stage)

- C. Bronchitis
- D. Pulmonary emphysema
- E. Obstructive bronchitis

43. On the left over the chest there is dull percussion sound along the midaxillary line from the 4th interspace, along the scapular line from the 6th interspace along the vertebral line from the 7th interspace downwards. It transforms to dullness, over the area of dullness the respiration is not heard.

What

diagnosis can be suggested?

- A. Lung carnification
- B. Pneumonia
- C. Lung abscess
- D. Lung cancer
- E. Exudation pleurisy

44. The patient complains of absence of appetite, loss of weight. The body temperature is subfebrile. In the right subclavicular area there is tympanic sound

and amphoric respiration. What diagnosis can be suggested?

- A. Pneumonia
- B. Cavity
- C. Bronchial asthma
- D. Lung cancer
- E. Exudation pleurisy

45. The right hemithorax delays in respiration: on breathing in the right subclavicular area there is

tympanic sound and amphoric respiration. What diagnosis can be suggested?

- A. Bronchitis
- B. Exudation pleurisy
- C. Pneumothorax
- D. Pulmonary emphysema
- E. Cavity in the lung

46. The patient's chest is normosthenic. The respiratory motions are symmetrical. The voice resonance is unchanged. The percussion sound is respiratory. The respiration is rough. What diagnosis can be suggested?

- A. Bronchitis
- B. Bronchial asthma
- C. Pneumonia
- D. Lung cancer
- E. Lung abscess

47. The patient's position is forced, he is sitting resting his hands against the edge of the chair. There are numerous whistling rales against vesiculytympanic resonance and weak vesicular respiration all over the lungs. What diagnosis can be supposed?

- A. Lung cancer
- B. Bronchitis
- C. Pulmonary emphysema
- D. Bronchial asthma
- E. Lung abscess

48. In the right subscapular area from the 7th to the 10th ribs there is dull percussion sound, bronchial respiration. What diagnosis can be supposed?

- A. Height of lobar pneumonia
- B. Lung cancer
- C. Lung abscess
- D. Pneumosclerosis
- E. Exudation pleurisy

49. Solitary coarse moist rales are heard over the left apex of the lung against a background of tympanic sound and amphoric respiration. What diagnosis can be supposed?

- A. Bronchial asthma
- B. Lung cancer
- C. Pneumonia
- D. Bronchitis
- E. Cavity in the lung

50. The patient complains of pain in the left hemithorax, which becomes worse on breathing in. Lung sound is heard on percussion of the chest. Auscultation demonstrates weak vesicular respiration, pleura friction rub in the left axillary area. What diagnosis can be supposed?

- A. Pneumothorax
- B. Exudation pleurisy
- C. Pleuropneumonia
- D. Dry pleurisy
- E. Lung emphysema

51. Dull tympanic sound, weak vesicular respiration and crepitation are heard over the left hemithorax at the level of 4th-10th interspace. What diagnosis can be supposed?

- A. Lung abscess
- B. Focal pneumonia
- C. Initial stage of lobar pneumonia
- D. Lung edema
- E. Pneumothorax

52. The patient complains of dyspnea on moderate exercise. Acrocyanosis. The ratio of anteroposterior to transverse size of the chest is 0.92; the voice resonance is weak; the chest is rigid. The resonance is vesiculotympanic, the respiration is weak vesicular. ERF investigation demonstrates a "shark's tooth" curve and abrupt reduction of the ERF parameters. What diagnosis can be supposed?

- A. Emphysema
- B. Chronic obstructive lung disease
- C. Bronchial asthma
- D. Lung cancer
- E. Pneumonia

53. The patient complains of attacks of difficult breathing especially on breathing out, morning cough with some mucous sputum. Microscopy of the sputum demonstrates bronchial epithelium,

eosinophils, and Charcot-Leiden crystals. What diagnosis can be supposed?

- A. Emphysema
- B. Chronic obstructive lung disease.
- C. Bronchial asthma
- D. Lung cancer
- E. Pneumonia

54. A smoker complains of cough with moderate sputum discharge. The sound over the lungs is clear, rigid, vesicular. The rales are disseminated buzzing. Investigation of the sputum demonstrates bronchial epithelium separately and in aggregates, leukocytes in moderate amounts, Churchman's spirals. X-ray demonstrates increased lung picture. Fibrobronchoscopy shows hyperemia and edema of the bronchial mucosa. ERF has not reveal any ventilation abnormality. What diagnosis can be supposed?

- A. Emphysema
- B. Chronic obstructive lung disease.
- C. Bronchial asthma
- D. Lung cancer

E. Pneumonia

55. The patient has tympanic sound on the left of the 2nd and 3rd interspace. X-ray demonstrate a cavity with horizontal fluid level. Laboratory study demonstrates elastic fibers in the sputum. What diagnosis can be suggested?

- A. Lung cancer
- B. Bronchial asthma
- C. Pneumonia
- D. Chronic bronchitis
- E. Lung abscess

56. The patient with chronic obstructive lung disease has dyspnea at rest, acrocyanosis. RR at rest is 28/min. Computer spirometry demonstrates considerably pronounced disorders of a mixed type (vital lung capacity 55%, forced expiration volume 1 50%, Tiffno's index 60%). What diagnosis can be supposed?

- A. Stage 1 respiratory failure
- B. Stage 2 respiratory failure
- C. Stage 3 respiratory failure
- D. Pulmonary emphysema
- E. Pneumosclerosis

TOPIC 3

PHYSICAL AND INSTRUMENTAL METHODS OF THE EXAMINATION OF THE CARDIOVASCULAR SYSTEM. THE INTERVIEW AND THE GENERAL EXAMINATION OF THE PATIENT WITH THE DISORDER OF THE CARDIOVASCULAR SYSTEM. PHYSICAL METHODS OF THE EXAMINATION. LABORATORY AND INSTRUMENTAL TESTS IN CARDIOLOGY AND RHEUMATOLOGY

1. Which color of the skin is typical in the patients with aortic regurgitation?
 - A. Pale
 - B. Peripheral cyanosis
 - C. Jaundice
 - D. Diffuse cyanosis
 - E. Purple
2. Edema of the feet, more pronounced in the evening, acrocyanosis, cold skin over edema are typical in:
 - A. Pericarditis
 - B. Glomerulonephritis
 - C. Heart failure
 - D. Liver cirrhosis
 - E. Thyrotoxicosis
3. Cardiac hump is observed in:
 - A. Mitral heart valvular disease that arises in 30 years old patient
 - B. Aortic aneurism
 - C. Congenital heart disease
 - D. Pericarditis with effusion
 - E. Hydrothorax
4. Which heart chamber takes part in the cardiac beat formation?
 - A. Left ventricle
 - B. Right ventricle
 - C. Left atrium
 - D. Right atrium
 - E. Left atrium and left ventricle
5. Which color of the skin is typical in the patients with mitral stenosis?
 - A. Pale
 - B. Peripheral cyanosis
 - C. Jaundice
 - D. Diffuse cyanosis
 - E. Purple
6. In which pathology protrusion of the heart region, leveling of the intercostals spaces are observed in inspection?
 - A. Mitral stenosis
 - B. Pericarditis with effusion
 - C. Aortic aneurism
 - D. Pulmonary artery stenosis
 - E. Tricuspid regurgitation

7. In which pathology apex beat is impalpable?
- A. Right-sided pleurisy with effusion
 - B. Right-sided lobar pneumonia
 - C. Left-sided lobar pneumonia
 - D. Left-sided pleurisy with effusion
 - E. Right-sided spontaneous pneumothorax
8. Which color of the skin is typical in the patients with aortic stenosis?
- A. Pale
 - B. Peripheral cyanosis
 - C. Jaundice
 - D. Diffuse cyanosis
 - E. Purple
9. Edema of the lower limbs, more pronounced in the evening is typical in:
- A. Pericarditis
 - B. Glomerulonephritis
 - C. Heart failure
 - D. Liver cirrhosis
 - E. Thyrotoxicosis
10. In which pathology pulsation in the jugular fossae is observed?
- A. Mitral regurgitation
 - B. Mitral stenosis
 - C. Pericarditis with effusion
 - D. Myocarditis
 - E. Aortic arch aneurism
11. In which pathology apex beat is displaced to the left?
- A. Aortic stenosis
 - B. Tricuspid regurgitation
 - C. Mitral stenosis
 - D. Dry pericarditis
 - E. Left-sided pleurisy with effusion
12. Which color of the skin is typical to the patients with cardiogenic shock?
- A. Pale
 - B. Peripheral cyanosis
 - C. Jaundice
 - D. Diffuse cyanosis
 - E. Purple
13. Which color of the skin is typical in the patients with infectious endocarditis?
- A. Pale with yellowish tint
 - B. Peripheral cyanosis
 - C. Jaundice
 - D. Diffuse cyanosis
 - E. Coffee with milk
14. In which pathology pulsation and protrusion in the second intercostals space to the left of the sternum can observed?
- A. Aortic stenosis
 - B. Combined aortic defect
 - C. Tricuspid regurgitation
 - D. Aortic regurgitation

- E. Pulmonary hypertension in mitral valve defects
15. In which pathology carotid arteries pulsation is observed?
- Mitral stenosis
 - Aortic stenosis
 - Tricuspid regurgitation
 - Aortic regurgitation
 - Mitral regurgitation
16. In which cardiac disease diffuse cyanosis can be observed?
- Essential hypertension
 - Aortic stenosis
 - Congenital heart diseases
 - Mitral regurgitation
 - Mitral stenosis
17. In which acute condition forced sitting posture, dyspnoea, diffuse cyanosis, hemoptysis are typical?
- Loss of consciousness
 - Pulmonary artery thromboembolism
 - Pericarditis with effusion
 - Cardiogenic shock
 - Edema of the lungs
18. In which pathology protrusion and pulsation in the second intercostals space to the right of the sternum is observed?
- Aortic stenosis
 - Mitral stenosis
 - Aortic aneurism
 - Pericarditis with effusion
 - Myocarditis
19. In which pathology apex beat is displaced to the left and downward?
- Aortic stenosis
 - Tricuspid regurgitation
 - Mitral stenosis
 - Aortic regurgitation
 - Myocarditis
20. In which pathology protrusion and pulsation in the third-fourth intercostals spaces to the right of the sternum can be observed?
- Mitral regurgitation
 - Aneurism of the anterior wall of the left ventricle
 - Mitral stenosis
 - Aortic stenosis
 - Essential hypertension
21. Right border of the relative cardiac dullness is formed by:
- Right atrium
 - Left atrium
 - Right ventricle
 - Left ventricle
 - Aorta
22. Right contour of the heart and vessels is formed by:

- A. Vena cava superior and right atrium
 B. Right ventricle and aorta
 C. Left ventricle and aorta
 D. Left ventricle and pulmonary artery
 E. Right atrium and pulmonary artery
23. Left contour of the heart and vessels is formed by:
 A. Vena cava superior, right atrium, right ventricle
 B. Aortic arch, pulmonary trunk, left ventricle, left atrium
 C. Pulmonary trunk, left ventricle, left atrium
 D. Left ventricle, left atrium
 E. Vena cava superior, left atrium, left ventricle
24. Upper border of the relative cardiac dullness is formed by:
 A. Right ventricle
 B. Pulmonary artery
 C. Vena cava
 D. Left atrium
 E. Right atrium
25. Left border of the relative cardiac dullness is formed by:
 A. Left atrium
 B. Right atrium
 C. Left ventricle
 D. Pulmonary artery
 E. Aorta
26. What is the cause of outward displacement of the right border of the relative cardiac dullness?
 A. Coronary heart disease
 B. Mitral stenosis
 C. Aortic stenosis
 D. Aortic regurgitation
 E. Essential hypertension
27. In mitral stenosis, outward displacement of ... is observed:
 A. Upper border of the relative cardiac dullness
 B. Upper and right borders of the relative cardiac dullness
 C. Left and right borders of the relative cardiac dullness
 D. Upper, Left and right borders of the relative cardiac dullness
 E. Right border of the relative cardiac dullness
28. In mitral regurgitation, outward displacement of ... is observed:
 A. Upper border of the relative cardiac dullness
 B. Upper and right borders of the relative cardiac dullness
 C. Left and right borders of the relative cardiac dullness

- D. Upper and left borders of the relative cardiac dullness
- E. Right border of the relative cardiac dullness
29. In aortic stenosis, outward displacement of ... is observed:
- A. Left border of the relative cardiac dullness
- B. Upper and right borders of the relative cardiac dullness
- C. Left and right borders of the relative cardiac dullness
- D. Upper, Left, and right borders of the relative cardiac dullness
- E. Right border of the relative cardiac dullness
30. Absolute cardiac dullness is formed by:
- A. Left atrium
- B. Right atrium
- C. Left ventricle
- D. Right ventricle
- E. Aorta
31. In which pathology decreased first sound at the heart apex is observed?
- A. Pulmonary artery regurgitation
- B. Aortic stenosis
- C. Mitral stenosis
- D. Tricuspid regurgitation
- E. Tricuspid stenosis
32. In which listening point the second sound is louder than the first?
- A. 5th intercostal space on the left midclavicular line
- B. 2nd intercostal space to the right of the sternum
- C. In the Botkin-Erb's point
- D. On the base of the sternum
- E. 3rd intercostal space to the right of the sternum
33. In which pathology triple rhythm is auscultated?
- A. Aortic stenosis
- B. Mitral regurgitation
- C. Aortic regurgitation
- D. Mitral stenosis
- E. Pulmonary artery stenosis
34. Which factors define the loudness of the second heart sound?
- A. Condition of the right atrial myocardium
- B. Condition of the left atrial myocardium
- C. Pressure in the pulmonary artery
- D. Condition of the mitral valve
- E. Condition of the tricuspid valve
35. In which pathology increased first sound at the heart apex is observed?
- A. Mitral valve regurgitation

- B. Aortic stenosis
 C. Mitral stenosis
 D. Tricuspid stenosis
 E. Pulmonary artery regurgitation
36. What is the character of the first sound in the triple rhythm?
 A. Increased in the Botkin-Erb's point
 B. Increased at the heart apex
 C. Decreased at the heart apex
 D. Increased over aorta
 E. Decreased over pulmonary artery
37. Which factors define loudness of the first heart sound?
 A. Condition of the left ventricular myocardium
 B. Pressure in the pulmonary artery
 C. Condition of the pulmonary artery valve
 D. Pressure in the aorta
 E. Condition of the aortic valves
38. In which pathology decreased second sound over aorta is observed?
 A. Mitral regurgitation
 B. Mitral stenosis
 C. Atherosclerosis of the aorta
 D. Aortic regurgitation
 E. Essential hypertension
39. In which heart valvular disease systolic murmur in the second intercostal space to the right of the sternum is heard?
 A. Mitral stenosis
 B. Mitral regurgitation
 C. Aortic stenosis
 D. Aortic regurgitation
 E. Tricuspid regurgitation
40. Which components take part in the formation of the second heart sound?
 A. Atrial component
 B. Tension and vibration of the mitral valve
 C. Vibration of the aortic wall
 D. Tension and vibration of the tricuspid valve
 E. Tension of the right ventricular myocardium
41. In which pathology accentuated second sound over aorta is observed?
 A. Mitral regurgitation
 B. Aortic regurgitation
 C. Mitral stenosis
 D. Atherosclerosis of the aorta
 E. Aortic stenosis
42. In which heart valvular disease systolic murmur is conducted by the blood flow onto the carotid arteries?
 A. Mitral stenosis
 B. Mitral regurgitation

- C. Aortic stenosis
D. Aortic regurgitation
E. Tricuspid regurgitation
43. In which pathology decreased first sound over heart apex and increased second over pulmonary artery are observed?
- A. Mitral stenosis
B. Mitral regurgitation
C. Tricuspid regurgitation
D. Tricuspid stenosis
E. Aortic stenosis
44. In which pathology decreased first sound on the base of the sternum is observed?
- A. Mitral regurgitation
B. Aortic regurgitation
C. Mitral stenosis
D. Tricuspid regurgitation
E. Aortic stenosis
45. What is listening point of murmur in mitral regurgitation?
- A. Heart apex
B. 2nd intercostal space to the right of the sternum
C. 2nd intercostal space to the left of the sternum
D. Base of the xiphoid process
E. Botkin-Erb's point
46. In which pathology accentuated second sound over pulmonary artery is observed?
- A. Mitral stenosis
B. Aortic stenosis
C. Aortic regurgitation
D. Pulmonary artery regurgitation
E. Tricuspid regurgitation
47. What is the listening point of the murmur in the mitral stenosis?
- A. 2nd intercostal space to the right of the sternum
B. 2nd intercostal space to the left of the sternum
C. Heart apex
D. Base of the xiphoid process
E. Botkin-Erb's point
48. Which component take part in the formation of the first heart sound?
- A. Closing and vibration of the aortic valve
B. Vibration of the aortic wall
C. Closing and vibration of the pulmonary artery valves
D. Vibration of the pulmonary artery wall
E. Tension and contraction of the left ventricular myocardium
49. In which pathology increased first sound at the heart apex and accentuated

second sound over pulmonary artery is observed?

- A. Mitral stenosis
- B. Pulmonary artery stenosis
- C. Mitral regurgitation
- D. Tricuspid regurgitation
- E. Aortic stenosis

50. What is the best listening point of the murmur in the aortic stenosis?

- A. Heart apex
- B. 2nd intercostal space to the right of the sternum
- C. 2nd intercostal space to the left of the sternum
- D. Base of the xiphoid process
- E. Botkin-Erb's point

51. What is it pulsus differens:

- A. Difference between pulse rate and heart rate
- B. Different pulse on both radial arteries
- C. Escape of the separate pulse waves
- D. Different volume of the pulse waves
- E. Alternation of large and small pulse waves

52. A normal resting pulse rate in adult is:

- A. 60-70 beats per minute
- B. 60-80 beats per minute

C. 50-80 beats per minute

D. 65-85 beats per minute

E. 55-85 beats per minute

53. What is it tachycardia:

- A. Large volume pulse
- B. Heart rate more than 80 beats per minute
- C. The full pulse – p. plenus
- D. Heart rate less than 60 beats per minute
- E. Heart rate more than 90 beats per minute

54. What is it bradycardia:

- A. Heart rate more than 80 beats per minute
- B. The full pulse – p. plenus
- C. Large volume pulse
- D. Heart rate less than 60 beats per minute
- E. Heart rate more than 90 beats per minute

55. What is it pulse deficit:

- A. Different pulse on both radial arteries
- B. Difference between pulse rate and heart rate
- C. Escape of the separate pulse waves
- D. Different volume of the pulse waves

- E. Alternation of large and small pulse waves
56. The pulse is firm (p. durus) in:
- Hypotension
 - Aortic stenosis
 - Hypertension
 - Bleeding
 - Collapse
57. A large volume pulse is found in:
- Aortic regurgitation
 - Collapse
 - Profuse vomiting
 - Profuse diarrhea
 - Aortic stenosis
58. Decreased volume pulse (p. vacuus) is found in:
- Reduced stroke volume due to heart failure
 - Fever
 - Anemia
 - Thyrotoxicosis
 - Aortic regurgitation
59. Thready pulse (p. filiformis) is found in:
- Anemia
 - Fever
 - Pregnancy
 - Shock
 - Aortic regurgitation
60. What is the name of device for blood pressure measurement:
- Pneumotachometer
 - Oscillometer
 - Phlebomanometer
 - Sphygmomanometer
 - Phonocardiograph
61. Optimal blood pressure is defined as:
- SBP 120-129 mmHg, DBP 80-84 mmHg
 - SBP \geq 180 mmHg, DBP \geq 110 mmHg
 - SBP $<$ 120 mmHg, DBP $<$ 80 mmHg
 - 140-159 mmHg, DBP 90-99 mmHg
 - 130-139 mmHg, DBP 80-85 mmHg
62. Normal blood pressure is defined as:
- SBP \geq 140 mmHg, DBP \geq 90 mmHg
 - SBP $<$ 120 mmHg, DBP $<$ 80 mmHg
 - SBP 130-139 mmHg, DBP 85-89 mmHg
 - SBP 160-179 mmHg, DBP 100-109 mmHg
 - SBP 120-129 mm Hg, DBP 80-84 mmHg

63. High normal blood pressure is defined as:
- A. SBP 130-139 mmHg, DBP 85-89 mmHg
 - B. SBP 120-129 mmHg, DBP 80-84 mmHg
 - C. SBP < 120 mmHg, DBP < 80 mmHg
 - D. SBP \geq 180 mmHg, DBP \geq 110 mmHg
 - E. SBP 140-159 mmHg, 90-99 mmHg
64. Hypertension in adults is defined as:
- A. SBP 130-139 mmHg, DBP 85-89 mmHg
 - B. SBP 140-159 mmHg, DBP 90-99 mmHg
 - C. SBP 160-179 mmHg, DBP 100-109 mmHg
 - D. SBP \geq 140 mmHg, DBP \geq 90 mmHg
 - E. SBP \geq 180 mmHg, DBP \geq 110 mmHg
65. Grade 1 hypertension is defined as:
- A. SBP \geq 180 mmHg, DBP \geq 110 mmHg
 - B. SBP 140-159 mmHg, DBP 90-99 mmHg
 - C. SBP 130-139 mmHg, DBP 85-89 mmHg
 - D. SBP 160-179 mmHg, DBP 100-109 mmHg
 - E. SBP \geq 140 mmHg, DBP < 90 mmHg
66. Grade 2 hypertension is defined as:
- A. SBP 140-159 mmHg, DBP 90-99 mmHg
 - B. SBP 130-139 mmHg, DBP 85-89 mmHg
 - C. SBP \geq 180 mmHg, DBP \geq 110 mmHg
 - D. SBP \geq 140 mmHg, DBP < 90 mmHg
 - E. SBP 160-179 mmHg, DBP 100-109 mmHg
67. Grade 3 hypertension is defined as:
- A. SBP \geq 180 mmHg, DBP \geq 110 mmHg
 - B. SBP 140-159 mmHg, DBP 90-99 mmHg
 - C. SBP 130-139 mmHg, DBP 85-89 mmHg
 - D. SBP 160-179 mmHg, DBP 100-109 mmHg
 - E. SBP \geq 140 mmHg, DBP < 90 mmHg
68. Isolated systolic hypertension is defined as:
- A. SBP 140-159 mmHg, DBP 90-99 mmHg

- B. SBP 130-139 mmHg, DBP 85-89 mmHg
- C. SBP 160-179 mmHg, DBP 100-109 mmHg
- D. SBP \geq 140 mmHg, DBP $<$ 90 mmHg
- E. SBP \geq 180 mmHg, DBP \geq 110 mmHg

69. Hypotension is defined as:

- A. SBP $<$ 120 mmHg, DBP $<$ 80 mmHg
- B. SBP $<$ 110 mmHg, DBP $<$ 70 mmHg
- C. SBP $<$ 100 mmHg, DBP $<$ 60 mmHg,
- D. SBP $<$ 90 mmHg, DBP $<$ 60 mmHg
- E. SBP $<$ 95 mmHg, DBP $<$ 65 mmHg

70. Pulse pressure is defined as:

- A. Maximum blood pressure level
- B. Minimum blood pressure level
- C. Difference between SBP and DBP levels
- D. Venous pressure
- E. Average SBP levels

71. When the ECG rhythm is called regular?

- A. R-R interval differ by more than 10%;
- B. R-R interval differ by no more than 0.1 s;
- C. R-R interval differ by more than 0.1 s;
- D. R-R interval differ by more than 0, 2 s;
- E. R-R interval differ by no more than 10%

72. Which P wave is of sinus origin?

- A. P wave is before each QRS, singles in shape and size, positive;
- B. P wave is before each QRS, varies in amplitude;
- C. P wave is hidden in complex QRS;
- D. P wave is negative before each QRS;
- E. P wave is not proceed each QRS;

73. Which standard ECG lead is normally has the highest voltage?

- A. I;
- B. II;
- C. III;
- D. III at the height of expiration;
- E. II at height of inspiration.

74. What is the value of the angle alpha of the ECG in humans normosthenic type constitution?
- 0 - 30
 - 31 - 70
 - 71 - 90
 - 91 - 180
 - 0 - (- 180)
75. In which lead T wave normally always negative?
- I standard;
 - II standard;
 - III standard;
 - AVR;
 - AVF.
76. Which interval is called the electrical systole of the heart?
- P-Q;
 - QRS;
 - Q-T;
 - R-R;
 - P-P.
77. What does the increase in systolic performance?
- Functional weakness infarction;
 - Tachycardia;
 - Polytopic rhythm;
 - Intracardiac conduction disorders;
 - Myocardial hypertrophy.
78. Where V4 chest electrode is located?
- Right sterna border in 1V intercostal spaces;
 - Left sterna border in 1V intercostal spaces;
 - On the left anterior axillary line;
 - At the apex of the heart;
 - On the posterior left axillary line.
79. What is a sinus rhythm?
- P wave is positive before each complex QRS, duration of R-R ranges, P-Q interval ranges from 0.25 to 0, 35 sec; within 0,15-0,45 sec;
 - P wave is before each QRS, not uniform amplitude and shape;
 - P wave before each complex QRS, duration of R-R ranges to 0.10 sec;
 - P wave before each QRS complex is negative;
80. What does the high voltage ECG mean?
- Functional weakness infarction;
 - tachycardia;
 - polytopic rhythm;

- D. inflammatory changes in the myocardium;
E. myocardial hypertrophy.
81. What does lowering voltage ECG mean?
A. electrical axis of the heart deviation;
B. tachycardia;
C. polytopic rhythm;
D. inflammatory and sclerotic changes in the myocardium;
E. myocardial hypertrophy
82. Electrical axis of the heart deviation to the left:
A. The highest R wave in lead I, the deepest S wave in lead III;
B. The highest R wave in lead III, the deepest S wave in lead I;
C. The highest R wave in lead I;
D. The highest R wave in lead II;
E. The highest R wave in lead III;
83. Potential of which wall mainly registers III standard leads?
A. Right atrium
B. Right ventricular
C. Ventricular septum
D. The anterior wall of the left ventricle
E. Posterior wall of the left ventricle
84. ECG signs of the right atrium hypertrophy?
A. Negative P wave in lead I
B. Negative T wave in lead II
C. Two pointed P wave in lead I
D. Pointed P wave in lead III
E. Two pointed P wave in lead II
85. ECG signs of the left atrium hypertrophy?
A. Negative P wave in lead I
B. Increased amplitude of T wave in lead I
C. Two pointed P wave in lead I
D. Pointed P in lead II
E. Two pointed P wave in lead II
86. ECG signs of right ventricular hypertrophy?
A. P wave duration > 0.11-0.12 sec
B. $\angle\alpha > +90^\circ$, R_{III} / S_{I} .
S. Syndrome $TV_1 > TV_6$.
D. Syndrome $TV_1 < TV_6$
E. In leads III, aVF dominated "P-pulmonale" wave.
87. ECG signs of left ventricular hypertrophy?
A. P wave duration > 0.11-0.12 sec

- B. $\angle\alpha > +90^\circ$, R III / S I .
 C. Syndrome TV 1 > TV 6 .
 D. Syndrome TV 1 < TV 6
 E. In leads III, aVF dominated "P-pulmonale" wave.
88. ECG signs of left ventricular hypertrophy?
 A. Index Makruza = 1
 B. $\angle\alpha > +90^\circ$, R III / S I .
 C. Increasing the amplitude of S wave in leads I, aVL, V5-V6.
 D. Syndrome TV 1 < TV 6
 E. Increased R wave amplitude in leads I, aVL; Rv5-6 > Rv4; Rv4 < Rv6.
89. ECG signs of right ventricular hypertrophy?
 A. Index Makruza > 1
 B. $\angle\alpha > -30^\circ$
 C. Increasing the amplitude of S wave in leads I, aVL, V5-V6.
 D. Syndrome Tv1 > Tv6
 E. Increased R wave amplitude in leads I, aVL; Rv5-6 > Rv4; Rv4 < Rv6
90. What conductivity complex QRS reflects?
 A. Atrioventricular;
 B. Intraatrial;
 C. Intraventricular;
 D. The conductivity of the left Hiss bundle branch;
 E. Conductivity on the right Hiss bundle branch.
91. Which is normal duration of P wave:
 A 0.02-0.03 sec
 B. 0.03-0.04 sec;
 C. 0.04-0.06 sec;
 D. 0.06-0.10 sec;
 E. 0.12-0.18 sec.
92. What is the speed of the impulse transmission through AV node?
 A 0.02-0.05 mm / sec;
 B. 0.08-0.10 mm / sec;
 C. 0.30-0.80 mm / sec;
 D. 1.0-2.0 mm / sec;
 E. 3.0-4.0 mm / sec.
93. What ECG element reflects impulse pathway in atria?
 A. P-Q segment;
 B. P-Q interval;
 C. P wave;
 D. T wave;
 E. QRS complex
94. What is the speed of the pulse conduction in Hiss bundle branch block?
 A 0.02-0.05 mm / sec;
 B. 0.08-0.10 mm / sec;

- C. 0.30-0.80 mm / sec;
 D. 1.0-2.0 mm / sec;
 E. 3.0-4.0 mm/ sec.
95. What ECG element reflects impulse conduction through AV node?
 A. P-Q segment;
 B. P-Q interval;
 C. P wave;
 D. T wave;
 E. QRS complex
96. What ECG element reflects impulse conduction through Hiss bundle branch?
 A. P-Q segment;
 B. P-Q interval;
 C. P wave;
 D. T wave;
 E. QRS complex
97. Which QRS complex duration is normal?
 A 0.02-0.05 sec;
 B. 0.06-0.10 sec;
 C. 0.16-0.20 sec;
 D. 0.21-0.30 sec;
 E. 0.30-0.40 sec.
98. Electrical axis of the heart deviation to the left ECG signs:
 A. The highest R wave in lead I, the deepest S wave in lead III;
 B. The highest R wave in lead III, the deepest S wave in lead I;
 C. The deepest S wave in aVR lead;
 D. The highest R wave in lead I;
 E. The highest R wave in lead III.
99. What is normal P-Q interval duration?
 A 0.08-0.10 sec;
 B. 0.03-0.04 sec;
 C. 0.04-0.08 sec;
 D. 0.06-0.10 sec;
 E. 0.12-0.18 sec.
100. Electric axis of the heart normal position ECG signs:
 A. The highest R wave in lead I, the deepest S wave in lead III;
 B. The highest R wave in lead III, the deepest S wave in lead I;
 C. The highest R wave in lead I;
 D. The highest R wave in lead II;
 E. The highest R wave in lead III.

TOPIC 4
BASIC SYMPTOMS AND SYNDROMES OF CARDIOVASCULAR
DISEASES

1. The main ECG sign of intraventricular block:
 - A. Extending the P-Q interval;
 - B. The increase in the QRS complex with deformation
 - C. The increase in the QRS complex without deformation
 - D. Reducing the length of the P-Q segment
 - E. S-T segment displacement
2. What ECG interval is used to determine heart rate?
 - A. P-Q;
 - B. QRS;
 - C. QRST;
 - D. R-R;
 - E. P-P.
3. What registers R-R interval on ECG?
 - A. intraatrial conductivity;
 - B. intraventricular conduction;
 - C. atrioventricular conduction;
 - D. ventricular systole;
 - E. duration of cardiac cycle.
4. What is normal heart rate?
 - A. 30-40 for 1 minute;
 - B. 40-60 for 1 minute;
 - C. 60-80 C. for 1 minute;
 - D. 80-100 for 1 minute;
 - E. 90-110 for 1 minute.
5. What registers R wave on ECG?
 - A. Excitation of atria;
 - B. Excitation of ventricles;
 - C. atrial systole;
 - D. ventricular systole;
 - E. Excitation of Hiss bundle.
6. What conductivity registers complex QRS?
 - A. atrioventricular;
 - B. intraatrial;
 - C. Intraventricular;
 - D. The conductivity of the left Hiss bundle branch;
 - E. Conductivity on the right Hiss bundle branch.
7. What registers T wave on the ECG?
 - A. Excitation of atria;
 - B. Excitation of ventricles;
 - C. Reduction fibrillation;
 - D. Shifting of electrical axis of the heart;
 - E. ventricular repolarization.

8. In which lead wave P must always be negative?
- A. I standard;
 - B. II standard;
 - C. III standard;
 - D. AVR;
 - E. AVF.
9. I standard registers mostly potential of:
- A. Right atrium;
 - B. Right ventricle;
 - C. Anterior wall of the left ventricle;
 - D. Interventricular septum;
 - E. posterior wall of the left ventricle.
10. W standard allotment registers mostly potential:
- A. Right atrium;
 - B. Right ventricle;
 - C. Anterior wall of the left ventricle;
 - D. Interventricular septum;
 - E. posterior wall of the left ventricle.
11. The normal duration of P wave is:
- A 0,02-0,03 sec;
 - B. 0,03-0,04 sec;
 - C. 0,04-0,06 sec;
 - D. 0,06-0,10 sec;
 - E. 0,12-0,18 sec.
12. Which duration of QRS complex is normal?
- A 0,02-0,05 sec;
 - B. 0,06-0,10 sec;
 - C. 0,16-0,20 sec;D. 0,21-0,30 sec;
 - E. 0,30-0,40 sec.
13. Which limb potentials discharged during registration of I standard leads?
- A. Upper extremity;
 - B. lower extremities;
 - C. The right hand and left foot;
 - D. Left arm and left leg;
 - E. Left hand and right leg.
14. Which limb potentials discharged during registration of II standard lead?
- A. Upper extremity;
 - B. lower extremities;
 - C. The right hand and left foot;
 - D. Left arm and left leg;
 - E. Left hand and right leg.
15. Which limb potentials discharged during registration of III standard leads?
- A. Upper extremity;
 - B. lower extremities;
 - C. The right hand and left foot;
 - D. Left arm and left leg;
 - E. Left hand and right leg.

16. How many chest electrodes must be used during ECG recording?
- three;
 - twenty;
 - six;
 - ten;
 - twelve
17. What bioelectrical process reflects P wave?
- Depolarization left ventricle;
 - Depolarization left atrium
 - Both atrial repolarization
 - Depolarization of both atria
 - depolarization of both ventricles
18. What bioelectrical process reflects a complex QRS?
- Depolarization left ventricle;
 - Depolarization left atrium
 - Both atrial repolarization
 - Depolarization of both atria
 - Repolarization of both ventricles
19. What bioelectrical process reflects T wave?
- Left ventricular repolarization;
 - Left atrial repolarization
 - Both atrial repolarization
 - Depolarization of both ventricles
 - Repolarization both ventricles
20. Which characteristics of the Q wave are normal?
- $> 1/4 R$, 0,04 sec;
 - $< 1/4 R$, 0,04 sec;
 - $< 1/4 R$, 0,03 sec;
 - $> 1/4 R$, 0,03 sec;
 - $= 1/4 R$ 0,02 sec.
21. Identify ECG - sign of paroxysmal tachycardia?
- Disappearance of the P wave;
 - Appearance of "sawtooth" f-waves with a frequency of 250-400 per minute;
 - Maintaining of regular sinus rhythm.
 - Sudden onset and end.
 - No differentiation of waves
22. What is the ECG sign of alorhythm?
- Maintaining of regular sinus rhythm.
 - Maintaining of sinus rhythm.
 - There is no relationships P wave and QRS complex;
 - Tachycardia-bradycardia syndrome
 - Pattern of extrasystole appearance

23. What is ECG sign of ventricular extrasystole?
- There are no relationships of P wave and QRS complex;
 - Premature excitation (QRS complex).
 - Deformed and widened QRS complex ($> 0,12$ c).
 - Shortening of P-P interval '.
 - The compensatory pause is absent or incomplete
24. Identify ECG sign of bigeminy?
- The appearance of each second extrasystole;
 - The appearance of two monotopic extrasystole.
 - The appearance of two paired extrasystoles;
 - Interchange of different extrasystoles;
 - The pattern of extrasystole occurrence
25. What is ECG sign of atrial fibrillation?
- P wave absence;
 - Appearance of "sawtooth" f-waves with a frequency of 250-400 per minute;
 - Maintaining of regular sinus rhythm.
 - Sudden onset and end.
 - No differentiation of waves
26. What is ECG sign of idioventricular rhythm?
- Alternation of different P wave shapes, amplitudes and polarity.
 - There is no relation of P wave and QRS complex;
 - Tachycardia-bradycardia syndrome
 - Change of P wave polarity and positivity.
 - Different QRS complexes amplitude
27. What is ECG sign of wandering pacemaker?
- Different QRS complexes amplitude
 - Alternation of different P wave shapes, amplitudes and polarity.
 - There is no relation of P wave and QRS complex;
 - Tachycardia-bradycardia syndrome
 - Change of P wave polarity and positivity
28. What is ECG sign of sick sinus syndrome?
- Tachycardia-bradycardia syndrome

- B. Alternation of different P wave shapes, amplitudes and polarity
- C. There is no relation of P wave and QRS complex;
- D. Disappearance of the P wave;
- E. ECG has the form sinusoids;
29. What is ECG sign of ventricular fibrillation?
- A. Tachycardia-bradycardia syndrome
- B. Alternation of different P wave shapes, amplitudes and polarity.
- C. There is no relation of P wave and QRS complex;
- D. Disappearance of the P wave;
- E. ECG has the form sinusoids
30. The negative P wave is recorded on ECG. Your opinion?
- A. Sinus rhythm;
- B. Atrial rhythm;
- C. Idioventricular rhythm;
- D. Nodal rhythm;
- E. Artificial pacemaker of the heart
31. In which rhythm P wave is absent or isoelectric?
- A. Sinus arrhythmia;
- B. Wandering pacemaker;
- C. Idioventricular rhythm;
- D. Atrial premature beats;
- E. Upper nodal rhythm
32. In which rhythm P wave is absent?
- A. Sinus arrhythmia;
- B. Wandering pacemaker;
- C. Atrial premature beats;
- D. Ventricular fibrillation
- E. Upper nodal rhythm
33. In which case there is no waves differentiation on ECG?
- A. Atrial fibrillation;
- B. Atrial flutter;
- C. Ventricular fibrillation;
- D. Ventricular flutter;
- E. Artificial pacemaker of the heart
34. In patients with coronary artery disease ECG is recorded as small- and large waves line. Naming possible arrhythmias.
- A. Atrial fibrillation;
- B. Ventricular flutter
- C. Atrial flutter;
- D. Ventricular fibrillation
- E. Artificial pacemaker of the heart
35. In which case periodic missing of P wave on ECG is recorded?
- A. Sinus arrhythmia
- B. Atrial fibrillation;

- C. Artificial pacemaker of the heart
- D. Extrasystole
- E. Nodal rhythm;

36. The ECG recorded instead of the missing P wave tooth f-wave. Provide ECG conclusion.

- A. Atrial fibrillation;
- B. Atrial flutter;
- C. Idioventricular rhythm;
- D. Ventricular fibrillation;
- E. Ventricular flutter.

TOPIC 5

MAIN DIAGNOSTIC METHODS OF THE EXAMINATION OF THE DIGESTIVE SYSTEM. THE INTERVIEW AND THE EXAMINATION OF PATIENTS WITH GASTROINTESTINAL DISEASES. DIAGNOSTIC METHODS AND THE SEMIOTICS OF THE DIGESTIVE SYSTEM PATHOLOGY. BIOCHEMICAL BLOOD ANALYSES. BASIC SYNDROMES IN THE GASTROENTEROLOGY. CHANGES IN THE ORAL CAVITY IN THE CASE OF GASTROINTESTINAL DISEASES

1. The patient, 38 years has arrived with complaints to difficulty of swallowing of firm food, vomiting, decrease in body weight. In the anamnesis - a poisoning with a alkali. Inspection: pallor skin, an exhaustion. At superficial palpation the abdomen is soft and painless. What organ defeat it is possible to think of?

- A. Stomach
- B. Pancreas
- C. Oesophagus
- D. Intestines
- E. Liver

2. The patient, 33 years complaints to a heartburn, a pain in epigastrium that arises right after food, tarry [currant jelly] stool during 2 days, fainting fit, weakness. In the anamnesis - a stomach ulcer. Inspection - pallor skin. What complication is it possible to think of?

- A. Perforation
- B. Penetration
- C. Malignization

- D. A bleeding
- E. Pylorostenosis

3. Patient P. 60 years is disturbed heavy sense epigastral site, with disgust for meat food, vomiting by the food eaten on the eve, decrease in body weight. In the anamnesis - a stomach. Inspection: - pallor skin, the expressed growing thin, above left clavicle a dense lymph nod is palpate. Detonation of abdomen wall in epigastral site is determined. At palpation in epigastral site it is more than stomach to the left of a median line, palpable formation in the size 3x4 cm. Your previous diagnosis?

- A Pylorostenosis
- B. Bleeding.
- C. Stomach cancer
- D. Atrophic gastritis
- E. Ulcer

4. The patient, 42 years, complains of dyspnea, increase of abdomen. In the

anamnesis - abusing alcohol. Abdomen inspection – is increased, umbilicus is protruding by formation of a hernia, - behind the umbilicus « the head of a jellyfish». Your diagnostic assumptions?

- A. Flatting
- B. Obesity
- S. Tumor
- D. Ascitis
- E. Cyst

5. The patient, 48 years, complains of weight in right hypochondrium, increase abdomen. During 10 years suffers on chronic persistent hepatitis. At abdomen inspection in vertical position -is loose-hanging, umbilicus is protruding a little. In horizontal position detonation of lateral departments abdomen is marked. Your diagnostic assumptions?

- A. Flatting
- B. Obesity
- S. Tumor
- D. Ascitis
- E. Cyst

6. The patient, 70 years has arrived in clinic with complaints on sharp knife-like pain in the top of the abdomen that has appear after rise heavy. In the anamnesis - a stomach ulcer during 4 years. Inspection. Position of the

patient is forced - lays with the pressed to a breast legs, features are aggravated, pale skin, covered sticky then. Superficial palpation: the poured pressur of abdomen wall muscles, sharp painness in epigastral part is marked. What pathology is it possible to think of?

- A. Stomach ulcer exacerbation
- B. Ulcer perforation
- C. Acute cholecystitis
- D. Peritonitis
- E. Bleeding

7. The patient, 35 years complains of a pain in epigastrium, that appears in 30 minutes after food, a heartburn, decrease of appetite, tarry [currant jelly] stool. The anamnesis. 4 year of stomach ulcer. The beginning of disease connects with stress, an aggravation during the autumn-spring period. Inspection tongue is covered by white patch near root. Superficial palpation: moderate plainness in epigastral part. Your diagnostic assumptions?

- A. Ulcer penetration
- B. Ulcer perforation
- C. Ulcer malignization
- D. Peritonitis
- E. Bleeding

8. The patient, 70 years, has arrived in clinic with complaints to a constant pain and sensation of spreading in paraumbilical site that amplify after reception even a small amount of food. The simplification comes after vomiting. In the anamnesis - stomach ulcer. Last aggravation about three months ago. Inspection – skin is dry, the patient of lowered feed, visible peristaltics of stomach in the form of deep waves which go from left hypochondrium to right is determined. Your diagnosis?

- A. Flatting
- B. Perforation
- C. Pilirostenosis
- D. Ascitis
- E. Tumor of stomach

9. The patient, 19 years, complains on colicky [cramping] pain that arises after fat food and attend by heartburn, an eructation sour. Objectively: tongue is densely imposed white patch. At palpation – moderate painness in epigastrium. Your diagnosis?

- A. Atrophy gastritis
- B. Stomach ulcer
- C. Calculous cholecystitis
- D. Chronic gastritis
- E. Pilorostenosis

10. Patient, 35 years, complains of a pain in epigastrium that arises shortly after food, faintness. An eructation, stool instability. Diseases developed gradually, first attributes has been appears about three years ago. Inspection: patient is satisfactory fatness, tongue is imposed white patch, crude with reflections teeth on edges. Moderate palpatory tenderness is defined at epigastric region. Your previous diagnosis?

- A. Acute gastritis
- B. Chronic cholecystitis
- C. Stomach ulcer
- D. Chronic pancreatitis
- E. Chronic gastritis

11. The patient, 39 years, complains of frequent liquid excrements (till 10-12 time on times) with an impurity of slime and blood, decrease in body weight of 4 kg for last year. Marks itself ill about one year. Repeatedly inspected in the infectious hospital where diagnoses of sharp infectious diseases have been removed. At inspection: patient is sharply lowered fatness, skin is flabby, dry. The abdomen is soft, palpation in left iliac region is sharply painful. In excrements insignificant amount of rare contents with an impurity of blood.

What organ defeat is it possible to think of ?

- A. Stomach
- B. Sigmoid colon
- C. Liver
- D. Transversus colon
- E. Cecum

12. Patient P. 66 years Disturbs the heavy feeling in the epigastral region, disgust for meat food, decrease in body weight. In the anamnesis atrophic gastritis. Inspection: pallor skin, expressed weight loss, the dense lymph node is palpable above left clavicular. Detonation of a abdomen wall in epigastral region. Blunt painness is define in epigastral region during palpation. Percussion - big curvature of the stomach is below the umbilicus about 2 sm. Your previous diagnosis?

- A. Pylorostenosis
- B. Bleeding
- C. Cancer of the stomach
- D. Atrophic gastritis
- E. Ulcer of the stomach

13. Patient D. 50 years has arrived with complaints on heavy and sensation of completeness in epigastral region that amplify after food, an eructation rotten, and also the food eaten on the eve. The simplification comes after vomiting. In the anamnesis - a stomach duodenal

ulcer during 10 years. For last month has weight loss about 3 kg. Inspection. The lowered feed, dry skin, cheilitis, tongue is covered by white patch. Superficial palpation of the abdomen: the abdomen is a little swell, painful in epigastral region is determine. Percussion of the abdomen: «splashing » noise above epigastral region, the lower border of the stomach is on 2-3 sm below umbilicus. What complication of a stomach ulcer has arisen in the patient?

- A. Penetration
- B. Pylorostenosis
- C. Perforation
- D. Bleeding
- E. Malignization

14. The patient, 45 year has in anamnesis the stomach ulcer, has suddenly felt „knife-like» pain in epigastral region that irradiates to wright scapula, and then extended in the right half of the abdomen. The pain has accompanied by reusable vomiting. Inspection: position of the patient - laying with knees led to the trunk, breath is superficial, features are aggravated. Palpation of the abdomen - plank-buttress. Percussion of the lateral region - dullness. Shchetkin-Blumberg symptom is positive. Your diagnosis?

- A. Perforation
- B. Penetration
- C. Malignization
- D. Bleeding
- E. Pylorostenosis

15. The patient, 30 years delivered to the admission dep. with complaints of the general weakness, fainting, palpitation. The anamnesis. The heartburn during one year that arises just after the meal, especially sour or sharp, that accompanies by epigastral pain. Becomes ill sharply when suddenly has quickly lost consciousness (works on construction). Inspection. Pale skin, AP-80/50 Hg, pulse - 120 per minute, weak filling and a pressure. Tones of the heart are weakened, rhythmic, systolic noise on the top. Palpation of the abdomen – moderate painness in the epigastrium. Abdomen is soft, symptoms of peritoneum irritation are absent. Your previous diagnosis?

- A. Perforation
- B. Penetration
- C. Malignization
- D. Bleeding
- E. Pylorostenosis

16. The patient, 33 years, has arrived in surgical branch with complaints of the pain in right side of the abdomen. Hurt occurrence he connects with the use of sharp and rough food. Pain in the right iliac region has been revealed during

palpation and percussion. Your previous diagnosis?

- A. Acute cholecystitis
- B. Acute gastritis
- C. Acute appendicitis
- D. Stomach ulcer
- E. Enterocolitis

17. The patient, 22 years, has arrived in surgical branch with complaints of intensive pain in right side. Painful palpation of the abdomen in right iliac region, painful palpation of Mac-Burneus point. Your previous diagnosis?

- A. Acute cholecystitis
- B. Acute gastritis
- C. Acute appendicitis
- D. Stomach ulcer
- E. Enterocolitis

18. The patient, 76 years, complains of constant constipation, a swelling of the abdomen, a periodic pain in the left side. At the palpation – sigmoid colon is dense, painful, its surface unequal, hilly. Your previous diagnosis?

- A. Sigmoiditis
- B. Colitis
- C. Dysentery
- D. A malignant new growth
- E. Plenty gases accumulation

19. The patient, 78 years, complains of a pain in the left side. In the anamnesis - constipation during many years. Last defecation was 1 week ago. At

palpation the blind gut is considerably increased at the rate, dense, painful, does not hum, with a corpulent surface.

Your previous diagnosis?

- A. Appendicitis
- B. Plenty cal mass accumulation
- C. Tuberculosis
- D. A malignant new growth
- E. Plenty gases accumulation

20. «Noise of splash » at healthy persons is determine:

- A. Just after food
- B. In 1-3 hours after food
- C. In 3-5 hours after food
- D. In 5-7 hours after food
- E. In 7-10 hours after food

21. Melena is:

- A. Shiny black tarry stool
- B. Rectorrhagia
- C. Hemoptoe
- D. Hematemesis
- E. There is no right answer

22. High-pitched peristalsis or borborygmi in rushes in a patient with acute abdominal pain and distention suggests which of the following?

- A. Peritonitis
- B. Bowel obstruction
- C. Renal colic
- D. Pancreatitis
- E. There is no right answer

23. Severe acute abdominal pain and a silent abdomen suggests which of the following?

- A. Peritonitis
- B. Appendicitis
- C. Renal colic
- D. Abdominal aortic aneurysm
- E. All answers are correct

24. When associated with nausea and vomiting, which of the following raises suspicion of a more serious etiology of chronic constipation?

- A. Occasional bouts of diarrhea
- B. Change in color of stool
- C. Distended, tympanic abdomen
- D. Abdominal pain
- E. All answers are correct

25. Dysphagia is best defined as

- A. A feeling of a lump in the throat
- B. Difficulty swallowing
- C. An aversion to food or eating
- D. A blockage in the pharynx
- E. There is no right answer

26. Esophageal dysphagia is difficulty passing food down the esophagus. It results from either a motility disorder or a mechanical obstruction. Which of the following is an example of a mechanical obstruction?

- A. Extrinsic compression
- B. Diffuse esophageal spasm
- C. Systemic sclerosis

- D. Eosinophilic esophagitis
- E. All answers are correct

27. Blood test of the patient revealed albumin content of 20 g/L and increased activity of lactate dehydrogenase isoenzyme 5 (LDH5). These results indicate disorder of the following organ:

- A. Spleen
- B. Kidneys
- C. Heart
- D. Lungs
- E. Liver

28. A patient presents with an acute attack of cholelithiasis. Laboratory examination of the patient's feces will show the following in this case:

- A. Positive reaction to stercobilin
- B. Negative reaction to stercobilin

- C. Connective tissue
- D. Partially digested cellulose
- E. Starch granules

29. Hematemesis is an indication of:

- A. Upper gastrointestinal bleeding
- B. Lower gastrointestinal bleeding
- C. Both
- D. Neither
- E. ----

30. The most common cause of upper gastrointestinal hemorrhage (hematemesis or melena) is:

- A. Esophageal varices
- B. Gastric carcinoma
- C. Peptic ulcer
- D. Gastritis
- E. Neither

TOPIC 6

MAIN METHODS OF THE EXAMINATION OF THE URINARY SYSTEM. THE INTERVIEW AND THE EXAMINATION OF PATIENTS WITH THE URINARY SYSTEM DISEASES. LABORATORY AND INSTRUMENTAL TESTS OF THE URINARY SYSTEM. BASIC SYNDROMES IN THE NEPHROLOGY. THE EDEMA SYNDROME. CHANGES IN THE ORAL CAVITY IN THE CASE OF URINARY DISEASES

1. A 20-year old patient developed edema of the face, pain in the lumbar area 3 days after tonsillitis. Changes in the urine were revealed. Which system can be involved?
 - A. Nervous
 - B. Respiratory
 - C. Cardiovascular
 - D. Genitourinary
 - E. Digestive

2. A 50-year old patient has been suffering from kidney disease for 15 years. Examination revealed paleness, dryness of the skin, ammonia odor from the mouth, the pupils are narrow. What diagnosis can be supposed?
 - A. Uremia
 - B. Atropine poisoning
 - C. Myxedema
 - D. Thyrotoxicosis
 - E. Itsenko-Cushing syndrome

3. Morning edema of the face is typical in:
 - A. Pericarditis
 - B. Acute glomerulonephritis
 - C. Heart failure
 - D. Liver cirrhosis
 - E. Thyrotoxicosis

4. The patient, 19 years, the mechanic, complains of a blunt pain in right lumbar region, frequent urination, rising temperature up to 37,8°C. A condition become worse 2 days ago after overcooling. At the review a lumbar site symmetric, skin hyperemia, oedema are absent. Positive Pasternaysky symptom. Your previous diagnosis?
 - A. Acute pyelonephritis
 - B. Acute glomerulonephritis
 - C. Acute cystitis
 - D. Intercostal neuralgia
 - E. Nephrotic syndrome

5. The patient, 22 years, complains of face and eyelid oedema, general weakness, rise in temperature of a body up to 37,2 C. Anamnesis: was ill sharply, 2 weeks ago has carried quinsy. Inspection: face is pale, bloated, eyelid oedema, shins and

fingers of hands. Arterial pressure is 140/95 mm hg. Pasternatsky symptom is negative from both sides. Your suggested diagnosis?

- A. Acute pyelonephritis
- B. Acute glomerulonephritis
- C. Acute cystitis
- D. Intercostal neuralgia
- E. Nephrotic syndrome

6. Leukocyteuria is more typical for:

- A. Tumor of urine bladder
- B. Paraneuritis
- C. Pyelonephritis
- D. Acute glomerulonephritis
- E. Renal amiloidosis

7. Presence of unchanged erythrocytes in urine is typical for the patients with:

- A. Acute pyelonephritis
- B. Chronic pyelonephritis
- C. Glomerulonephritis
- D. Nephrotic syndrome
- E. Urethritis

8. Positive Pasternatsky' syndrome is typical for the patients with:

- A. Acute glomerulonephritis
- B. Chronic glomerulonephritis
- C. Uremia
- D. Cystitis
- E. Renal colics

9. For the patients with Chronic glomerulonephritis is typical following changes in the urine:

- A. Leukocyteuria and proteinuria
- B. Cylindruria and leukocyuria
- C. Hematuria and leukocyteuria
- D. Proteiunuria and hematuria
- E. Leukocyteuria and hematuria

10. Polyuria is ?

- A. arbitrarily defined as the production by an adult of less than 500 ml of urine/24h.
- B. traditionally defined as frequent, more than 6 times a day, urination.
- C. defined as complete absence of urine secretion and/or excretion.
- D. describes the excretion of larger than normal volume of urine (exceed 2l/24 h).
- E. is defined as passing of more than one-third of the total 24-h urine volume by night.

11. The earliest complaint of patient with Acute Glomerulonephritis is following:

- A. Increasing amount of urine
- B. Dark (tea-colored), scanty urine
- C. Cloudy urine
- D. Straw colored urine

E. Beer-colored urine

12. A 35-year-old man presents with acute onset of fever, shortness of breath and mild oedema of the legs. A 24 hour urine specimen is significant for microscopic hematuria and 1.2g of protein. What is the most likely diagnosis?

- A. Nephrotic syndrome
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Chronic heart failure
- E. Acute pyelonephritis

13. 17 year old patient was admitted to the hospital because a fever of 40.6° C and shaking chills for the previous day. On physical examination, he had mild right costovertebral angle tenderness. Urinalysis: urine is cloudy; 100 WBC/hpf, 5-10 RBC/hpf, many WBC's casts and occasional transitional cells were found. What is the suspected diagnosis?

- A. Acute glomerulonephritis
- B. Acute pyelonephritis
- C. Chronic glomerulonephritis
- D. Kidney stone disease
- E. Chronic pyelonephritis

14. A 25-year-old female with 5-years history of urine abnormalities

complains of headache, light back pain. Her condition was getting worse 2 weeks ago after cold. Phys exam revealed face edema, BP – 150/95 mm Hg. Urinalysis: protein 0.93 g/24hr, 4-6 RBCs/hpf, hyaline casts – 3-4/hpf, 1-2 granular casts/hpf. What the most possible diagnosis?

- A. Chronic glomerulonephritis
- B. Chronic pyelonephritis
- C. Acute glomerulonephritis
- D. Acute pyelonephritis
- E. Kidney stone disease

15. A 19-year-old patient with history of a preceding infection (tonsillitis) several days ago presents with dark colored urine. There is puffiness of eyelids, especially in morning and breathlessness. Microscopic hematuria and 2.3g of protein in urine were found. What is the most likely diagnosis?

- A. Acute glomerulonephritis
- B. Acute pyelonephritis
- C. Chronic glomerulonephritis
- D. Kidney stone disease
- E. Chronic pyelonephritis

16. A 18-year-old male consults his family physician. He has no significant past medical history except periorbital edema last 3 years. Routine laboratory studies revealed proteinuria

0.93 g/24hr, 15-25 RBCs/HPH, 1-2 WBCs/HPF, 2-4 hyaline casts/HPF, 2-3 granular casts/HPF. Phys exam: BP – 140/90 mm Hg. What the most likely diagnosis?

- A. Acute pyelonephritis
- B. Acute glomerulonephritis
- C. Chronic glomerulonephritis, nephritic syndrome
- D. Kidney stone disease
- E. Chronic pyelonephritis

17. A 45 year old male came to his doctor after spending a second sleepless night with excruciating lower abdominal pain. The pain seemed to come in waves and was unrelieved by aspirin, tylenol, or lying or standing in any position. He had not experienced any similar pain before. Urinalysis revealed dark yellow, cloudy urine with no protein; 2-5 WBC/hpf, >100 RBC/hpf, no casts and occasional squamous epithelial cells. What diagnosis do you suspect?

- A. Acute pyelonephritis
- B. Acute glomerulonephritis
- C. Chronic glomerulonephritis
- D. Kidney stone disease
- E. Chronic pyelonephritis

18. A 16-year-old girl brought to family physician for increasing facial and peripheral edema of eight days

duration. Urine - 4.2 g protein/24 hrs, hyaline casts, oval fat bodies. What diagnosis do you suspect?

- A. Acute pyelonephritis
- B. Acute glomerulonephritis, nephrotic syndrome
- C. Chronic glomerulonephritis
- D. Kidney stone disease
- E. Chronic pyelonephritis

19. A 17 year-old girl is admitted to the hospital because of fever, polyuria, nausea and vomiting. Physical exam reveals temperature of 38.9°C, left flank tenderness. Initial laboratory work shows WBC count 17,800 (N-3,800-10,600) with 85 % neutrophils and 8% bands. Urinalysis: protein - 0.033g/l, WBC – ½ HPF, rare WBC casts, numerous bacteria, and 10-15 RBC per HPF with no RBC casts. What is this patient's diagnosis?

- A. Nephritic syndrome
- B. Acute renal failure
- C. Lithiasis
- D. Acute urinary tract infection
- E. Acute glomerulonephritis

20. A 52-year-old man was admitted to the hospital. Over the last few months he noted legs edema, face edema, severe weakness, and difficulties of breathing. Phys exam revealed anasarca, BP - 200/110 mmHg. Labs:

blood glucose – 12 mmol/l, Urinalysis: Sp,gr – 1.035, protein – 1.3 g/24hr, glucose – 0.5%. What the most possible reasons for urinalysis findings?

- A. Kidney stone disease
- B. Acute urinary tract infection
- C. Diabetes mellitus, diabetic nephropathy
- D. Chronic glomerulonephritis
- E. Acute glomerulonephritis

21. Nephrotic syndrome includes:

- A. Oedema, hyperproteinemia, hyperlipidemia, proteinuria
- B. None of the above
- C. Oedema, hypoproteinemia, hyperlipidemia, massive proteinuria
- D. Hematuria, oliguria, hypoproteinemia, hyperlipidemia, oedema
- E. Hematuria, oliguria

22. Abdominal pain that causes the patient to writhe around trying to get comfortable suggests which of the following?

- A. Renal colic
- B. Appendicitis
- C. Pancreatitis
- D. Abdominal aortic aneurysm
- E. There is no right answer

23. Long-standing dysuria symptoms plus hematuria without pyuria or infection suggest which of the following diagnoses?

- A. Cystitis
- B. Spondyloarthropathy
- C. Tumor
- D. Urethritis
- E. There is no right answer

24. In patients with dysuria, fever and flank pain suggest which of the following disorders?

- A. Gonorrhoea
- B. Prostatitis
- C. Vulvovaginitis
- D. Pyelonephritis
- E. There is no right answer

25. Isolated hematuria is urinary RBCs without other urine abnormalities (eg, proteinuria, casts). The most common causes in adults are UTI, prostatitis, and which of the following?

- A. Vigorous exercise
- B. Urinary calculi
- C. Polycystic kidney disease
- D. Glomerular disorders
- E. All answer is correct

26. Which of the following descriptions defines polyuria?

- A. Excessive frequency of urination

- B. Pale-colored, frequent urine output
C. Urine output >3 L/day
D. Urine output >5 L/day with urgency
E. All answer is correct
27. When a patient's water intake increases, which of the following occurs?
A. Arginine vasopression (ADH) release increases
B. Blood osmolality decreases
C. Peripheral ADH sensitivity increases
D. Blood volume decreases
E. All answer is correct
28. A 30-year-old woman developed facial edemas. Examination detected proteinuria (5.87 g/L), hypoproteinemia, dysproteinemia, and hyperlipidemia. Such combination of signs is characteristic of:
A. Nephrotic syndrome
B. Nephritic syndrome
C. Chronic pyelonephritis
D. Acute kidney failure
E. Chronic kidney failure
29. The cause of _____ failure is impaired blood supply to the kidney (Fluid Volume Deficit, hemorrhage, heart failure, shock)
A. Prerenal
B. Intrarenal
C. Postrenal
D. Perirenal
E. Neither
30. _____ failure is caused by obstruction of urine flow. (urethral obstruction by enlarged prostate or tumor; ureteral or kidney pelvis obstruction by calculi)
A. Prerenal
B. Intrarenal
C. Postrenal
D. Perirenal
E. Neither

TOPIC 7

MAIN METHODS OF EXAMINATION OF THE HEMATOPOIETIC SYSTEM. THE INTERVIEW AND THE EXAMINATION OF PATIENTS WITH THE DISORDERS OF THE HEMATOPOIETIC SYSTEM. THE COMPLETE BLOOD COUNT. BLOOD CLOTTING TESTS (THE COAGULATION PANEL)

1. Iron deficiency anaemia is characterized by the following:
 - A. Hypochromia, microcytosis, sideroblasts in the sternal punctate;
 - B. Hypochromia, microcytosis, target-like erythrocytes;
 - C. Hypochromia, microcytosis, elevated iron-binding capacity of serum;
 - D. Hypochromia, microcytosis, reduced iron-binding capacity of serum;
 - E. Hypochromia, microcytosis, positive Desferal test.

2. Which abdominal organ is often enlarged in the case of diseases of the hematopoietic system?
 - A. Pancreas
 - B. Spleen
 - C. Stomach
 - D. Left kidney
 - E. Right kidney

3. Which test should be used to diagnose haemophilia?
 - A. coagulation time;
 - B. determination of bleeding time;
 - C. plasminogen.
 - D. Desferal test
 - E. fibrinogen

4. The reference range of erythrocytes in the healthy individual is as the following:
 - A. $2.0-3.0 \times 10^{12} / l$
 - B. $3.9-5.0 \times 10^{12} / l$
 - C. $5.0-6.0 \times 10^{12} / l$
 - D. $3.0-3.9 \times 10^{12} / l$
 - E. $10.0 \times 10^{12} / l$

5. The hemolysis is defined by the following:
 - A. reduced leukocytes in the peripheral blood
 - B. elevated bilirubin in the blood
 - C. reduced leukocytes in the peripheral blood
 - D. elevated ESR
 - E. elevated basophils in the blood

6. Where are blood cells formed?
 - A. In the liver

- B. In the spleen
 C. In the bone marrow
 D. In the lymph nodes
 E. In the thymus
7. The leukocyte formula is described as the following:
 A. elevated leukocytes in the peripheral blood
 B. elevated lymphocytes in the peripheral blood
 C. elevated band-shaped neutrophils and juvenile neutrophils in the peripheral blood
 D. the ratio of particular types of leukocytes
 E. low leukocytes in the peripheral blood
8. Which lymph nodes are enlarged in the case of haematological diseases?
 A. only axillary
 B. axillary and anterior cervical
 C. occipital
 D. all palpable lymph nodes
 E. inguinal
9. Which bones should be punctured to obtain the bone marrow sample?
 A. frontal
 B. the shin
 C. IV thoracic vertebra
 D. the sternum
 E. ribs
10. Reticulocytosis in the peripheral blood may be a sign of the following:
 A. Lymphogranulomatosis
 B. Haemophilia
 C. Haemolytic anaemia
 D. Werlhof's disease
 E. Myeloma disease
11. Thrombotic disorders can be caused by genetic defects, which increase the risk of venous thromboembolism, or acquired defects, which increase the risk of arterial and venous thrombosis. Of the acquired causes, which of the following is most likely to increase a patient's risk of venous thrombosis?
 A. Sepsis
 B. Hyperhomocysteinemia
 C. Low-dose oral contraceptives
 D. Atherosclerosis
 E. There is no right answer
12. Symptoms of a thrombotic disorder depend on the location of the clot. For instance, if a patient has abdominal pain, which of the following thrombotic disorders is most likely?
 A. Deep venous thrombosis
 B. Ischemic stroke
 C. Mesenteric ischemia
 D. Pulmonary embolism
 E. All answer is correct

13. A patient developed punctate hemorrhages after a tourniquet had been applied. It occurred due to functional disturbance of the following blood corpuscles:

- A. Platelets
- B. Eosinophils
- C. Monocytes
- D. Lymphocytes
- E. Neutrophils

14. Examination of a patient shows decreased leukocyte and erythrocyte count and low hemoglobin levels in peripheral blood, as well as appearance of large cells (megaloblasts). What vitamin deficiency can cause these clinical presentations?

- A. Riboflavin
- B. Niacin
- C. Ascorbic acid
- D. Folic acid
- E. Biotin

15. A patient is diagnosed with severe B12- deficiency anemia resulting in disturbed hematopoiesis and appearance of atypical erythrocytes in the blood. The patient has a history of total gastric resection. This diagnosis can be confirmed if the following cells are present in the peripheral blood:

- A. Megalocytes
- B. Microcytes
- C. Elliptocytes

- D. Normocytes
- E. Anulocytes

16. A patient is suffered from vitamin K deficiency. Which of the coagulation factors will not be affected ?

- A. Factor II
- B. Factor VII
- C. Factor VIII
- D. Factor IX
- E. Factor X

17. Bone marrow responds to iron therapy by increasing erythropoietic activity. Which of the following in bone marrow would most likely indicate erythropoiesis?

- A. Myelocytes
- B. Reticulocytes
- C. Ring siderblasts
- D. Target cells
- E. Megakaryoblasts

18. Where does hematopoiesis takes place?

- A. Bone marrow
- B. Liver
- C. Kidney
- D. Lungs
- E. Heart

19. Which of these is not a kind of blood cell?

- A. Erythrocyte
- B. Hepatocyte
- C. Leukocyte

- D. Thrombocyte
E. There is no right answer
20. Which of the following would result from a reduced number of erythrocytes in the blood?
A. Increased hemoglobin in the blood
B. Decreased hematocrit
C. Increased risk of hemostasis
D. Decreased osmotic pressure of the blood
E. All answer is correct
21. Which of the following substances acts as an anticoagulant?
A. Fibrinogen
B. Prothrombin
C. Heparin
D. Vitamin K
E. All answer is correct
22. What term is used to describe a deficit of all types of blood cells?
A. Leucopenia
B. Erythrocytosis
C. Neutropenia
D. Pancytopenia
E. Neutrocytosis
23. Vitamin K is required by the liver to synthesize:
A. Amino acids.
B. Prothrombin.
C. Heparin.
D. Bilirubin.
E. All answer is correct
24. What causes numbness and tingling in the fingers of individuals with untreated pernicious anemia?
A. Vitamin B12 deficit causing peripheral nerve demyelination
B. Multiple small vascular occlusions affecting peripheral nerves
C. Increasing acidosis affecting metabolism
D. Persistent hyperbilirubinemia
E. All answer is correct
25. Why do abnormally low hemoglobin values develop with pernicious anemia?
A. Shorter life span of erythrocytes
B. Abnormal structure of hemoglobin chains
C. Deficit of folic acid
D. Decreased production of erythrocytes
E. All answer is correct
26. Which of the following can result from a malabsorption problem?
A. Aplastic anemia
B. Pernicious anemia
C. Thalassemia major
D. Sickle cell anemia
E. All answer is correct
27. In individuals with pernicious anemia, antibodies form to:
A. Hydrochloric acid.

- B. Mucus-producing glands.
 - C. Intrinsic factor or parietal cells.
 - D. Vitamin B12.
 - E. There is no right answer
28. Which of the following applies to erythropoietin?
- A. It is produced by the liver.
 - B. It increases iron absorption for heme production.
 - C. Hypoxia stimulates the red bone marrow to produce erythropoietin.
 - D. It stimulates production of red blood cells.
 - E. All answer is correct
29. Petechiae and purpura are common signs of:
- A. Leucopenia.
 - B. Excessive hemolysis.
 - C. Increased bleeding.
 - D. Hemoglobin deficit
 - E. There is no right answer
30. In which blood dyscrasia does pancytopenia develop?
- A. Pernicious anemia
 - B. Sickle cell anemia
 - C. Iron deficiency anemia
 - D. Aplastic anemia
 - E. There is no right answer

TOPIC 8

BASIC SYNDROMES IN THE HEMATOLOGY. CHANGES IN THE ORAL CAVITY IN DISEASES OF THE HEMATOPOIETIC SYSTEM

1. The erythraemia is distinguished from the erythrocytosis by the following:
 - A. thrombocytopenia;
 - B. elevated alkaline phosphatase in neutrophils;
 - C. elevated basophils;
 - D. all of mentioned above;
 - E. options B and C.

2. Chronic myeloid leukaemia is characterised by the following:
 - A. the onset in patients with acute myeloblastic leukaemia;
 - B. refers to myeloproliferative diseases;
 - C. is characterised by pancytopenia;
 - D. elevated basophils;
 - E. no correct option

3. The Philadelphia chromosome in patients with leukaemia is characterised as the following:
 - A. a mandatory sign of the disease;
 - B. is found only in granulocytes;
 - C. is found only in progenitor cells of the megakaryocytic lineage;
 - D. is found only in the myeloid lineage;
 - E. no correct option

4. Treatment of subleukemic myelosis consists in the following:
 - A. begins just after making the diagnosis;
 - B. cytostatics are prescribed in the combination with prednisolone;
 - C. the mandatory radiation therapy;
 - D. the splenectomy is not indicated;
 - E. correct options C and D.

5. Chronic lymphocytic leukaemia is characterised by the following:
 - A. the most common type of leukaemia;
 - B. the benign clinical course;
 - C. occurs in elderly and advanced ages, mostly does not require cytostatic therapy;
 - D. does not require cytostatic therapy

E. all of mentioned above.

6. Which form of chronic lymphocytic leukaemia is characterised by significantly enlarged lymph nodes with low leucocytosis?

- A. with splenomegaly;
- B. classical;
- C. benign;
- D. with the bone marrow involvement;
- E. tumorous.

7. Which complications are typical for chronic lymphocytic leukaemia?

- A. thrombotic;
- B. infectious;
- C. bleeding;
- D. hepatic failure;
- E. no correct options.

8. The patient X. has the daily proteinuria of more than 3.5 m, the positive Bence-Jones protein and the hyperproteinaemia. Which clinical condition should be suspected?

- A. the nephrotic syndrome;
- B. myeloma disease;
- C. Waldenström's macroglobulinemia;
- D. acute lymphocytic leukaemia;

E. chronic lymphocytic leukaemia.

9. The syndrome of increased viscosity in myeloma is characterized by the following:

- A. the mucous membranes bleeding;
- B. the proteinuria;
- C. the dyslipidaemia;
- D. the hyperbilirubinemia;
- E. correct B and C.

10. The hypercalcemia in the case of myeloma is characterized by the following:

- A. associated with the myeloma osteolysis;
- B. decreases with the azotemia;
- C. does not have a negative impact on the renal tubular system;
- D. a secondary reaction of kidneys;
- E. all of mentioned above.

11. Lymphogranulomatosis is characterised by the following signs:

- A. the selective involvement of lymph nodes;
- B. the early lymphocytopenia;
- C. positive Berezovsky-Sternberg cells in biopsies;
- D. correct A and B;

E. all of mentioned above.

12. B12 deficiency anemia includes:

A. Megalocytosis, low serum D12 plasma levels, paresthesias, ataxia, impaired deep muscle-tendon reflexes

B. Lymphadenopathy, splenomegaly, fever, increase white blood cell count, arthralgias

C. Microcytosis, low serum iron, chronic or occult bleeding, low MCW

D. all of mentioned above.

E. None of above

13. Thrombocytopenia due to bone marrow suppression is a result of which of the following?

A. Chemotherapy

B. Gestational thrombocytopenia

C. Systemic infection

D. Immune thrombocytopenia (ITP)

E. There is no right answer

14. Abnormal bleeding can result from disorders of the coagulation system, of platelets, or of blood vessels. Disorders of the coagulation system can be hereditary or acquired. Of the hereditary disorders of

hemostasis, which of the following is the most common?

A. Hemophilia A

B. Hemophilia B

C. Hemorrhagic telangiectasia

D. Von Willebrand disease

E. There is no right answer

15. Which of the following is not associated with thrombotic thrombocytopenic purpura ?

A. Thrombosis

B. Thrombocytopenia

C. Microangiopathic hemolytic anemia

D. Neurologic deficits

E. Renal failure

16. A patient is presented with weakness of legs, arms, trunk, tingling and numbness that progressively worsens. Peripheral blood smear shows macrocytic anemia. Which of the following is not the factor causing this condition ?

A. Chronic atrophic gastritis

B. Ileal resection

C. Tapeworm infestation

D. Alcoholism

E. Exposure to nitrous oxide

17. A patient is presented with pallor, fatigue and dyspnea. Physical

examination shows koilonychia and angular cheilosis. Which of the following is not expected in the laboratory finding of this patient ?

- A. Low total iron binding capacity
- B. High serum transferrin
- C. Low iron: total iron binding capacity ratio
- D. Low serum ferritin
- E. Low transferrin saturation

18. A 36 year old woman presented with weakness, lassitude and feeling easily tired. Her bone marrow aspirate showed 15% myeloblasts and reduced erythropoiesis. The most likely cause is

- A. Acute myeloid leukaemia
- B. Acute lymphoid leukaemia
- C. Myelodysplastic syndrome
- D. Myelofibrosis
- E. Chronic myeloid leukaemia

19. Why is excessive bleeding a common occurrence with acute leukemia?

- A. Dysfunctional thrombocytes
- B. Decreased platelets
- C. Impaired production of prothrombin and fibrinogen
- D. Deficit of calcium ions
- E. There is no right answer

20. Chronic blood loss causes anemia because of the:

- A. Shortened life span of the erythrocytes.
- B. Lower metabolic rate.
- C. Smaller amount of recycled iron available.
- D. Loss of protein and electrolytes.
- E. There is no right answer

21. Which of the following best describes the characteristic erythrocyte associated with pernicious anemia?

- A. Normochromic, normocytic
- B. Elongated, sickle-shaped
- C. Megaloblastic or macrocytic nucleated cells
- D. Hypochromic, microcytic
- E. All answer is correct

22. Jaundice is one typical sign of:

- A. Sickle cell anemia.
- B. Iron deficiency anemia.
- C. Aplastic anemia.
- D. Acute leukemia.
- E. There is no right answer

23. What are the typical early general signs and symptoms of anemia?

- A. Jaundice, stomatitis
- B. Pallor, dyspnea, and fatigue
- C. Chest pain, palpitations

D. Bradycardia, heat intolerance

E. There is no right answer

24. Which of the following statements applies to hemochromatosis. It is:

A. Results from excessive hemolysis of RBCs.

B. Caused by excessive iron intake in the diet.

C. An inherited defect that results in abnormal hemoglobin.

D. A metabolic error that leads to excess amounts of hemosiderin, causing damage to organs.

E. There is no right answer

25. Secondary polycythemia may be associated with:

A. Severe chronic bronchitis.

B. Frequent angina attacks.

C. Certain types of anemia.

D. Renal disease

E. All answer is correct

26. Leukemia is sometimes linked to chromosome abnormalities, as evidenced by:

A. Little evidence of familial incidence.

B. Very low incidence in persons with Down syndrome.

C. Transmission as a recessive gene.

D. The presence of Philadelphia chromosome translocation in cases of acute myelogenous leukemia (AML).

E. All answer is correct

27. Iron deficiency anemia frequently results from any of the following EXCEPT:

A. Excessive menstrual flow.

B. Malabsorption syndromes.

C. Diabetes mellitus

D. Certain vegetarian diets.

E. All answer is correct

28. Which of the following applies to the leukemias?

A. AML is the most common childhood leukemia.

B. Chronic leukemias are more common in older people.

C. Lymphoid tissue produces abnormal leukocytes.

D. Exposure to chemicals is not considered a predisposing factor.

E. All answer is correct

29. Which of the following applies to the condition disseminated intravascular coagulation (DIC)?

A. It is usually a secondary complication.

B. It is not life threatening.

C. It results in an inability of platelets to adhere.

D. It is always initiated by excessive bleeding.

E. All answer is correct

30. Microcytic and hypochromic erythrocytes are commonly found as a result of:

A. Polycythemia.

B. Hemophilia A.

C. Disseminated intravascular coagulation.

D. Iron deficiency anemia.

E. All answer is correct

TOPIC 9

MAIN METHODS OF THE EXAMINATION OF THE ENDOCRINE SYSTEM. LABORATORY AND INSTRUMENTAL RESEARCH

METHODS OF THE ENDOCRINE SYSTEM. BASIC SYNDROMES IN THE ENDOCRINOLOGY

1. A 35-year-old woman has a one-year history of an arterial hypertension with hypertensive crisis. She was not treated. After an intense house work she felt the fear, excitement, palpitation, intense headache, chest and abdominal pains, the low back pain, frequent urinations, the nausea, and vomiting. Upon the physical examination: her skin was moist, the face was pale, the pulse was regular with the rate of 170 beats/min; her heart sounds were normal; the blood pressure was 220/110 mmHg. Laboratory tests revealed the blood sugar 7.2 mmol/l, leucocytosis, and erythrocytosis. What was the preliminary diagnosis?

- A. Pheochromocytoma's crisis;
- B. The hypertensive crisis;
- C. Myocardial infarction;
- D. The thyrotoxic crisis;
- E. The hypothalamic crisis.

2. On a regular medical check-up a 28-year-old woman was diagnosed with the arterial hypertension. During the deep abdominal palpation, the patient noticed the acute diffuse abdominal pain, nausea, vomiting,

headache, agitation, feeling of fear, irritability, sweating, palpitations, and paraesthesia. Upon the physical examination: her skin was pale, moist; her pupils were dilated; the pulse was regular with the rate of 160/min, her heart sounds were normal; the blood pressure was 220/120 mmHg. Laboratory tests revealed the blood sugar 8.00 mmol/l and leucocytosis. She was given a nifedipine tablet SL without a positive effect. Which drug should be prescribed as an emergency?

- A. Phentolamine.
- B. Papaverine.
- C. Furasemid.
- D. Verapamil.
- E. Anaprilin.

3. A 48-year-old man had a three-years history of the arterial hypertension with the reference range of blood pressure 220/120–240/140 mmHg. The hypotensive therapy was ineffective. He presented complaining for a muscle weakness, dry mouth, polyuria, and headache. Laboratory tests revealed the sodium of 155 mmol/l and potassium of 3.6 mmol/l.

Which was the likeliest cause of the arterial hypertension?

- A. Primary hyperaldosteronism
- B. Pheochromocytoma
- C. Hypertensive heart disease
- D. The renal hypertension
- E. Itsenko-Cushing's disease

4. A 36-year-old woman complained of the headache, muscle weakness, periodic jerks, episodes of acute general weakness, thirst, polyuria, and increased blood pressure. She had been unwell for 2 years. Upon the physical examination: her height was 170 cm, her body weight was 68 kg, her pulse was 78 beats/min, regular; her heart sounds were muffled, with the II tone's accent over the aorta, her blood pressure was 170/100 mmHg, no oedema. Laboratory tests revealed the potassium of 2.9 mmol/l, sodium of 158 mmol/l, blood glucose of 5.3 mmol/l; the urinalysis - the alkaline reaction, protein was 0.033 g/l, 1-3-4 in view; hypoisostenuria. What was the preliminary diagnosis?

- A. Primary hyperaldosteronism.
- B. Hypertensive disease.
- C. Chronic pyelonephritis.
- D. Itsenko-Cushing's disease.
- E. Pheochromocytoma.

5. A 32-year-old woman complained of the dizziness, headache, palpitations, and tremors. For several months she had been under the family

doctor's supervision due to her high blood pressure. Gradually, such attacks had become more frequent and more severe. Upon the physical examination: her skin was sweaty and sticky, with limbs' tremors; her heart rate was 110/min, the blood pressure was 220/140 mmHg; her heart tones were weak. Laboratory tests revealed leukocytes of $9.8 \times 10^9/l$, ESR of 22 mm/h, the blood glucose of 9.8 mmol/l. Which was the likeliest cause of the crisis?

- A. Diabetic glomerulosclerosis;
- B. Hypertensive heart disease;
- C. Preeclampsia;
- D. Primary hyperaldosteronism;
- E. Pheochromocytoma.

6. The woman complained of paroxysms of the headache with vomiting, chills, nausea, and palpitations. She was unwell for 15 years. The patient had lost 17 kg. Upon the physical examination: she was withdrawn, her heart sounds were rhythmic, with the II tone's accent over the aorta, the systolic murmur over the apex and the aorta, her pulse was 96/min, the blood pressure was 300/170 mmHg. Laboratory tests revealed leukocytes of $18 \times 10^9/l$, the fasting glucose was 6.8 mmol/l, during the crisis it was 21 mmol/l, the vanillin-mandelic acid (+++); the urinalysis - 1% glucose; adrenaline in

the urine was 320 nmol/day. What was the preliminary diagnosis?

- A. Autonomic crisis;
- B. Cerebrovascular arterial hypertension;
- S. Hypertensive disease;
- D. Pheochromocytoma;
- E. Conn's syndrome.

7. A 32-year-old woman complained of fits of dizziness, headache, palpitations, and tremors. Over the last months such attacks had become more frequent and severe. Upon the physical examination: her skin was sweaty, the limbs' tremors, her heart rate was 110/min, her blood pressure was 210/110 mmHg; her heart sounds were normal. Laboratory tests revealed leukocytes of $9.8 \times 10^9/l$, ESR of 22 mm/h, the blood glucose of 9.8 mmol/l. Which of the following diagnostic methods should be recommended for establishing a diagnosis?

- A. the urinary aldosterone test;
- B. Dipyridamole tests;
- C. Atropine test;
- D. urinary catecholamine's test;
- E. blood sodium and potassium.

8. A 30-year-old woman complained of the increased blood pressure, severe weakness, seizures, transient paresis, palpitations, dizziness, and headache. She had been suffering from arterial hypertension for 3 years.

The ECG showed: the sinus tachycardia, the prolongation of the Q-T interval, the ST depression in V1-V6, the negative T wave in V3-V6. The urinalysis: the alkaline reaction, the relative density was 1010, transparent, negative protein and sugar. The blood potassium was 2.9 mmol/l, sodium was 160 mmol/l. What pathology did cause the arterial hypertension?

- A. Itsenko-Cushing's disease;
- B. the hypertensive disease, II stage;
- C. the hypertensive disease, III stage;
- D. Kohn's syndrome;
- E. Chronic pyelonephritis.

9. A 45-year-old man complained of an acute weakness, polyuria, the increased blood pressure till 210/120 mmHg. Laboratory tests revealed potassium of 3.12 mmol/l, sodium of 148 mmol/l, aldosterone of 715 nmol/l. What was the preliminary diagnosis?

- A. Hypertensive disease, III stage, HF IIB;
- B. Kohn's syndrome;
- C. Chronic pyelonephritis, CKF;
- D. Diabetic glomerulosclerosis, CKD;
- E. Itsenko-Cushing syndrome.

10. A 42-year-old man complained of periodic squeezing chest pains, severe proximal limbs weakness and convulsions, and dizziness. He was unwell for 2 years. Upon the physical examination: her height was 176 cm, her weight was 80 kg, the heart's borders were shifted to the left; her HR was 92 beats/min, the blood pressure was 190/100 mmHg. The ECG showed: the sinus rhythm, oblique-descending shift of the ST segment in all leads. The Zimnytsky urinalysis: polyuria, nocturia with isosthenuria, hyporeninaemia. Laboratory tests revealed potassium of 2.8 mmol/l. What was the preliminary diagnosis?

- A. Hyperparathyroidism;
- B. Itsenko-Cushing syndrome;
- C. Primary hyperaldosteronism;
- D. Essential hypertension;
- E. Pheochromocytoma.

11. A 39-year-old woman complained of the headache, weakness, the limbs paraesthesia and polyuria. Upon the physical examination: heart sounds were muffled, the HR was 94 beats/min, the blood pressure was 190/105 mmHg. Laboratory tests revealed the glucose of 5.5 mmol/l, sodium of 148 mmol/l, potassium of 2.7 mmol/l. The urinalysis: relative density of 1012, protein of 0.1 g/l, alkaline reaction, leukocytes of 3-4 in

view; erythrocyte of 2-3 in view. What was the preliminary diagnosis?

- A. Hypertensive heart disease.
- B. Amyloidosis.
- C. Diabetes insipidus.
- D. Chronic glomerulonephritis.
- E. Primary hyperaldosteronism.

12. A 32-year-old man had been complaining of muscle weakness, thirst, polyuria, and headache for a year. Upon the physical examination: his height was 180 cm, his weight was 76 kg, his skin was normal, the HR was 76 beats/min, the blood pressure was 170/105 mmHg; no oedema. Laboratory tests revealed hypokalaemia, hypernatremia, hypochloraemia. The urinalysis: the specific gravity was 1007, the alkaline reaction, the proteinuria was 0.033 g/l. What was the preliminary diagnosis?

- A. Primary hyperaldosteronism;
- B. Hyperparathyroidism;
- C. Glomerulonephritis;
- D. Itsenko-Cushing syndrome;
- E. Pyelonephritis.

13. The 32 years-old woman complained of the muscle weakness, periodic convulsions, attacks of severe general weakness, polyuria, nocuria, and elevated blood pressure. He had been unwell for 8 months. Upon the physical examination: her heart sounds were muffled, with the II

tone accent over the aorta, her blood pressure was 170/100 mmHg, no oedema. Laboratory tests revealed potassium of 3 mmol/l, glucose of 5.3 mmol/l. The urinalysis: the alkaline reaction, protein of 0.066 g/l, leukocytes of 3-5 in view, hypoisostenuria. What was the preliminary diagnosis?

- A. Hypertensive heart disease;
- B. Primary hyperaldosteronism;
- C. Chronic pyelonephritis;
- D. Itsenko-Cushing's disease;
- E. Pheochromocytoma.

14. A 30-year-old man complained of a severe muscle weakness, cramps in his arms and legs, thirst, polyuria, and nocturia. Upon the physical examination: his blood pressure was 160/100 mmHg. On the ECG: signs of hypokalaemia. The ultrasound showed the enlargement of the right adrenal gland. What was the preliminary diagnosis?

- A. Pheochromocytoma;
- B. Itsenko-Cushing syndrome;
- C. Primary hyperaldosteronism;
- D. Thyrotoxicosis;
- E. Hypothyroidism.

15. A 32-year-old woman complained of the dizziness, headache, palpitations, and tremors. She had been under the family doctor's supervision due to increased blood pressure for several months. For the

last months such attacks had deteriorated. Upon the physical examination: her skin was sweaty, with limbs tremors, her heart rate was 110 beats/min, her blood pressure was 220/140 mmHg, her heart tones were weak. Laboratory tests revealed leukocytes of $9.8 \times 10^9/l$, ESR of 22 mm/h, the blood glucose of 9.8 mmol/l. Which disease probably did cause such crisis?

- A. Pheochromocytoma;
- B. Hypertensive heart disease;
- C. Preeclampsia;
- D. Primary hyperaldosteronism;
- E. Diabetic glomerulosclerosis.

16. The patient complained of paroxysms of headache with vomiting, chills, nausea, and palpitations. She had been sick for 15 years. She lost 17 kg. Upon the physical examination: she was withdrawn, her heart sounds were rhythmic, with the 2 tone's accent above the aorta, with the systolic murmur at the apex and the aorta, her pulse was 96 bpm, her blood pressure was 300/170 mmHg. Laboratory tests revealed leukocytes of $18.10/l$, the fasting glucose of 6.8 mmol/l, the glucose during the crisis of 21 mmol/l, the reaction to vanillin-mandelic acid (+++). The urinalysis: 1% glucose, adrenaline of 320 nmol/day. What was the preliminary diagnosis?

- A. Kohn's syndrome;
- B. Cerebrovascular arterial hypertension;
- C. Hypertensive disease;
- D. Pheochromocytoma;
- E. autonomic crisis.

17. A 49-year-old woman was admitted with complaints of attacks of severe headache with temporal pulsation, dizziness, palpitations, sweating, episodic vomiting, retrosternal pain and increasing blood pressure till 280/140 mmHg. Attacks occurred spontaneously, at night or early in the morning, and lasted for 20-40 minutes. Which mechanism of the hypertensive crisis can be suspected?

- A. increasing of catecholamine;
- B. increasing of serum aldosterone;
- C. increasing of serum renin activity;
- D. increasing of vasopressin;
- E. increasing of serum thyroxine.

18. A 34-year-old woman was admitted with an acute headache, vomiting, loss of consciousness, and palpitations. Apart from two episodes of such attacks she had been otherwise well and had no significant past medical history. Upon the physical examination: her heart sounds were normal, her heart rate

was 110 bpm, her blood pressure was 230/140 mmHg. Her blood glucose was 7.8 mmol/l. What tests should be recommended?

- A. the vanillyl mandelic acid test;
- B. the cortisol test;
- C. the aldosterone excretion;
- D. the ACTH level;
- E. the monitoring of glucose level.

19. A 37-year-old woman with an abrupt elevation of the blood pressure to 230/126 mmHg headache, «hot flush» and tachycardia was admitted to the hospital. There were no apparent reasons of these attacks. The tests revealed a tumour of the medulla of the adrenal glands. The patient denied the recommended operation. Which medications are recommended for this patient?

- A. Diuretics;
- B. ACE inhibitors;
- C. alpha1 – adrenoblockers;
- D. Calcium channel blockers;
- E. beta-blockers.

20. A 30-year-old woman complained of elevated blood pressure, with severe weakness, convulsions, short-lasting intermittent paresis, palpitations, dizziness, and headache. She had a three-years medical history of the arterial hypertension. The ECG showed: the sinus tachycardia, the

Q/T interval prolongation, the ST depression in V1-V6, the negative T wave in V3-V6. The urinalysis: alkaline reaction, the relative gravity of 1010, transparent, no protein, no sugar. Laboratory tests revealed potassium of 2.9 mmol/l and sodium of 160 mmol/l. What was the cause of the arterial hypertension?

- A. Kohn's syndrome;
- B. Hypertensive disease, II stage;
- C. Kohn's syndrome;
- D. Itsenko-Cushing's disease;
- E. Chronic pyelonephritis.

21. A 42-year-old man complained of episodes of squeezing chest pains, severe proximal weakness of limbs and cramps, the occipital headache, and dizziness. He was unwell for 2 years. Upon the physical examination: his height was 176 cm, his weight was 80 kg, the pulse was 92 bpm, his blood pressure was 190/100 mmHg, the left shift of heart borders. The ECG showed: the sinus rhythm, the oblique-descending ST segment shift in all leads. The Zimnytsky urinalysis: polyuria, nocturia with isosthenuria. Laboratory tests revealed the hyporeninemia, potassium of 2.8 mmol/l. What was the preliminary diagnosis?

- A. Primary aldosteronism;
- B. Cushing's syndrome;
- C. Hyperparathyroidism;

- D. Essential hypertension;
- E. Pheochromocytoma.

22. A 32-year-old man had been complaining of muscle weakness, thirst, polyuria, and headache for a year. Upon the physical examination: his height was 180 cm, his weight was 76 kg, his heart rate was 76 bpm, his BP was 170/105 mmHg, his skin was normal, no oedema. Laboratory tests revealed hypokalemia, hypernatremia, and hypochloremia. The urinalysis: the relative density 1007, alkaline reaction, proteinuria (0.033g/l). What was the preliminary diagnosis?

- A. Cushing's syndrome;
- B. Hyperparathyroidism;
- C. Glomerulonephritis;
- D. Kohn's syndrome;
- E. Pyelonephritis.

23. A 30-year-old man complained of severe muscle weakness, limbs cramps, thirst, polyuria, and nocturia. His blood pressure was 160/100 mmHg. The ECG showed signs of hypokalaemia. The ultrasound revealed the enlargement of the right adrenal gland. What was the preliminary diagnosis?

- A. Hypothyroidism;
- B. Itsenko-Cushing syndrome;
- C. Pheochromocytoma;
- D. Thyrotoxicosis;
- E. Primary aldosteronism.

24. A 26 years-old woman complained of spasms in hands, feet and face, the chest pain, which had started in two days after the thyroid gland surgery. She had a medical history of diffuse toxic goitre, III degree, moderate severity of thyrotoxicosis. Symptoms of Khvostek and Truso were positive. The ECG showed the prolongation of

the Q-T interval. What complication had happened?

- A. Hypoparathyroidism;
- B. Hyperparathyroidism;
- C. Thyrotoxic crisis;
- D. Paresis of the laryngeal nerves;
- E. Thyrotoxic myocardiodystrophy.

TOPIC 10

MAIN METHODS OF EXAMINATION OF PATIENTS WITH ALLERGIC DISEASES. LABORATORY AND INSTRUMENTAL TESTS IN ALLERGOLOGY. BASIC SYNDROMES IN THE ALLERGOLOGY

1. Clinical manifestations of pathology of immediate hypersensitivity reactions are as following:
 - A. Allergic rhinitis
 - B. allergic rhinoconjunctivitis
 - C. allergic asthma
 - D. urticaria
 - E. All of mentioned above

2. An antigen is characterised by the following properties:
 - A. Foreignness.
 - B. Antigenicity.
 - C. Immunogenicity.
 - D. Specificity.
 - E. All of mentioned above.

3. What does occur during the release of mast cell mediators?
 - A. Increasing in cAMP
 - B. Bronchospasm
 - C. Arteriolar spasm and tissue swelling
 - D. Bronchospasm and tissue swelling
 - E. Increasing in cAMP, bronchospasm and tissue swelling

4. What does result from the simultaneous ingestion intake of the allergens and alcohol?
 - A. Accelerates the manifestation of allergic reactions
 - B. Slows down the manifestation of allergic reactions
 - C. does not produce symptoms
 - D. does not produce symptoms when ingested without subsequent exercise
 - E. produce only skin symptoms

5. Which chemical mediators are released during degranulation of mast cells?
 - A. Bradykinin
 - B. Hemotoxic factor of eosinophils
 - C. Histamine
 - D. Hemotoxic factor of eosinophils and slowly reacting substance of anaphylaxis
 - E. Bradykinin, chemotaxic factor of eosinophils, histamine and slowly reacting substance of anaphylaxis

6. An 8-year-old child had dyspeptic symptoms and diarrhoea after the ingestion of non-pasteurised cow's milk. He tolerates boiled milk, as well as goat's milk. What is the preliminary diagnosis?
- Pseudoallergy;
 - Food allergy to cow's milk;
 - Lactose intolerance;
 - Chronic gastritis with low secretory function of the stomach;
 - chronic pancreatitis.
7. Which is the urgent treatment in the case of the angioedema of the laryngopharynx?
- Intravenous administration of glucocorticoids
 - Oral administration of antihistamines
 - Parenteral administration of epinephrine
 - Hot foot baths
 - izadrin or novodrin inhalation
8. The patient had an angioedema as a result of the contact with the **daphnia fish food**. What type of food allergies can be expected in this patient?
- For meat
 - For boiled fish
 - For dried fish
 - On crayfish and crabs
 - For iodine preparations
9. Which antibodies are produced during an attack of atopic asthma?
- IgA
 - IgM
 - IgG
 - IgE
 - all of mentioned above
10. Which cells produce immunoglobulins?
- Plasmocytes;
 - T-lymphocytes;
 - Smooth cells;
 - Macrophages;
 - Stem cells.
11. How can be classified allergens of dust mites?
- household;
 - viruses;
 - CO;
 - dust;
 - NO.
12. What causes pollinosis?
- Plant pollen;
 - Viruses;
 - Carbon monoxide;
 - Ticks;
 - Nitrous oxide.
13. How can be classified allergens of house dust?
- Epidermal;
 - householdof
 - food;
 - dust;

E. Chemical.

14. The group of endoallergens include all of the following, except:

- A. proteins of the nervous system tissues;
- B. denaturation proteins of burns;
- C. retinal proteins;
- D. sperm;
- E. dust.

15. Early skin allergic reactions in atopic dermatitis are characterized by:

- A. Itching
- B. Lichenification
- C. Excoriation
- D. papules
- E. cheilitis

16. When determining the cause of a patient's hypersensitivity reaction, clinical evaluation including a thorough history is generally more reliable than testing or screening. However, specific tests may be necessary when a detailed history and physical examination do not identify the cause or trigger of persistent or severe symptoms. Of these specific tests, which of the following is most likely indicated when drugs that interfere with test results cannot be temporarily stopped before testing?

- A. Allergen-specific serum IgE tests
- B. Ophthalmic testing

C. Provocative testing

D. Skin testing

E. All answer is correct

17. If a child goes into anaphylactic shock after a bee sting, you should...

- A. Slap his face to force him out of it.
- B. Give him an epinephrine injection.
- C. Give him the kiss of life.
- D. Apply calamine lotion.
- E. All answer is correct

18. Which of these body systems causes allergic reactions?

- A. Endocrine
- B. Immune
- C. Nervous
- D. Autonomic
- E. CNS

19. An allergen is anything that triggers an allergic response. Which of these could be an allergen?

- A. Dust
- B. Food
- C. Nickel jewelry
- D. All of the above
- E. There is no right answer

20. The most severe form of allergic reaction is called anaphylaxis. Which symptoms might happen with this?

- A. Drop in blood pressure
- B. Breathing is difficult
- C. Runny nose
- D. All of the above

- E. There is no right answer
21. Which of these foods are most likely to trigger an allergy?
- A. Shellfish
 - B. Wheat
 - C. Celery
 - D. A and B
 - E. All of the above
22. Children who have an egg allergy should not get which of these vaccines?
- A. MMR
 - B. Flu
 - C. Polio
 - D. None of the above
 - E. All of the above
23. Dust mites are a common trigger for indoor respiratory allergies. Where are you most likely to find them in the home?
- A. Carpet
 - B. Drapes
 - C. Beds
 - D. All of the above
 - E. None of the above
24. A 19-years old boy is looking for you help as he suffers from urticaria since more than a years. He reports that the wheals and flares are persisting long. Marking the lesions with a pen, in fact the wheals do not move within 24 hours. The most likely diagnosis in this patient is
- A. Cold urticaria
 - B. Delayed pressure urticaria
 - C. Urticarial vasculitis
 - D. Contact urticaria
 - E. Cholinergic urticaria
25. Patients with seasonal allergic rhinitis who experience symptoms in the spring are most likely allergic to which of the following substances?
- A. Grasses
 - B. Hay
 - C. Ragweed
 - D. Trees
 - E. All answer is correct
26. Many people with seasonal allergies also have which of the following illnesses?
- A. Asthma
 - B. Bacterial conjunctivitis
 - C. Bronchitis
 - D. Sinus infections
 - E. There is no right answer
27. If a patient with severe symptoms of seasonal allergic rhinitis cannot avoid the allergen and drug treatment with corticosteroids, antihistamines, and/or decongestants is ineffective, which of the following is the most appropriate next step in management?
- A. Anti-IgE antibody therapy
 - B. Desensitization immunotherapy
 - C. H1 blocker therapy
 - D. Mast cell stabilizers

E. There is no right answer

28. Which of the following should be tried when food is the suspected allergen and symptoms persist after an elimination diet fails to identify the culprit food?

A. Conduct skin testing for nonfood allergens

B. Test for aerosolized allergens

C. Try an elemental diet, using amino acid-based formulas.

D. Try a full diet to confirm that the allergy still exists

E. There is no right answer

29. A 40-year-old female patient has been hospitalized for attacks of asphyxia, cough with phlegm. She has a 4-year history of the disease. The first attack of asphyxia occurred during her stay in the countryside. Further attacks occurred while cleaning the room. After 3 days of

inpatient treatment the patient's condition has significantly improved. What is the most likely etiological factor?

A. Household allergens

B. Pollen

C. Chemicals

D. Psychogenic

E. Infectious

30. A 16-year-old adolescent was vaccinated with DTP. In eight days there was stiffness and pain in the joints, subfebrile temperature, urticarial skin eruption, enlargement of inguinal, cervical lymph nodes and spleen. What kind of allergic reaction is observed?

A. Cytotoxic

B. Hypersensitivity of delayed type

C. Hypersensitivity of immediate type

D. Immunocomplex

E. There is no right answer

TOPIC 11

THE PRINCIPLES OF THE EMERGENCY. THE PRINCIPLES OF THE PREHOSPITAL FIRST AID

1. The basic emergency measures, the alleviation of the victim's suffering and the prevention of possible complications can be classified as the followings?
 - A. Qualified medical help;
 - B. Specialised medical help;
 - C. First aid;
 - D. All of mentioned above;
 - E. Options A and B.

2. What is the algorithm of the initial patient's assessment:
 - A. A (airway);
 - B. B (breathing);
 - C. C (circulation);
 - D. D (disability);
 - E. All of mentioned above.

3. Which is the recommended target level of BP in the case of the complicated hypertensive crisis with intracranial haemorrhage or subarachnoid haemorrhage?
 - A. 120/80 mmHg;
 - B. 90/60 mmHg;
 - C. should exceed by 15-20% the normal value;
 - D. should exceed by 5-10% the normal value;
 - E. The level depends on the patient's well-being.

4. Which mechanisms of the cardiac arrest can you pinpoint?
 - A. ventricular fibrillation or fluttering;
 - B. pulseless ventricular tachycardia;
 - C. Asystole;
 - D. pulseless electrical activity;
 - E. All of mentioned above.

5. What is the normal compression-to-ventilation ratio of CPR?
 - A. 2:30
 - B. 30:2.
 - C. 15:10
 - D. 30:3
 - E. 25:5

6. What is the clinical trend of the syncope?
 - A. duration longer than 2 minutes;
 - B. resolve spontaneously within <20 s;
 - C. accompanied by the chest pain;
 - D. options A and C;
 - E. All of mentioned above.

7. Define the right place of electrodes for defibrillation?
 - A. Apex-anterior;
 - B. On both sides;

- C. Apical-posterior;
- D. Anterior-posterior;
- E. All of mentioned above.

8. What is the first aid in the case of respiratory failure?

- A. Restoration of airway patency;
- B. CPR with a ratio of 25:15;
- C. Oxygen therapy;
- D. HBO;
- E. All of mentioned above.

9. A pulsating bright red blood escaping from the circulatory system from damaged blood vessels, sometimes intermittent is typical for the following?

- A. Arterial bleeding.
- B. Venous bleeding.
- C. Capillary bleeding.
- D. Internal bleeding.
- E. All of mentioned above.

10. How long a tourniquet should not be used on a patient's limb in the case of bleeding?

- A. No longer than 1 hour in the warm weather and no longer than 2 hours in the cold weather;
- B. No longer than 1 hour in the cold weather and no longer than 2 hours in the warm weather.
- C. for 1 hour;

D. for 15 minutes in the warm weather, for 30 minutes in the cold weather.

E. so long as it is needed.

11. What is the management of a conscious casualty who has diabetes and low blood sugar?

- A. Give water
- B. Give nothing
- C. Give sugar
- D. Give insulin
- E. All answer is correct

12. What are the four main vital signs?

- A. BP, O2 Sat, Temp, Pulse
- B. BP, Respiration, Temp, Pulse
- C. BP, Respiration, Temp, O2 Sat
- D. BP, Respiration, Pulse, Pain
- E. All answer is correct

13. Which of the following is NOT a common cause of cardiac arrest in children?

- A. Cardiac disease
- B. Poisoning
- C. Airway obstruction
- D. Smoke inhalation
- E. All answer is correct

14. For cardiopulmonary resuscitation (CPR), guidelines for health care professionals from the American Heart Association are followed. After

determining that someone is unresponsive and not breathing, which of the following is the next step?

- A. Determining whether ventricular fibrillation (VF) is present
- B. Calling for help
- C. Determining whether ventricular tachycardia (VT) is present
- D. Starting chest compressions
- E. There is no right answer

15. Giving chest compressions during CPR can result in unintended injuries. Which of the following complications of chest compression is the most common?

- A. Bone marrow emboli to the lungs
- B. Rupture of the stomach
- C. Laceration of the liver
- D. Fractured ribs
- E. All answer is correct

16. To help restore upper airway patency in an unconscious patient in an emergency setting, the head tilt-chin lift maneuver is used during bag-valve-mask (BVM) ventilation. Which of the following is a relative contraindication to performing this maneuver?

- A. Do-not-resuscitate order
- B. Specific advance directive
- C. Suspected spinal injury

D. There are no contraindications

E. All answer is correct

17. Placing the patient in the sniffing position prior to using the jaw-thrust or head tilt-chin lift maneuvers is important for optimal air passage. With the patient supine, proper sniffing position aligns the external auditory canal with which of the following structures?

- A. Chin
- B. Shoulders
- C. Sternal notch
- D. Lungs
- E. There is no right answer

18. There are several steps to ensuring that the jaw-thrust maneuver is effective. Which of the following is the most appropriate initial step in this maneuver?

- A. Position the patient prone.
- B. Place tips of fingers under the patient's chin and pull up on the soft tissues.
- C. Push down on the patient's forehead.
- D. Stand at the head of the stretcher and place your palms on the patient's temple and fingers under the mandible
- E. There is no right answer

19. While performing CPR on an infant, another rescuer appears on the scene, what do you do next?

- A. Have the second rescuer help with CPR, to minimize fatigue
- B. Wait until exhausted, then switch
- C. Immediately transport the patient
- D. Have the second rescuer begin ventilations; ratio 30:2
- E. There is no right answer

20. How long should you check for breathing while performing CPR?*

- A. Do not check for breathing, continue chest compressions
- B. 2 seconds
- C. 5 seconds
- D. No longer than 10 seconds
- E. 30 seconds

21. When you try to give an unresponsive adult a rescue breath and the chest does not appear to rise, what would you do next?

- A. Perform abdominal thrusts
- B. Repeat the head tilt/chin lift maneuver and attempt the breath again
- C. Begin CPR
- D. Go call 911
- E. All answer is correct

22. After finding someone who is unresponsive, has a pulse but does not

appear to be breathing, you find you are unable to give them CPR, what do you do next?

- A. Repeat the head tilt/chin lift maneuver and attempt the breath again
- B. Begin CPR
- C. Abdominal thrusts
- D. Heimlich maneuver
- E. There is no right answer

23. Arriving first to the scene, you find an unresponsive person with no pulse that has thrown up. You feel CPR is not something you are comfortable giving them. What would be the next best thing for you to do?

- A. Wipe off the face or cover with a shirt
- B. Compression only CPR
- C. Go and get help
- D. Do not initiate resuscitation
- E. Heimlich maneuver

24. Before responding to a first aid scenario, what is the first question you should ask at the scene?

- A. Age of the injured or ill person
- B. Time of the injury
- C. Nature of the injury
- D. Safety of the scene
- E. All answer is correct

25. Personal protective equipment consists of the following items:

- A. Gloves

- B. Mask
- C. Eye shield
- D. A+B
- E. All of the above

26. What would your next step be after you are performing single-person CPR and the AED (Automatic External Defibrillator) advises a shock?

- A. Call for help
- B. Resume CPR with chest compressions
- C. Check for a pulse
- D. Resume ventilation
- E. All of the above

27. As a daycare provider that is working alone, one of your three-year-old children isn't feeling well and lays down for a nap. After checking on the child, you notice they are not breathing and are blue in color. What would be the best step to take?

- A. Do back blows.
- B. Do a blind finger sweep.
- C. Call 103.
- D. Deliver two minutes of CPR
- E. There is no right answer

28. Properly operating an AED include the following steps:

A. Power on the AED, attach electrode pads, shock the person, and analyze the rhythm

B. Power on the AED, attach electrode pads, analyze the rhythm, and shock the person

C. Go and get Power on the AED, analyze the rhythm, attach electrode pads, and shock the person

D. Power on the AED, shock the person, attach electrode pads, and analyze the rhythm

E. The sequence of actions is not important

29. After someone has fainted what position should they be in to aid recovery?

- A. Lay flat
- B. Lay down with legs raised
- C. Sit in chair
- D. Stand upright
- E. There is no right answer

30. What is not a sign of shock?

- A. Pale, clammy skin
- B. Increased pulse rate
- C. Wide eyes and open mouth
- D. Nausea
- E. All of the above

ANSWER TABLES

TOPIC 1

1	2	3	4	5	6	7	8	9	10
A	D	A	C	E	A	B	A	C	A
11	12	13	14	15	16	17	18	19	20
A	E	B	D	A	C	D	A	A	A
21	22	23	24	25	26	27	28	29	30
B	B	D	A	B	C	B	B	E	A

TOPIC 2

1	2	3	4	5	6	7	8	9	10
D	A	B	A	D	A	B	A	B	E
11	12	13	14	15	16	17	18	19	20
B	D	B	A	B	A	A	B	A	B,C
21	22	23	24	25	26	27	28	29	30
A,D	A,C	C,D	D	A,D	C	C	C	B	A
31	32	33	34	35	36	37	38	39	40
D	E	A	A	E	A	E	D	A	B
41	42	43	44	45	46	47	48	49	50
C	D	E	B	E	A	D	A	E	D
51	52	53	54	55	56				
C	A	C	D	E	B				

TOPIC 3

1	2	3	4	5	6	7	8	9	10
A	C	C	B	B	B	D	A	C	E
11	12	13	14	15	16	17	18	19	20
A	A	E	E	D	C	E	C	D	B
21	22	23	24	25	26	27	28	29	30
A	A	B	D	C	B	B	D	A	D
31	32	33	34	35	36	37	38	39	40
B	B	D	C	C	B	A	D	C	C
41	42	43	44	45	46	47	48	49	50
D	C	B	D	A	A	C	E	A	B

51	52	53	54	55	56	57	58	59	60
B		E	D	B	C	C	A	D	D
61	62	63	64	65	66	67	68	69	70
C	C	A	D	B	E	A	D	C	C
71	72	73	74	75	76	77	78	79	80
E	A	B	B	D	C	A	D	C	E
81	82	83	84	85	86	87	88	89	90
D	A	E	D	C	B	C	E	C	C
91	92	93	94	95	96	97	98	99	100
D	A	E	E	A	E	B	A	E	D

TOPIC 4

1	2	3	4	5	6	7	8	9	10
B	D	E	C	A	C	E	D	C	E
11	12	13	14	15	16	17	18	19	20
D	B	A	C	D	C	D	E	E	C
21	22	23	24	25	26	27	28	29	30
D	E	C	A	A	B	B	A	E	B
31	32	33	34	35	36				
C	D	D	B	D	A				

TOPIC 5

1	2	3	4	5	6	7	8	9	10
C	D	C	D	D	B	E	C	D	E
11	12	13	14	15	16	17	18	19	20
B	C	B	A	D	C	C	D	B	A
21	22	23	24	25	26	27	28	29	30
A	B	A	C	B	A	E	B	A	C

TOPIC 6

1	2	3	4	5	6	7	8	9	10
D	A	B	A	B	C	C	A	B	D
11	12	13	14	15	16	17	18	19	20

B	C	B	A	A	C	D	B	D	C
21	22	23	24	25	26	27	28	29	30
C	A	C	D	B	C	B	A	A	C

TOPIC 7

1	2	3	4	5	6	7	8	9	10
C	B	A	B	B	C	D	D	D	D
11	12	13	14	15	16	17	18	19	20
A	C	A	D	A	C	B	A	B	B
21	22	23	24	25	26	27	28	29	30
C	D	B	A	A	B	C	D	C	D

TOPIC 8

1	2	3	4	5	6	7	8	9	10
B	B	C	B	B	E	B	B	A	A
11	12	13	14	15	16	17	18	19	20
C	A	A	D	A	D	A	C	B	C
21	22	23	24	25	26	27	28	29	30
C	A	B	D	A	D	C	B	A	D

TOPIC 9

1	2	3	4	5	6	7	8	9	10
A	D	A	E	E	D	D	D	B	C
11	12	13	14	15	16	17	18	19	20
E	A	B	C	A	D	A	A	C	C
21	22	23	24						
A	D	E	A						

TOPIC 10

1	2	3	4	5	6	7	8	9	10
E	E	D	A	E	B	B	A	D	D
11	12	13	14	15	16	17	18	19	20
A	A	B	E	A	A	B	B	D	D
21	22	23	24	25	26	27	28	29	30
D	B	C	C	D	A	B	C	A	D

TOPIC 11

1	2	3	4	5	6	7	8	9	10
C	E	D	E	B	B	E	A	A	B
11	12	13	14	15	16	17	18	19	20
D	B	A	B	D	C	C	D	A	D
21	22	23	24	25	26	27	28	29	30
B	A	B	D	E	B	D	B	B	C

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