

Nr 1. The presence of red cell casts in a patient with hematuria is characteristic of:

- A. glomerular bleeding.
- B. calyceal bleeding.
- C. urethral bleeding.
- D. cystitis.
- E. all the answers are correct.

Nr 2. Nephrotic syndrome is characterized by:

- A. proteinuria < 3.5 g/dl.
- B. dyslipidemia.
- C. low albumin in urine.
- D. high albumin in blood.
- E. the correct answers are A and B.

Nr 3. Urinary tract infection is regarded as complicated in:

- A. pregnant women.
- B. men.
- C. individuals with diabetes mellitus.
- D. all the above answers are correct.
- E. the correct answers are A and C.

Nr 4. The most common kidney stones consist of:

- A. calcium oxalate with calcium phosphate.
- B. calcium phosphate alone.
- C. uric acid.
- D. magnesium ammonium phosphate (struvite).
- E. cystine.

Nr 5. Renal ultrasonography **is not** appropriate for:

- A. renal size measurement.
- B. characterizing renal masses as cystic or solid.
- C. visualization a normal adult ureter.
- D. diagnosis of polycystic kidney disease.
- E. diagnosis of pelvicalyceal dilatation.

Nr 6. Renoprotection consists of:

- A. the normalization of blood pressure.
- B. lowering proteinuria < 0.3 g/24 h.
- C. angiotensin converting enzyme inhibitor in proteinuria > 1g/24h.
- D. all the above.
- E. the correct answers are A and C.

Nr 7. The best method to assess excretory renal function is:

- A. sodium excretion in urine.
- B. glomerular filtration rate.
- C. specific gravity of urine.
- D. urine osmolality.
- E. urine sediment examination.

Nr 8. In dehydrated patient with acute kidney injury you should consider as a therapeutic option:

- A. diuretic (e.g. frusemide).
- B. non-steroidal nantiinflammatory drug (e.g. ibuprofen).
- C. ACE inhibitor (e.g. enalapril).
- D. intense hydration (e.g. 3-4 litres of physiological saline- 0.9% NaCl).
- E. the correct answers are A and D.

Nr 9. In a patient with acute kidney injury due to obstruction of urinary tract the treatment of choice is as follows:

- A. the elimination of the obstruction by medical therapy, instrumentation or surgery.
- B. diuretic administration.
- C. pain-relieving drug administration.
- D. dialysis therapy.
- E. kidney transplantation.

Nr 10. In a patient with chronic kidney disease (CKD) serum creatinine on the last visit was 4.5 mg/dL, and glomerular filtration rate (creatinine clearance) was 20 mL/min. Due to generalized edema the patient requires diuretic administration. Which of the following diuretics is the best option for this patient?

- A. thiazide diuretic.
- B. mannitol.
- C. carbon anhydrase inhibitor.
- D. loop diuretic.
- E. there is no effective diuretic at this stage of CKD.

Nr 11. A 32-year-old female suffering from hypertension for the last 5 years plans to become pregnant. She is treated with enalapril and hydrochlorothiazide reaching target values below 140/90 mm Hg. In hypotensive therapy, the medical advice is as follows:

- A. continue previous therapy.
- B. replace enalapril with calcium channel blocker when she becomes pregnant.
- C. replace enalapril with calcium channel blocker or methyldopa before she becomes pregnant, and, if possible, stop hydrochlorothiazide or replace it with another diuretic (e.g. dihydralazine or methyldopa).
- D. replace enalapril with losartan, continue diuretic.
- E. add methyldopa, because in pregnancy the blood pressure will increase.

Nr 12. The most common cause of the end-stage renal failure requiring renal replacement therapy (dialyses or kidney transplantation) is:

- A. chronic glomerulonephritis.
- B. urinary tract infection.
- C. diabetic nephropathy.
- D. hypertension.
- E. acute renal failure/acute kidney injury.

Nr 13. A 57-year-old male with a history of well-controlled hypertension for many years came to the doctor's office due to elevated blood pressure values in the last weeks (160/110, 150/100 mm Hg). He is treated with enalapril 20 b.i.d. and amlodypine 10 q.d. In the laboratory test, serum creatinine is 0.89mg/dl, serum sodium is 139 mEq/l, serum potassium is 5.45 mEq/l, fasting glucose is 89 mg%. Which of the following options should be introduced for better control of his hypertension?

- A. increase the dose of enalapril to 30 mg b.i.d.
- B. add angiotensin II receptor blocker e.g. losartan.
- C. add beta-blocker (e.g. metoprolol).
- D. add mineralocorticoid receptor antagonist (e.g. spironolactone).
- E. add diuretic (e.g. hydrochlorothiazide).

Nr 14. A 30-year-old man, sexually active, complains of painful voiding localized in the urethra, itch around urethra. He also discovered purulent urethral discharge.

The most probable diagnosis is the following:

- A. cystitis.
- B. prostatitis.
- C. benign prostatic hyperplasia.
- D. urethritis.
- E. urolithiasis.

Nr 15. After asthma had been diagnosed, a patient received inhaled budesonide 2 x 200 mcg and salbutamol as a rescue medication. After 4 weeks the patient made a control visit. Now he reports significant improvement, but he wakes-up at night due to cough at least once a week, he still reports worse exercise tolerance, the use of salbutamol is 1-2 doses per day. The most appropriate therapeutic decision is:

- A. continue the so-far treatment regime, because the improvement has been achieved.
- B. recommend the use of salbutamol in regular doses, e.g. 2 doses every 6 hrs.
- C. add theophylline.
- D. add cromones.
- E. add long-acting beta-mimetic or replace inhaled steroid with a composite formulation, containing both drugs. The increase of the dose of inhaled steroid should be considered.

Nr 16. The first choice treatment for the patient with acute asthma attack is:

- A. rapidly acting inhaled bronchodilators.
- B. beta-mimetics given orally or intravenously.
- C. inhaled steroids.
- D. theophylline and steroids intravenously.
- E. adrenalin subcutaneously.

Nr 17. The treatment of choice in the mild and symptomless COPD is:

- A. monitoring of the rate of bronchial obstruction progression, no other recommendations.
- B. anti-nicotine therapy and respiratory rehabilitation.
- C. high doses of inhaled steroids, long-acting beta-mimetics, short-acting beta-mimetics on demand – the treatment should be initiated as early as possible in order to inhibit the disease progression.
- D. steroids – oral or depot.
- E. oxygen therapy and respiratory rehabilitation.

Nr 18. Which of the following statements **best** describes the diagnostic value of D-dimers in pulmonary embolism?

- A. elevated concentration of D-dimers is specific to pulmonary embolism.
- B. low concentrations allow to exclude pulmonary embolism with high probability.
- C. D-dimers help to differentiate between thrombo-embolic processes and inflammatory or neoplastic diseases.
- D. high concentrations are detected especially in patients with pulmonary infarction.
- E. high concentrations are detected especially in patients with infarction of the right ventricle.

Nr 19. The pathogen most frequently causing community-acquired pneumonia is:

- A. *Legionella pneumophila*.
- B. viruses.
- C. *Klebsiella pneumoniae*.
- D. *Streptococcus pneumoniae*.
- E. *Pneumocystis carini*.

Nr 20. For which of the following rheumatic diseases the typical feature is a symmetric synovitis involving wrists and small joints of the hands and feet:

- A. *Ankylosing spondylitis*.
- B. gout.
- C. *Rheumatoid arthritis*.
- D. *Reiter's syndrome*.
- E. *Lupus erythematosus systemicus*.

Nr 21. A 55-year-old obese male experienced at night a strong pain and swelling involving the first metatarsophalangeal joint of the left foot with concomitant warmth and redness of the skin in this area. The symptoms disappeared several days later. Shortly thereafter however, (as a consequence of abundant dinner with alcohol) there occurred an equally painful swelling and effusion in the right knee. In the synovial fluid sample taken for a diagnostic purpose the most likely finding is:

- A. Reiter's cells.
- B. rheumatoid factor (RF).
- C. intracellular bacteria (e.g. gonococcal infection).
- D. needle-shaped strongly negative birefringent crystals (in polarized light microscopy).
- E. rhomboid-shaped or rectangular weakly positive birefringent crystals (in polarized light microscopy).

Nr 22. A 32-year-old female shortly after delivery started to complain about weakness, elevated temperature, migratory joint pain and swelling, hair loss and nontender oral ulcers. After a sun exposure she developed erythematous skin lesions on cheeks and dorsal part of the nose. The control chest radiograph revealed bilateral flattening of costo-diaphragmal angles. In laboratory testing: HGB 10.5 g/dl, WBC 2.0 G/l, PLT 120 G/l. **The most likely** diagnosis in this case is:

- A. lymphoma.
- B. mesothelioma.
- C. discoid lupus.
- D. lupus erythematosus systemicus.
- E. Sjögren's syndrome.

Nr 23. To the group of necrotizing vasculitides belong the following entities **except for**:

- A. Wegener's granulomatosis.
- B. *Polyarteritis nodosa*.
- C. Takayasu's arteritis.
- D. *Systemic sclerosis*.
- E. giant cell arteritis.

Nr 24. Which from the following situations does not require treatment consisting in bisphosphonates administration as well as vitamin D and calcium supplementation?

- A. *senile osteoporosis*.
- B. *postmenopausal osteoporosis*.
- C. *poststeroid osteoporosis*.
- D. *periarticular osteoporosis*.
- E. *secondary osteoporosis*, e.g. related to endocrine conditions.

Nr 25. The hallmark of which from the following rheumatic diseases is the absence of rheumatoid factor:

- A. *Rheumatoid arthritis.*
- B. Ankylosing spondylitis.
- C. Sjögren's syndrome.
- D. *Lupus erythematosus systemicus.*
- E. rheumatoid factor may be present in all entities named above.

Nr 26. The aim of chemoprophylaxis against tuberculosis is:

- A. preventing disease development in infected individuals.
- B. active infection treatment.
- C. preventing infection transmission.
- D. protection against exposure to mycobacteria.
- E. disease recurrence prevention.

Nr 27. The first line therapy in sarcoidosis is:

- A. antibiotics.
- B. inhaled glucocorticosteroids.
- C. systemic glucocorticosteroids.
- D. long acting β -mimetics.
- E. cytotoxic agents.

Nr 28. Non-complicated pneumonia caused by influenza virus requires:

- A. hospital based treatment.
- B. symptomatic treatment.
- C. antiviral treatment.
- D. oral antibacterial therapy.
- E. intravenous antibacterial therapy.

Nr 29. Which of the following **is not** an unfavourable factor in hospital-acquired pneumonia?

- A. respiratory failure.
- B. prolonged mechanic ventilation.
- C. age < 60 yrs.
- D. bilateral pneumonia.
- E. chronic respiratory disease.

Nr 30. QT interval in ECG reading is measured:

- A. from the start of QRS complex to the start of T wave.
- B. from the start of QRS complex to the end of T wave.
- C. from the end of QRS complex to the start of T wave.
- D. from the end of QRS complex to the end of T wave.
- E. from the highest point of QRS complex to the start of T wave.

Nr 31. Which of the following **is not** a pulmonary hypertension symptom?

- A. hoarseness.
- B. lower extremities edema.
- C. stenocardia.
- D. loss of appetite.
- E. increased sputum production.

Nr 32. Which of the medications listed below reduce the risk of cardio-vascular incidents and death in patients suffering from coronary disease?

- A. nitrates.
- B. statins.
- C. calcium channel blockers.
- D. the correct answers are A and B.
- E. none of the above.

Nr 33. What ECG signs may be found in a patient with acute coronary syndrome?

- A. elevated ST segments.
- B. new left bundle branch block.
- C. inverted T-wave.
- D. the correct answers are A and B.
- E. the correct answers are A,B,C.

Nr 34. The most frequent cause of chylothorax is:

- A. terminal renal failure.
- B. acute renal failure.
- C. neoplasm.
- D. heart insufficiency.
- E. liver cirrhosis.

Nr 35. The weakening of the 1st heart sound and systolic murmur over the apex which radiates to the left armpit are characteristic of:

- A. mitral valve insufficiency.
- B. aortic valve insufficiency.
- C. tricuspid valve insufficiency.
- D. atrial septal defect.
- E. patent arterial duct.

Nr 36. The group 0 freshly frozen plasma may be transfused to:

- A. all patients, regardless AB0 group.
- B. patients with group A.
- C. patients with group B.
- D. patients with group 0.
- E. patients with group AB.

Nr 37. Which of the following **is not** a characteristic feature of tetralogy of Fallot?

- A. ventricular septal defect.
- B. pulmonary trunk stenosis.
- C. a shift of aortic ostium to the right, over the interventricular foramen.
- D. right ventricle hypertrophy.
- E. atrial septal defect.

Nr 38. Which of the following **is not** a risk factor of venous thrombo-embolic disease?

- A. congestive heart disease.
- B. hormonal replacement therapy.
- C. nephrotic syndrome.
- D. chronic obstructive pulmonary disease.
- E. deficiency of factor VIII.

Nr 39. A 32-year-old male visited the admission room with the fever reaching 40°C, bilateral ankle joints arthritis, painful reddish subcutaneous pretibial nodes. The symptoms had an acute onset and have lasted for the last week. During this time he has been treated with an antibiotic, without any improvement. His chest X-ray revealed bilateral enlargement of the hilar shadow. WBC 11.3 G/L, CRP 98 mg/L. The most probable diagnosis is:

- A. pneumonia.
- B. lymphoma.
- C. disseminated neoplastic disease.
- D. sarcoidosis.
- E. tuberculosis.

Nr 40. According to the current Prophylactic Vaccination Program obligatory immunization against tuberculosis is conducted:

- 1) in newborns;
- 2) in patients at the age of 6;
- 3) in patients at the age of 12 in the case of negative tuberculin test;
- 4) in patients at the age of 19 in the case of negative tuberculin test;
- 5) in the first year students of medical studies, in the case of negative tuberculin test.

The correct answer is:

- A.** only 1. **B.** 1,2. **C.** 1,2,3. **D.** 1,2,3,4. **E.** all of the above.

Nr 41. According to the current Prophylactic Vaccination Program obligatory (financed by the government) immunization against hepatitis B is conducted in the following groups of people at risk of infection **except for**:

- A.** people of medical profession at risk of infection.
B. people from the close society of patients with hepatitis B and carriers of hepatitis virus B (HBV).
C. patients before operation.
D. patients before operative procedures in extracorporeal circulation.
E. HIV positive patients.

Nr 42. The parents of a 13-month-old child who is diagnosed with coeliac disease are asking what products could be used in their child diet. Which of the following products are allowed?

- | | |
|---------------------------|-------------------|
| 1) rice products; | 4) rye products; |
| 2) wheat products; | 5) corn products. |
| 3) potato flour products; | |

The correct answer is:

- A.** 1,2,4. **B.** 1,3,4. **C.** 1,3,4,5. **D.** 1,3,5. **E.** 3,4,5.

Nr 43. Which of the following antibiotics should be used in treatment of a 4-year-old child with pneumonia of *Mycoplasma pneumoniae* etiology?

- A.** doxycycline. **B.** amoxicillin. **C.** ampicillin. **D.** cefuroxime. **E.** clarithromycin.

Nr 44. The most common pathogenic factor of the haemorrhagic cystitis in children is:

- A.** *Pseudomonas sp.* **D.** *Candida albicans.*
B. *Proteus sp.* **E.** *Staphylococcus saprophyticus.*
C. *Adenovirus.*

Nr 45. The treatment of acute pyelonephritis in children **does not** include:

- A.** ampicillin. **D.** nitrofurantoin.
B. amoxicillin with clavulanic acid. **E.** second-generation cephalosporin.
C. amoxicillin.

Nr 46. Which of the following are bad prognosis factors in acute lymphoblastic leukemia in children?

- 1) age above 10 yrs at the time of diagnosis;
- 2) initial leukocytosis above 20 000/mm³;
- 3) being a female;
- 4) t(9;22) or t(4;11) translocation in neoplastic cells;
- 5) steroid therapy resistance.

The correct answer is:

- A. 1,2,4,5. B. 1,2,3,4. C. 2,3,4,5. D. 1,3,4,5. E. all of the above.

Nr 47. Morning vomiting, headache, nystagmus, ataxia suggest the diagnosis of:

- A. chronic peptic ulcer disease. D. brain tumor of the posterior cranial cavity.
B. epilepsy. E. schizophrenia.
C. vision defect.

Nr 48. The control of urine culture in a child treated because of urinary system inflammation with persisting symptoms should be done:

- A. 48 hours after starting the treatment. D. 12 hours after the end of the treatment.
B. 12 hours after starting the treatment. E. 72 hours after starting the treatment.
C. 48 hours after the end of the treatment.

Nr 49. The cause of bleeding from the lower part of the alimentary tract in infants could be all of the following **except for**:

- A. congenital defect of the alimentary tract. D. pylorostenosis.
B. intussusception. E. *Salmonella sp.* infection.
C. food allergy.

Nr 50. Pneumonia of *Chlamydia trachomatis* etiology:

- 1) could be diagnosed in newborns in the first weeks of life;
- 2) is an atypical infection diagnosed most usually in school age children;
- 3) has non-productive, convulsive, whooping cough as a typical clinical symptom;
- 4) has conjunctivitis, rhinitis, cough and vomiting as typical clinical symptoms.

The correct answer is:

- A. 1,2. B. 2,3. C. none of the above. D. 1,4. E. 3,4.

Nr 51. What is **the most probable** etiology of pneumonia

- with primary multifocal then lobar inflammatory changes and abscesses in a chest X-ray
- with high leucocytosis
- in which leucopenia as a bad prognosis factor could appear
- in which clinical symptoms appear suddenly with high fever and cough?

- A. *Pneumocystis carini*. D. *Staphylococcus aureus*.
B. *Chlamydia pneumoniae*. E. *Mycoplasma pneumoniae*.
C. *Pseudomonas aeruginosa*.

Nr 52. In the case of the following symptoms: meconium obstruction in neonatal period, malabsorption syndrom, fatty stools, prolapse of the anus, returning pneumonia, diagnostics of which disease should be conducted in the first place?

- A. *colitis ulcerosa*.
- B. *coeliac disease*.
- C. food allergy.
- D. *mucoviscidosis*.
- E. *haemosiderosis*.

Nr 53. Today early in the morning a 12-year-old boy with a two-day history of intense epigastric pain vomited blood few times and noticed two tarry stools.

The most probable diagnosis is:

- A. Meckel's diverticulum.
- B. *oesophageal varices*.
- C. peptic ulcer.
- D. Mallory-Weiss syndrome.
- E. arteriovenous malformation.

Nr 54. A 15-year-old boy with a few-months history of diarrhea associated with the passage of blood or mucus and painful cramps notified pain in left hypogastrium and his mother noticed loss of appetite. The patient has lost 8 kg in the last two months. Laboratorial examinations showed high C-reactive protein concentration. In endoscopic examination superficial ulcerations covered by fibrin in the rectum were noticed. In histopathological study - crypt abscesses. The most probable diagnosis is:

- A. solitary rectal ulcer syndrome.
- B. Crohn's disease.
- C. ulcerative colitis.
- D. ischemic colitis.
- E. collagenous colitis.

Nr 55. A 5-year-old boy suffers from functional constipation. Which of the following drugs you won't apply in the treatment?

- A. lactulose.
- B. paraffin.
- C. macrogol.
- D. phosphatic enema.
- E. loperamide.

Nr 56. Which of the following diets should be applied to a 10-year-old boy with acute pancreatitis?

- A. elimination diet.
- B. light diet.
- C. high-fiber diet.
- D. low-fiber diet.
- E. fasting.

Nr 57. A 15-year-old boy has low back pain, nausea, loss of appetite and fever (> 39 °C). Laboratorial examinations showed high C-reactive protein concentration, leucocyturia and bacteriuria. The most probable diagnosis is:

- A. urinary calculus.
- B. idiopathic nephritic syndrome.
- C. acute pyelonephritis.
- D. glomerulonephritis.
- E. renal amyloidosis.

Nr 58. A 3-week-old male neonate suffers from anxiety and has 2-day history of intensive vomiting after each breast-feeding. In medical examination the doctor felt a hard mass (olive shaped) in the epigastrium. The most probable diagnosis is:

- A. esophageal atresia.
- B. pylorostenosis.
- C. anal atresia.
- D. food allergy.
- E. acute gastritis.

Nr 59. Physical examination of a 5-year-old boy revealed no pulse on femoral arteries. The above-mentioned symptom is characteristic of congenital heart defect such as:

- A. PDA. B. SA. C. VSD. D. ToF. E. CoA.

Nr 60. The propagation of echocardiographic examination caused that tendinous cords in the left ventricle of the heart are more commonly observed. Which of the sentences related to tendinous cords is **false**?

- A. tendinous cords may cause heart murmur.
B. tendinous cords include conduction system cells.
C. tendinous cords may cause repolarization abnormalities in ECG.
D. tendinous cords may cause ventricular arrhythmia.
E. children with tendinous cords in the left ventricle should limit physical efforts and should not exercise during physical education at school.

Nr 61. The drugs of the first choice in hypertension are among others angiotensin converting enzyme inhibitors (ACEI). The **contraindication** against ACEI is:

- A. hypertension with significant hypertrophy of left ventricle.
B. hypertension in infancy.
C. hypertension in a child with bilateral renal arteries stenosis.
D. hypertension with coexisting diabetes mellitus.
E. hypertension with coexisting dyslipidaemia.

Nr 62. Chest X-ray is still basic diagnostic examination in heart diseases. Which of the sentences related to interpretation of chest x-ray is **incorrect**?

- A. cardio-pulmonary index over 0.5 indicates heart enlargement.
B. a projection of the right lower heart outline indicates right atrium enlargement.
C. in left ventricle hypertrophy, the apex of the heart is moved upward.
D. the abnormal left upper heart outline with proximal part of the descending aorta resembling a figure "3" indicates coarctation of the aorta.
E. diminish vessel markings are characteristic of heart defects with decreased pulmonary flow.

Nr 63. The most common congenital heart defect is ventricular septal defect (20-30 % of all congenital heart defects). Which one of the sentences related to ventricular septal defect is **false**?

- A. the magnitude of cardiac shunt through septal defect depends on the dimension of defect and pulmonary resistance.
B. the left-to-right shunt through septal defect leads to volume overload of the left ventricle and increased pulmonary flow.
C. increased pulmonary flow causes progressing structural abnormalities in the pulmonary arterioles and increase in pulmonary resistance up to irreversible pulmonary hypertension.
D. pathognomonic for ventricular septal defect is a loud murmur involving systole and diastole of the heart, best heard to the left and in the lower part of the sternum.
E. in some cases spontaneous closure of ventricular septal defect is possible.

Nr 64. Vitamin D deficiency in children leads to short stature appearance, because the deficiency of active metabolites of vitamin D slows the growth of cartilages.

- A. the first sentence is true, the second false.
- B. the first sentence is false, the second true.
- C. both sentences are false.
- D. both sentences are true, but there is no causal link between them.
- E. both sentences are true and there is a causal link between them.

Nr 65. A 10-year-old boy, previously healthy, has been feeling ill for several weeks. He presents weakness, lack of appetite and polyuria. He feels thirsty. Clinical examination: pulse 110/min (1.83 Hz), quick and deep breath. Urine findings: gravity 1.035g/ml, pH 5.5, leukocytes and proteins absent, glucose +++++, ketone bodies +++++. In this boy, we can expect the presence of the following medical problems:

- A. respiratory alkalosis and osmotic diuresis.
- B. metabolic alkalosis and osmotic diuresis.
- C. metabolic acidosis and osmotic diuresis.
- D. respiratory acidosis and diabetes insipidus.
- E. respiratory alkalosis and diabetes insipidus.

Nr 66. Which from the following symptoms suggest hypothyroidism?

- A. short stature, vitiligo stains, constipation, breakable hair, Graefe's symptom, manic psychosis.
- B. vitiligo stains, constipation, greasy hair, depression.
- C. short stature, supraventricular cardiac arrhythmias, vitiligo stains, constipation, greasy hair, Graefe's symptom, weakness.
- D. short stature, constipation, breakable hair, depression, weakness.
- E. vitiligo stains, constipation, breakable hair, depression, thrombocytopenia.

Nr 67. What is the most common etiological factor for heart muscle inflammation in children?

- A. Epstein-Barr virus.
- B. Cytomegalovirus.
- C. Coxsackie group B virus.
- D. *Mycoplasma pneumoniae*.
- E. *Streptococcus aureus*.

Nr 68. In congenital heart diseases dependent on ductus arteriosus flow, immediately after a newborn delivery the permanent infusion of E1 prostaglandin is essential, which enables the maintenance of ductus arteriosus patency.

- A. the first statement is true and second is false.
- B. the first statement is false and second is true.
- C. both statements are true and there is cause-effect relationship between them.
- D. both statements are false.
- E. both statements are true but there is no cause-effect relationship between them.

Nr 69. A patient operated for the large retrosternal nodular goitre developed right sided myosis, ptosis and enophthalmos after the procedure. Where in your opinion the injury could occur?

- A. oculomotorius nucleus in the brain.
- B. trunk of the vagus nerve.
- C. orbit.
- D. cervicothoracic sympathetic nerves.
- E. eye-ball.

Nr 70. Which of the following excludes the deceased as a cadaver organ donor?

- A. objection expressed by the deceased before his death.
- B. objection of the family.
- C. positive testing for HCV.
- D. alcoholism.
- E. ICU treatment for the 14 days before the death.

Nr 71. Twenty four hours after cerebral injury a patient develops increasing headache, nausea and apathy. Which of the following is the most likely diagnosis?

- A. increasing intracranial hypertension.
- B. hypertensive crisis.
- C. intracerebral bleeding.
- D. epidural hematoma.
- E. subdural hematoma.

Nr 72. Gastroscopic exam performed for the symptoms of dyspepsia in a 60-year-old patient revealed crateriform ulceration 4 cm in diameter in the subcardiac part of the stomach on its lesser curvature. Histopathological diagnosis of the biopsy specimens revealed gastric cancer with an intestinal metaplasia. What type of the surgical procedure is indicated for this patient?

- A. total gastrectomy.
- B. total gastrectomy with lymphadenectomy.
- C. proximal gastrectomy.
- D. distal gastrectomy.
- E. distal gastrectomy with lymphadenectomy.

Nr 73. A 56-year-old obese female patient was admitted to the hospital because of an epigastric abdominal pain lasting for the last 12 hours. On the ultrasound examination cholelithiasis was found and retroperitoneal space was not visualized. Lab testing revealed significantly increased WBC count, elevated CRP and amylase levels. What in your opinion is the most appropriate treatment?

- A. urgent laparoscopic cholecystectomy.
- B. open cholecystectomy with intraoperative cholangiography.
- C. ERCP.
- D. careful monitoring of the patient in ICU.
- E. fasting, iv fluids, antibiotics and observation.

Nr 74. Acute appendicitis:

- 1) should not be approached laparoscopically;
- 2) is the most frequent at young age;
- 3) starts as a pain in the epigastrium which migrates into the right lower abdomen;
- 4) is not found in patients over 50;
- 5) frequently coexists with Crohn's disease.

The correct answer is:

- A.** 1,2. **B.** 3,4. **C.** 4,5. **D.** 2,3. **E.** 2,4.

Nr 75. Which statements about inguinal hernia are true?

- 1) it is several times more frequent in males than females;
- 2) only large hernias which had passed into the scrotum should be operated;
- 3) mesh (tension-free) hernia repair tend to give the best results;
- 4) it poses a risk of incarceration;
- 5) most frequently it is treated laparoscopically.

The correct answer is:

- A.** 1,2,3. **B.** 1,3,4. **C.** 2,4,5. **D.** 1,2,5. **E.** 2,3,4.

Nr 76. The most frequent symptoms of advanced cecum cancer are:

- 1) pain in the right lower abdomen;
- 2) tumor over right iliac ala;
- 3) anemia;
- 4) melena;
- 5) cachexia.

The correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 3,4,5. **D.** 1,3,4. **E.** 1,2,5.

Nr 77. The symptoms of perforated stomach or duodenal ulcer include:

- 1) retention of gases (inability to pass gas);
- 2) melena;
- 3) hematemesis;
- 4) severe, sudden abdominal pain;
- 5) abdominal guarding.

The correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 3,4,5. **D.** 1,2,5. **E.** 1,4,5.

Nr 78. The main symptoms of the cancer of the head of the pancreas include:

- 1) coffee-grounds like vomiting;
- 2) painless obstructive jaundice;
- 3) enlarged gallbladder;
- 4) dilated biliary ducts;
- 5) splenomegaly.

The correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 3,4,5. **D.** 2,4,5. **E.** 1,3,5.

Nr 79. Segmental necrosis of the small intestine can be caused by:

- | | |
|--|-------------------------|
| 1) incarcerated hernia; | 4) mesenteric embolism; |
| 2) diabetes; | 5) porphyria. |
| 3) strangulation of the bowel over peritoneal adhesions; | |

The correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 1,3,5. **D.** 1,3,4. **E.** 1,2,4.

Nr 80. Panaritium:

- | | |
|---|-----------------------------------|
| 1) is an inflammation of tissues of a finger; | 4) is treated by an incision, |
| 2) frequently occurs without pain; | pus evacuation and stabilization; |
| 3) is a blood-related infection; | 5) is caused by a trauma. |

The correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 1,4,5. **D.** 1,2,4. **E.** 1,2,5.

Nr 81. The most frequent symptoms of the sigmoid cancer include:

- | | |
|---|-------------------|
| 1) narrow (pencil like) stools; | 4) cachexia; |
| 2) alternate diarrhea and constipation; | 5) bloody stools. |
| 3) anemia; | |

The correct answer is:

- A.** 1,2,4. **B.** 1,2,3. **C.** 2,3,5. **D.** 1,2,5. **E.** 2,3,4.

Nr 82. Despite the effectiveness of endoscopy in terminating of the bleeding from gastric varices, the use of balloon tamponade can still be useful in selected cases. When inserting a Sengstaken-Blakemore tube some rules have to be followed:

- A.** the tube is inserted orally with the assistance of the laryngoscope.
- B.** both balloons are inflated with air.
- C.** both balloons are filled with fluid.
- D.** gastric balloon should be filled with fluid and esophageal inflated with air.
- E.** a tension should be applied to the tube using 1 kg weight.

Nr 83. Polyposis colon syndrom/s with genetic background is/are:

- | | |
|-------------------------------|--|
| A. Turcot's syndrome. | D. the correct answers are A and C. |
| B. Turner's syndrome. | E. the correct answers are B and C. |
| C. Gardner's syndrome. | |

Nr 84. A 29-year-old woman with abdominal pain on the left site radiating to the groin was admitted to ER, the pain started when she tried to pick up a heavy bag. RTG and US examinations showed no pathology apart from a big amount of gas in the bowels. WBC 9.6 G/L, there was no pain relief after metamizol and tramadol iv injection, there was no effect after spasmolytic drugs. The doctor on call decided to administer morphine sc, after which the pain grew stronger very quickly. What pathology do you suspect?

- | | |
|---|---|
| A. appendicitis. | D. radiolucent concrement in the ureter. |
| B. adnexitis. | E. ovarian cyst torsion. |
| C. subcapsular spleen haematoma. | |

Nr 85. The indications for the surgical treatment in Crohn's disease are:

- | | |
|--|----------------------------|
| 1) abscesses and fistulas; | 3) intestinal perforation; |
| 2) obstruction (due to constrictions and adhesions); | 4) carcinogenesis. |

The correct answer is:

- A.** all of the above. **B.** 1,2,3. **C.** 2,3,4. **D.** 1,3,4. **E.** 3,4.

Nr 86. The oesophagitis with intestinal metaplasia above cardia is called:

- | | |
|-----------------------------------|---------------------------------|
| A. Mallory-Weiss syndrome. | D. Barrett's oesophagus. |
| B. cardiospasm. | E. achalasia. |
| C. reflux disease. | |

Nr 87. A face and upper trunk skin rash lasting for about 30 minutes and caused by meal, extensive training, alcohol consumption together with diarrhea, asthmatic bronchus spasm and high blood pressure is characteristic of:

- | | |
|---|-------------------------------|
| A. Zollinger-Ellison's syndrome. | D. Gardner's syndrome. |
| B. Mallory-Weiss syndrome. | E. carcinoid syndrome. |
| C. Lynch syndrome. | |

Nr 88. The following symptoms:

- abdominal pain increasing during moving and coughing
- tachycardia
- fever
- palpable pain, guarding
- leucocytosis

are characteristic of:

- | | |
|---|-----------------------------|
| A. gastrointestinal bleeding. | D. abdominal angina. |
| B. peritonitis. | E. renal colic. |
| C. mechanical bowel obstruction. | |

Nr 89. The total parenteral nutrition at patient's home should be administered after the following surgical procedure:

- A.** subtotal excision of small intestine owing to mesenteric embolism.
- B.** total excision of large intestine owing to ulcerous colitis.
- C.** total gastrectomy owing to cancer.
- D.** excision of the esophagus complicated by anastomotic fistula.
- E.** any of the aforementioned.

Nr 90. In the age of pharmacological treatment of HCl oversecretion, the indications for surgical treatment of gastric ulcer exist in the case of:

- A.** perforation.
- B.** non effective treatment for more than 3 months.
- C.** recurrence of the ulcer despite correct treatment.
- D.** no possibility to rule out the diagnosis of cancer.
- E.** all the aforementioned.

Nr 91. In a young woman aged 20, a breast lump 1.5 cm in diameter, well limited, mobile, is **most probably**:

- A. a cyst.
- B. fibroadenoma.
- C. phylloid tumor.
- D. on early stage of glandular cancer.
- E. fibrocystic dysplasia.

Nr 92. Primary hyperparathyroidism, caused by an adenoma excreting parathormone may result in:

- A. renal stones.
- B. abdominal pains.
- C. formation of bone cysts and bone frangibility.
- D. psychical disorders.
- E. all the aforementioned.

Nr 93. Therapeutic dose of small-molecule heparin depends on:

- A. patient's weight.
- B. APTT.
- C. prothrombin time.
- D. INR.
- E. Platelet count.

Nr 94. The most adequate symptoms of the spinal cord lesion at the Th2 level could be:

- A. urine and faeces retention.
- B. upper limb paresis.
- C. lower limb paresis.
- D. the correct answers are A and C.
- E. all of the above could be the consequence of the Th2 level spinal cord lesion.

Nr 95. Which of the blood group is a risk-factor for gastric cancer?

- A. A.
- B. B.
- C. AB.
- D. 0.
- E. none of the above blood group could be a risk factor for gastric cancer.

Nr 96. Which of the following statements concerning *placenta previa* is correct?

- 1) the incidence is not related to the parity;
- 2) the first bleeding is usually painless and rarely fatal;
- 3) the vaginal examination should be performed immediately after the diagnosis;
- 4) the ultrasound examination is not more informative than clinical assessment;
- 5) the conservative management is not recommended in pregnancies less than 32 weeks of gestation.

The correct answer is:

- A. 1,2.
- B. 1,2,5.
- C. 2,4,5.
- D. only 2.
- E. all of the above.

Nr 97. The drug of choice in therapy of urinary tract infections (UTI) in the third trimester of pregnancy is:

- A. Cephalosporin.
- B. Tetracycline.
- C. Sulfonamide.
- D. Nitrofurantoin.
- E. Aminoglycosides.

Nr 98. Which of the following constitute risk factors for endometrial cancer:

- 1) obesity;
- 2) diabetes;
- 3) hypertension;
- 4) persistent HPV infection;
- 5) late menopause.

The correct answer is:

- A. 1,2,3. B. 1,2,3,5. C. 1,3,5. D. 1,2,4. E. 2,4,5.

Nr 99. At hCG levels between 1000 and 2000 mIU/mL, or at 5.5 weeks' gestation, a viable intrauterine pregnancy should be seen using:

- A. transvaginal ultrasound.
- B. abdominal ultrasound.
- C. transvaginal ultrasound and abdominal ultrasound.
- D. should not be seen.
- E. transvaginal ultrasound only at hCG levels above 9500 mIU/mL.

Nr 100. Ultrasound has become indispensable for the identification, assessment, and management of multiple gestations. The use of ultrasound in multiple gestations in the first trimester includes:

- A. the determination of chorionicity and amnionicity.
- B. the determination of placental cord insertion.
- C. the assessment of cervical length.
- D. fetal presentation.
- E. the screen for fetal growth restriction.

**Now, take the other answer ticket and mark the answers
to questions 101 - 200.**

Nr 101. The obliteration of uterine cavity and hypomenorrhea or secondary amenorrhea, with the onset following the D&C in the puerperium period is the syndrome of:

- A. Arnold-Chiari.
- B. Budd-Chiari.
- C. Asherman.
- D. Mendelsohn.
- E. Sheehan.

Nr 102. Which of the following infection is the risk factor for cervical cancer?

- A. HPV 16. B. HPV 6. C. HSV 2. D. HCV. E. CMV.

Nr 103. The most frequent malignant neoplasm in women in Poland is:

- A. cervical cancer.
- B. breast cancer.
- C. uterine cancer.
- D. ovarian cancer.
- E. vulvar cancer.

Nr 104. The ovarian germ cell tumors include:

- A. folliculoma.
- B. thecoma.
- C. adenocarcinoma.
- D. dysgerminoma.
- E. Sertoli cell tumor.

Nr 105. The rubella virus infection in pregnancy can result in:

- | | |
|------------------------------|------------------------------------|
| 1) congenital heart disease; | 4) limb deformations; |
| 2) deafness; | 5) defects of the deciduous teeth. |
| 3) congenital cataract; | |

The correct answer is:

- A.** 1,2. **B.** 1,2,3. **C.** 1,2,3,4. **D.** all of the above. **E.** 3,4.

Nr 106. Which is the most effective contraceptive method?

- | | |
|---|---------------------------|
| A. oral contraceptive. | D. condom. |
| B. intrauterine device (conventional). | E. rhythm methods. |
| C. intravaginal gel. | |

Nr 107. If basic diagnostic methods do not explain the reason for infertility, which of the following would you propose for the patient as the most valuable method?

- | | |
|--------------------------------------|-------------------------|
| A. test for sperm antibodies. | D. laparoscopy. |
| B. MRI of pituitary gland. | E. hysteroscopy. |
| C. karyotype evaluation. | |

Nr 108. The secondary amenorrhea and lack of lactation in a 30-year-old patient is most probably associated with:

- | | |
|---|--|
| A. secondary amenorrhea of hypophyseal origin. | D. benign breast disease. |
| B. pituitary disease (adenoma). | E. genetic disease connected with the reproductive tract. |
| C. ovarian tumor. | |

Nr 109. In the mechanism of lactation what is responsible for milk ejaculation?

- | | |
|--|----------------------|
| A. decrease of estrogens and progesterone after delivery. | D. prolactin. |
| B. oxytocin. | E. thyroxin. |
| C. human placental lactogen. | |

Nr 110. Which of the following statements regarding gonococcal infections is correct?

- A.** can be prevented by the use of a dead pathogen.
- B.** can be prevented by the use of a live attenuated pathogen.
- C.** confers immunity to subsequent infections only if the primary infection involves extragenital sites.
- D.** confers no immunity against repeated infection.
- E.** can be prevented by specific serum immune globulin.

Nr 111. The pituitary gland releases the following hormones, **except for**:

- A.** oxytocin. **B.** thyreotropin. **C.** cortisone. **D.** prolactin. **E.** luteinizing hormone.

Nr 112. What are the most common adverse effects of hormonal contraceptive pills?

- | | |
|--|----------------------|
| 1) bleeding and spotting during treatment; | 4) increased libido; |
| 2) nausea; | 5) diarrhoea; |
| 3) headaches; | |

The correct answer is:

- A.** 1,2,3. **B.** 2,5. **C.** 1,2,3,5. **D.** 1,3,4. **E.** all of the above.

Nr 113. A newborn may become infected with a cytomegalovirus by:

- 1) viremia during pregnancy;
- 2) exposure to infected cervical secretions;
- 3) exposure to infected breast milk;
- 4) transfusion of infected blood.

The correct answer is:

- A. 1,2,3. B. 1,3. C. 2,4. D. only 4. E. all of the above.

Nr 114. The benign vulvar neoplasm **does not** include:

- A. angiokeratoma. D. lipomas.
B. planoepithelial ca. E. fibrous histiocytoma.
C. pyogenic granuloma.

Nr 115. In diabetic women contraindications against pregnancy include:

- 1) severe nephropathy;
- 2) treatment-resistant hypertension;
- 3) treatment-resistant proliferative retinopathy;
- 4) ischaemic coronary disease;
- 5) persistent alimentary tract mycosis.

The correct answer is:

- A. 1,2. B. 1,3,4. C. 1,3,5. D. 1,2,3,5. E. 1,2,3,4.

Nr 116. The **rarest** metastatic ovarian lesion is:

- A. gastric cancer.
B. uterine tube cancer.
C. breast cancer.
D. the metastasis from the other ovary.
E. colorectal cancer.

Nr 117. A patient presents to the clinic approximately 8 weeks after the last menstrual period (LMP). She has the positive result of pregnancy test but is not sure about the exact date of LMP as she has had irregular cycles (28-60 days). Which of the following methods is the **most reliable** in the assessment of gestational age?

- A. digital examination and palpation of the uterus.
B. the quantitative assessment of human chorionic gonadotrophin (hCG) serum level.
C. the quantitative assessment of serum hCG together with progesterone level.
D. crown-rump length (CRL) on ultrasound.
E. the combination of digital examination with the assessment of progesterone level.

Nr 118. A healthy 20-year-old patient presents to the clinic for her first OB visit at 10 weeks' gestation. The medical history of the patient is unremarkable. All of the following test should be ordered **except for**:

- A. blood-group typing. D. glucose challenge test (GCT).
B. HIV. E. *Toxoplasma gondi* screening.
C. complete blood count (CBC) and urine analysis.

Nr 119. Which of the following symptoms suggest the need for cervical cerclage?

- 1) irregular uterine contractions;
- 2) bleeding from the cervical canal;
- 3) the cervical dilation of 3 cm without uterine contractions;
- 4) the gestational age of 29 weeks;
- 5) intrauterine infection.

The correct answer is:

- A.** 1,2,4. **B.** 2,4. **C.** only 3. **D.** 1,3,5. **E.** 1,2,3,4.

Nr 120. A 30-year-old patient, G2, 29 weeks of gestation, is diagnosed with gestational diabetes (GDM). She is concerned about the influence of the diabetes on her baby. Which of the following are the most common complications in the offspring of mothers with GDM?

- 1) macrosomia;
- 2) delivery trauma;
- 3) congenital malformations;
- 4) oligohydramnion;
- 5) the early "maturation" of the placenta.

The correct answer is:

- A.** 1,2. **B.** 1,2,3. **C.** 3,4,5. **D.** only 1. **E.** all of the above.

Nr 121. Hormonal contraceptive pills have been confirmed to protect from:

- 1) ovarian ca;
- 2) liver ca;
- 3) endometrial ca;
- 4) renal ca;
- 5) cervical ca.

The correct answer is:

- A.** 1,2,3,5. **B.** 1,3. **C.** 1,3,4. **D.** 1,3,4,5. **E.** 1,3,5.

Nr 122. In therapy of mononucleosis one uses:

- A.** penicillins. **D.** paracetamol.
B. macrolides. **E.** fluoroquinolones.
C. tetracyclines.

Nr 123. Eye pain in a patient with glaucoma attack is often accompanied with:

- 1) nausea;
- 2) vomiting;
- 3) abdominal pain;
- 4) sweating;
- 5) bradycardia.

The correct answer is:

- A.** 1,2,3. **B.** 4,5. **C.** 1,2,5. **D.** 1,4. **E.** all of the above.

Nr 124. Acute, non-complicated urinary tract infections in males occur sporadically; therefore, each case of urinary tract infection in males should be approached as a complicated infection, associated with the presence of anatomical or functional abnormalities, or a disease which increases the risk of the development of infection.

- A.** the first statement is true, the second false.
B. the first statement is false, the second true.
C. both statements are false.
D. both statements are true, but there is no cause-effect relationship between them.
E. both statements are true and there is a cause-effect relationship between them.

Nr 125. It is traditionally considered that the pain caused by paranasal sinuses obstruction radiates to certain sites. The pain localized on the top of the head indicates the presence of an inflammatory process in the following:

- A. maxillary sinuses.
- B. ethmoid sinuses.
- C. frontal sinuses.
- D. sphenoidal sinuses.
- E. it is not associated with inflammation of any sinus.

Nr 126. The causes of intestinal colic in infants include:

- A. gastrointestinal tract motoric immaturity.
- B. greedy fluid intake, swallowing a large amount of air.
- C. allergy to cow milk consumed by mother.
- D. the correct answers are A and C.
- E. the correct answers are A,B,C.

Nr 127. Which of the following vaccinations is not compulsory for all children according to the Polish vaccination calendar?

- A. tuberculosis vaccine.
- B. hepatitis B vaccine.
- C. pneumococcal vaccine.
- D. pertussis vaccine.
- E. diphtheria vaccine.

Nr 128. Reiter's syndrome triad includes:

- A. serositis, haemolytic anaemia with reticulocytosis, keratitis.
- B. choroiditis, gout, sialoadenitis.
- C. arthritis, urethritis, conjunctivitis.
- D. ulcerative stomatitis, proteinuria > 0,5 g/24 hours, flexion contracture of the fingers.
- E. obesity, hyperlipoproteinaemia, hypertension.

Nr 129. Which one of the following sentences concerning erysipelas is false?

- A. streptococcus group A is a common etiologic factor.
- B. frequent erysipelas recurrence is observed in patients with lymphatic and venous circulation insufficiency.
- C. local treatment is the only method available.
- D. a high body temperature is characteristic of erysipelas.
- E. painful, red, limited erythema is a typical skin sign.

Nr 130. The cause of reduction in absolute neutrophil count includes:

- A. viral infection.
- B. aplastic anaemia.
- C. autoimmunologic disease.
- D. drug influence.
- E. all the above.

Nr 131. The most probable cause of sideropenic anemia and eosinophilia in a 16-year-old girl is:

- A. bronchial asthma.
- B. familial intestinal polyposis.
- C. incorrect diet.
- D. abundant menses.
- E. parasitic disease.

Nr 132. Point the **false** sentence concerning oral glucose tolerance test (OGTT):

- A. the test should be carried out with 75g glucose dissolved in 300 ml water.
- B. the patient is obliged to drink the glucose solution in 5 minutes.
- C. the indication for OGTT is impaired fasting glucose (IFG).
- D. sometimes to find out a reactive hypoglycaemia glucose should be determined at the 180 minute of OGTT.
- E. to diagnose type 2 of diabetes mellitus it is necessary to find glucose plasma concentration ≥ 200 mg/dl (11.1 mmol/l) at the 120 minute of OGTT – examined twice.

Nr 133. The prophylactic daily dose of vitamin D3 for children and adolescents is:

- A. 200 IU.
- B. 300 IU.
- C. 400 IU.
- D. 500 IU.
- E. 600 IU.

Nr 134. The risk SCORE chart enables to estimate CVD risk based on:

- 1) age;
- 2) smoking habits;
- 3) diastolic blood pressure (DBP);
- 4) LDL ratio;
- 5) glycaemia.

The correct answer is:

- A. only 1.
- B. 1,2.
- C. 1,2,3.
- D. 1,2,3,4.
- E. all of the above.

Nr 135. Which of the following sentences is **false**?

- A. the optimal time for influenza vaccination is early autumn.
- B. specific antibodies appear after 20 days.
- C. influenza immunity requires yearly vaccination.
- D. all elderly people ≥ 65 years old should be vaccinated against influenza.
- E. influenza vaccine can be used during all the epidemiologic period.

Nr 136. A 79-year-old man reports excessive urination at night – at least 3 times per night. The symptom has been noted for several months. It can be caused by:

- A. heart failure.
- B. chronic kidney disease.
- C. benign prostate hypertrophy.
- D. diabetes.
- E. all of the above.

Nr 137. Mark the true sentence concerning European population:

- A. III degree obesity is diagnosed when BMI ≥ 40 kg/m².
- B. abdominal obesity in women is diagnosed when WHR $> 1,0$.
- C. abdominal obesity in men is diagnosed when the waist circumference is ≥ 102 cm.
- D. the correct answers are A and C.
- E. the correct answers are A,B,C.

Nr 138. A first choice drug in acute bronchitis is ciprofloxacin because microorganisms responsible for 80% cases of bronchitis are sensitive to that antibiotic.

- A. both parts of the sentence are true and there is a cause-effect relation between them.
- B. both parts of the sentence are true, but there is no cause-effect relation between them.
- C. the first part of the sentence is true, the second is false.
- D. the first part of the sentence is false, the second is true.
- E. both parts of the sentence are false.

Nr 139. The supplementation of the vitamin D3 in breast-fed newborns whose mothers have not taken the vitamin D3 during the pregnancy should be initiated:

- A. on the first days of life.
- B. after a week.
- C. after 2 weeks.
- D. after 3 weeks.
- E. after a month.

Nr 140. Tympanic membrane perforation and otitis media are absolute contraindications against swimming in natural and artificial reservoirs because water affecting semicircular canals region provokes strong vertigos and lack of orientation.

- A. both parts of the sentence are true and there is a cause-effect relation between them.
- B. both parts of the sentence are true, but there is no cause-effect relation between them.
- C. the first part of the sentence is true, the second is false.
- D. the first part of the sentence is false, the second is true.
- E. both parts of the sentence are false.

Nr 141. In the case of mushroom poisoning, gastric lavage should be carried out:

- A. up to 4 hours after consumption.
- B. up to 6 hours after consumption.
- C. up to 12 hours after consumption.
- D. up to 18 hours after consumption.
- E. any time after consumption.

Nr 142. Which of the following **does not** belong to the disturbances of thought flow?

- A. magical thinking.
- B. dissociation.
- C. acceleration of thoughts.
- D. thought slowness.
- E. incoherence.

Nr 143. The convincement about extraordinary possibilities, skills, knowledge is the base for the diagnosis of:

- A. sensitive delusions.
- B. grandiose delusions.
- C. persecutory delusions.
- D. nihilistic delusions.
- E. none of the above.

Nr 144. Pervasive thoughts, imaginations or repeated activities are called:

- A. delusions.
- B. fobias.
- C. obsessions.
- D. cenesthetic hallucinations.
- E. none of above.

Nr 145. All of the following belong to the sexual disturbances, with the **exception of**:

- A. diminished sexual drive.
- B. increased sexual drive.
- C. prostitution.
- D. disturbances of the directions of sexual drive.
- E. inappropriate way of realisation of sexual drive.

Nr 146. Which of the following **are not** characteristic symptoms of delirium?

- A. nightmares.
- B. excitement.
- C. illusions.
- D. hallucinations.
- E. incongruent delusions.

Nr 147. Nonspecific psychopathological states caused by external factors are called:

- A. psychoorganic syndromes.
- B. ecmnesias.
- C. disturbances of the body scheme.
- D. Bonhoffer's exogenic reactions.
- E. situational reactions.

Nr 148. The classification of mental disorders by the American Psychiatric Association, which is alternative to the International Classification of the Diseases ICD-10, is abbreviated as follows:

- A. ABC Psych.
- B. Amer Psych.
- C. AmClasPsych.
- D. DDT.
- E. DSM.

Nr 149. The obsessive-compulsive disorders are most commonly developed in individuals who have the following abnormal personality:

- A. psychopathic.
- B. characteropathic.
- C. schizoid.
- D. anancastic.
- E. narcissic.

Nr 150. The acute opiate intoxication can be fatal because of malfunction of:

- A. heart.
- B. respiratory center.
- C. adrenal cortex.
- D. kidneys.
- E. liver.

Nr 151. The traditional name „cyclophrenia” is replaced by the contemporary name:

- A. maniac syndrome.
- B. periodic schizophrenia.
- C. seasonal depression.
- D. dysthymia.
- E. bipolar affective disorder.

Nr 152. Which of the following **does not** belong to the anxiolytics?

- A. chlordiazepoxide.
- B. chlorprothixene.
- C. clorazepate.
- D. bromazepam.
- E. alprazolam.

Nr 153. During the treatment with lithium the toxic reaction **most frequently** observed is:

- A. thyroid insufficiency.
- B. thyroid hyperactivity.
- C. adrenal insufficiency.
- D. adrenal hyperactivity.
- E. parathyroid insufficiency.

Nr 154. The basic mechanism of action of the majority of antipsychotics is:

- A. dopaminergic neurons agonism.
- B. partial dopaminergic neurons agonism.
- C. dopaminergic neurons antagonism.
- D. serotonergic neurons.
- E. all of the above.

Nr 155. The expression „depot” refers to one of the following property of the antipsychotics:

- A. long-term activity.
- B. the efficacy against the positive symptoms.
- C. sedation.
- D. the option of administering the drug intravenously.
- E. the efficacy against the negative symptoms.

Nr 156. The following values in the arterial gas test measurement performed after 15 minutes of cardiopulmonary resuscitation: PaO₂ 100 mmHg, PaCO₂ 75 mmHg, pH 7.01, HCO₃ 19.3, BE -5.0, in patient weighing 60 kg (ERC guidelines 2005 adult):

- A. provide an indication for a 50 ml of 4.2% sodium bicarbonate solution infusion.
- B. provide an indication for a 25 ml of 8.4% sodium bicarbonate solution infusion.
- C. are an indication for the intervention other than a sodium bicarbonate infusion and for repeating gas test.
- D. are an indication for a 25 ml of 8.4% sodium bicarbonate solution infusion + additional intervention + arterial gas test repetition.
- E. provide an indication for a 25 ml 4.2% sodium bicarbonate solution infusion + additional intervention + arterial gas test repetition.

Nr 157. TRALI specifies:

- A. preparation consisting of coagulation factors dependent on vit. K and proteins C, S.
- B. post-transfusion acute lung injury.
- C. blood transfusion after hypervolemic hemodilution.
- D. post transfusion thrombocytopenia.
- E. hypothermia after massive blood transfusion.

Nr 158. After infusion of 10 units Packed RBCs during massive blood transfusion, the ratio of Packed RBCs to Fresh Frozen Plasma (FFP) should be:

- A. packed RBCs :FFP = 2:1.
- B. packed RBCs :FFP = 1:1.
- C. packed RBCs :FFP = 1:2.
- D. packed RBCs :FFP = 1:3.
- E. packed RBCs :FFP = 1:4.

Nr 159. Direct arterial access **does not** allow of:

- A. mean arterial pressure measurement.
- B. wedge pressure measurement.
- C. arterial blood oxygenation measurement.
- D. vascular bed filling evaluation.
- E. cardiac output measurement.

Nr 160. Mechanical ventilation using lung protected strategy; for example in ARDS management, is based on the following parameter:

- A. Peak Inspiratory Pressure \leq 30 cm H₂O.
- B. Respiratory Frequency $<$ 20/min.
- C. Positive End Expiratory Pressure (PEEP) $>$ 15cm H₂O.
- D. Pulmonary Wedge Pressure $>$ 18 mmHg.
- E. PaCO₂ $<$ 60 mmHg.

Nr 161. Thermodilution is:

- A. the method of heating the infusion fluids during operation.
- B. the infusion of heated fluids to the patient in hypothermia.
- C. one of the methods of cardiac output measurement.
- D. planned cooling of the patient during some special operating procedures e.g. in cardiac surgery or neurosurgery.
- E. planned 24-hour cooling of the patient after cardiac arrest.

Nr 162. The target parameters for circulatory stabilization in severe sepsis management are:

- A. CVP > 4 mmHg, Scv O₂ > 95%.
- B. CVP > 8 mmHg, Scv O₂ > 70%.
- C. CVP > 10 mmHg, Scv O₂ > 90%.
- D. CVP > 16 mmHg, Scv O₂ > 50%.
- E. CVP > 20 mmHg, Scv O₂ > 30%.

Nr 163. The patient's blood pressure is 170/80 mmHg. The mean arterial pressure is:

- A. 90 mmHg.
- B. 110 mmHg.
- C. 100 mmHg.
- D. 120 mmHg.
- E. 125 mmHg.

Nr 164. Select the **false** sentence:

- A. pneumonia is the most common form of hospital infections in the intensive care unit.
- B. blood stream infection is the most common form of hospital infections the intensive care unit.
- C. staff hands are the main vectors of intrahospital infections.
- D. the control of organ hypoperfusion prevents digestive tract bacterial translocation.
- E. *Pseudomonas aeruginosa* is a common cause of hospital infections.

Nr 165. The **false** is the statement:

- A. epinephrine increases the level of lactates.
- B. dopamine has stronger than norepinephrine inotropic effect.
- C. PDE inhibitors increase systemic vascular resistance.
- D. dobutamine improves cardiac output.
- E. norepinephrine is the catecholamine of choice in the treatment of septic shock.

Nr 166. Which of the following symptoms characterize increasing brain edema?

- A. cardiac arrhythmia.
- B. oliguria.
- C. coma.
- D. dilated pupils.
- E. the correct answers are A,C,D.

Nr 167. Which of the following scoring systems should be used for assessing the function of the central nervous system after brain injury?

- A. Ramsey's score.
- B. Glasgow coma scale.
- C. APACHE score.
- D. SOFA score.
- E. Malampatie's score.

Nr 168. Which of the following could be used in the therapy of status epilepticus?

- A. diazepam.
- B. clonazepam.
- C. phenobarbital.
- D. valproic acid.
- E. the correct answers are A,B,C.

Nr 169. Calcium chloride is used in:

- A. hypocalcemia.
- B. hypochloremia.
- C. hyperkaliemia.
- D. the correct answers are A and C.
- E. all the answers are false.

Nr 170. In anaphylactic reaction:

- A. symptoms are triggered by liberation of histamine.
- B. we use antihistaminic drugs as well as steroids.
- C. not all of the symptoms of anaphylactic reaction are present at the same time.
- D. in patients with dyspnoea and cyanosis adrenaline should be used.
- E. all the answers are true.

Nr 171. Acute coronary syndrome – indicate the **false** answer:

- A. in ECG an ST-segment elevation can be present.
- B. there is a risk of ventricular fibrillation.
- C. acetylsalicylic acid is the first shot drug.
- D. antiplatelet drugs are not used at pre-hospital stage.
- E. we use nitroglycerine or some opioids.

Nr 172. During resuscitation in children under 8:

- A. we are allowed to use only automated external defibrillator.
- B. there is not any indication for defibrillation.
- C. we defibrillate using normal self-adhesive electrode pads.
- D. we cannot use defibrillator intended for adults.
- E. the energy of defibrillation should be at 40 J for every 10 kg of body weight.

Nr 173. Psychomotor agitation observed in the accident victim is mostly caused by:

- A. the estimation of their serious state.
- B. hypoxia and pain.
- C. hyperventilation and hypotonia.
- D. the accident in itself.
- E. intracranial hematoma.

Nr 174. In the case of asphyxia:

- A. you should always start BLS with 3 artificial breaths.
- B. only intubation can rescue somebody's life.
- C. you should always start BLS with 5 artificial breaths.
- D. defibrillation should be performed as fast as possible.
- E. the most important in the first aid is to call an ambulance.

Nr 175. Indicate the true answer:

- A. pulseless electrical activity is an indication for defibrillation.
- B. the Philadelphia collar must be used in all victims of any kind of accident.
- C. the task of a physician at the accident scene is to clear the accident site.
- D. in acute bronchospasm we should not use adrenalin.
- E. none of the answers is true.

Nr 176. A 15-year-old Jehovah Witness is admitted to hospital. According to the physician on duty, he is in urgent need for blood transfusion due to blood loss. The patient's parents are against this treatment, while the boy gives consent to it. What should the physician do?

- A.** in the case of the parent's objection to blood transfusion in their child, the physician must not order this treatment; he should replace it with an intravenous therapy accepted by the adolescent patient's parents.
- B.** as the boy is over the age of 14, his consent to blood transfusion is legally valid and effective; therefore the physician is entitled to order the treatment.
- C.** when consent decisions of an adolescent patient and his parents are in conflict, the decision should be made by a guardianship court.
- D.** as the boy gives consent to blood transfusion, the physician should order this treatment, and keep it secret from his parents.
- E.** the physician should have the boy's parents sign a form certifying that they are aware of their responsibility for their child's possible death; however, he must not violate their right to make decisions considering their adolescent child's treatment.

Nr 177. After having a conversation with a terminally ill patient's family, and presuming that the awareness of the actual diagnosis and prognosis would have a devastating effect on the patient, the physician decides not to inform her. However, the patient suspects the truth and confronts the physician, demanding full disclosure. What should the physician do?

- A.** the physician's initial decision not to disclose the diagnosis and prognosis to the patient was wrong.
- B.** the physician should convince the patient that he has already told her the entire truth about her illness.
- C.** the physician should consult the patient's family to find out what to do.
- D.** the physician should ask another doctor for an opinion whether or not to tell the truth to the patient.
- E.** in this case, the physician should reveal the actual diagnosis and prognosis to the patient.

Nr 178. A physician diagnoses primary syphilis in his male patient. The patient doesn't give consent to the treatment. After a few days, the patient's wife visits the physician and asks him for the information on her husband's illness because she is afraid of getting infected. What should the physician do?

- A.** he should give the patient's wife information on her husband's illness.
- B.** he should consult his patient to find out, how much to tell the wife.
- C.** he should refuse to give any information to the patient's wife, in accordance with the professional confidentiality rules.
- D.** he should suggest that the wife should undergo serological tests.
- E.** he should explain that only her husband can release the physician from the obligation to keep all the patient information confidential.

Nr 179. A surgeon carries out a retrospective comparative analysis of several operational methods to find out which of them yields better long-term therapeutic results. For this purpose he invites the patients, collects their clinical histories, and performs clinical examination and a set of diagnostic laboratory and instrumental tests. Does he have to apply for the acceptance of the Bioethical Committee?

- A. no, because this type of research is qualified as a control study.
- B. yes, if any of the elements of examination is an increased-risk procedure.
- C. no, if the patients give valid consent to the participation in the study.
- D. yes, because all research projects in which medical examinations are performed for scientific reasons only must be approved by the bioethical commission.
- E. no, if the medical examinations performed during the study are typical of the illness, which was the reason for the surgical procedure.

Nr 180. If a prosecutor confirms that a pregnancy is a result of a rape, Polish law allows termination of the pregnancy:

- A. unless the fetus is mature enough to survive out of mother's organism.
- B. up to the 12th week of gestation.
- C. up to the 22nd week of gestation.
- D. within 2 weeks of the date of the prosecutor's decision.
- E. In this case Polish law does not allow the termination of pregnancy.

Nr 181. A patient or his legal representative is entitled to declare his objection to the doctor's opinion or ruling if it affects his rights or obligations. This objection may be raised to:

- A. an adequate provincial governor.
- B. a medical committee acting on the Patient's Rights Ombudsman.
- C. the Minister of Health.
- D. the manager of the health care institution.
- E. a patient does not have this kind of right.

Nr 182. The act on medical and dental professions states that the doctor is obliged to:

- A. provide medical assistance only when on duty.
- B. provide medical assistance always when delay may cause a danger for life, serious body harm or serious danger for health.
- C. provide medical assistance to everyone even when there is no life or health in danger.
- D. provide medical assistance when the way of payment is set.
- E. there are no legal regulation concerning the provision of medical assistance.

Nr 183. The doctor is allowed by the Code of Medical Ethics and the law not to inform the patient about his health:

- A. on request of the patient's family.
- B. if the patient wishes not to be informed.
- C. on superiors' order.
- D. when the diagnosis is inauspicious.
- E. when the patient is a minor.

Nr 184. Does the Polish Code of Medical Ethics identify the human embryo with a human?

- A. yes, except for Down syndrome.
- B. no, it does not.
- C. yes, it does.
- D. it does not say.
- E. it leaves the issue open.

Nr 185. In order to perform surgery on patients who came of age and are legally capacitated one has to obtain their consent:

- 1) in pen;
- 2) through form filling;
- 3) informed;
- 4) implied;
- 5) prior to the planned surgery.

The correct answer is:

- A. 1,3,5.
- B. 1,2,4.
- C. 1,2,3.
- D. 1,4,5.
- E. 2,4,5.

Nr 186. In accordance with the Law on cash benefits from social insurance in the case of illness and motherhood, an insured person who is working for money during the time of stated temporary incapacity to work loses the right to sickness allowance for the period of:

- A. the whole time of the stated temporary incapacity to work.
- B. 2 first days of its length.
- C. 3 first days of its length.
- D. 5 first days of its length.
- E. 7 days of its length.

Nr 187. A medical statement on temporary incapacity to work can cover the period preceding the day of physical examinations if their results indicate that the insured person involved was undoubtedly incapable to work during that period. This period, however **cannot** exceed:

- A. 1 day preceding the examination.
- B. 2 days preceding the examination.
- C. 3 days preceding the examination.
- D. 4 days preceding the examination.
- E. 5 days preceding the examination.

Nr 188. A medical statement on temporary incapacity to work is issued with two additional copies. In accordance with the Law on cash benefits from social insurance in the case of illness and motherhood the first copy is passed by the doctor to:

- A. the regional unit of SIF (ZUS).
- B. the central unit of SIF (ZUS).
- C. the insured person.
- D. National Health Fund.
- E. the employer.

Nr 189. In accordance with the Law on cash benefits from social insurance in the case of illness and motherhood, a doctor issuing a medical statement on temporary incapacity to work is obliged to send the original statement to a local branch of SIF (ZUS) within:

- A. 1 day of the date of the statement.
- B. 3 days of the date of the statement.
- C. 5 days of the date of the statement.
- D. 7 days of the date of the statement.
- E. 9 days of the date of the statement.

Nr 190. In accordance with the Law on cash benefits from social insurance in the case of illness and motherhood, a person issuing a medical statement on temporary incapacity to work is obliged to keep the second copy of the statement for the period of:

- A. half a year. B. 1 year. C. 3 years. D. 5 years. E. 7 years.

Nr 191. The medical statement on temporary incapacity to work, which is a confidential document, contains the statistical number of the disease established in accordance with the International Statistical Classification of Diseases and Health Problems. This number is put on:

- A. the original statement.
B. the original statement and the first copy of the original statement.
C. the original statement and the second copy of the original statement.
D. the first copy of the original statement.
E. the second copy of the original statement.

Nr 192. The attending doctor is not allowed to issue an application on behalf of an insured person for healing rehabilitation as part of SIF (ZUS) pension prevention owing to diseases of:

- A. the cardiovascular system. D. gastroenterologic basis.
B. the motor organs. E. the respiratory system.
C. psychosomatic basis.

Nr 193. The following factors have exerted an effect on the necessity to reform health care systems, both in Poland and in other countries:

- 1) population increase;
- 2) a rapidly advancing process of population ageing;
- 3) increase the proportion of population requiring intensive and long-term medical care;
- 4) the availability of modern diagnostic and treatment procedures in medicine;
- 5) the appearance of new health risks;
- 6) economic realities limiting the possibilities to increase outlays on health.

The correct answer is:

- A. 1,2. B. 2,3. C. 1,2,4. D. 2,3,4,5. E. all of the above.

Nr 194. According to the World Health Organization Report of 2002, the most important health risk factors associated with human behaviour and lifestyle cover:

- 1) lack of physical activity;
- 2) tobacco smoking;
- 3) low birth weight;
- 4) obesity;
- 5) high level of cholesterol;
- 6) elevated arterial pressure;
- 7) risky sexual behaviours.

The correct answer is:

- A. 1,2. B. 2,3,5. C. 3,4,5,6. D. 1,2,3,4,5. E. all of the above.

Nr 195. The primary functions of the public healthcare system on behalf of the health protection of individuals concern, among other things, the following:

- 1) content-related supervision and financial support for charity institutions providing medical and social care for the poor;
- 2) covering with active advice the population groups at high risk of contracting selected diseases of social importance;
- 3) evaluation of the health situation in the home country in comparison with the situations in other countries;
- 4) analyses of hazards resulting from the process of globalisation;
- 5) providing medical assistance for the disabled and homeless;
- 6) monitoring of international legal regulations in health protection matters.

The correct answer is:

- A.** 1,3. **B.** 2,4,5. **C.** 1,2,5. **D.** 3,4,5,6. **E.** 1,2,4,5,6.

Nr 196. The ambulatory specialist services financed from public resources are provided on referral from a health insurance physician. Such a referral is required in the case of:

- | | |
|---------------------------------------|------------------------------------|
| 1) cardiologist; | 4) laryngologist; |
| 2) ophthalmologist and dermatologist; | 5) psychiatrist and oncologist; |
| 3) rheumatologist; | 6) gynaecologist and obstetrician. |

The correct answer is:

- A.** 1,2. **B.** 1,3,4. **C.** 1,2,5,6. **D.** 2,4,5,6. **E.** 1,2,3,4,5.

Nr 197. According to the Act on the matter of health care services financed from public resources, the recipients have the following provided and financed:

- A.** psychological examination and therapy.
B. palliative and hospice care.
C. logopaedic examination and therapy.
D. care for women during breastfeeding.
E. all of the above.

Nr 198. Incidence is:

- A.** the number of new cases of a disease found within a population in a given area, noted over a certain period of time (month, year), expressed as a rate.
B. the number of cases of a disease in relation to the number of population in a given area, found over a specified time interval, expressed as a rate.
C. the number of deaths in relation to the total number of population in a given area, determined over a specified time interval, expressed as a rate.
D. the number of deaths due to an individual disease in relation to the number of sick persons afflicted by this disease, mainly expressed as a percentage.
E. the number of cases of contagious diseases in relation to the population in a given area.

Nr 199. Fatality is:

- A.** the number of new cases of a disease in relation to the number of population in a given area, recorded over a specified period of time (month, year), expressed as a ratio.
- B.** the number of people afflicted by a disease in relation to the number of population in a given area, recorded over a stated period of time, expressed as a ratio.
- C.** the number of deaths in relation to the total number of population in a given area, recorded over a specified period of time, expressed as a ratio.
- D.** the number of deaths due to a specified disease in relation to the number of sick persons afflicted by this disease, expressed mainly in percentages.
- E.** an indicator of the quality of work of medical services.

Nr 200. While evaluating an increase in the frequency of occurrence of influenza in my area, I will use the following as the most rational:

- A.** morbidity rate.
- B.** mortality rate.
- C.** incidence rate.
- D.** fatality rate.
- E.** sick absenteeism rate.

Thank You !