

**Nr 1.** HELLP syndrome is one of the symptoms of severe pre-eclampsia and includes the following:

- A. hemolysis, decreased levels of hepatic enzymes, low platelet concentration.
- B. hemolysis, decreased levels of hepatic enzymes, high platelet concentration.
- C. hemolysis, elevated levels of hepatic enzymes, low platelet concentration.
- D. hemolysis, elevated levels of hepatic enzymes, high platelet concentration.
- E. none of the above.

**Nr 2.** Arterial hypertension during pregnancy is not a homogeneous disease entity, but consists of:

- 1) chronic hypertension – occurring before;
- 2) pregnancy-induced hypertension;
- 3) hypertension occurring before with superimposed pregnancy-induced hypertension with proteinuria;
- 4) unclassified hypertension in pregnancy.

The correct answer is:

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

**Nr 3.** Pregnancy-induced hypertension:

- A. develops after 20th week of pregnancy.
- B. in most cases resolves within 42 days after the delivery.
- C. complicates approx. 6-7% of pregnancies.
- D. is characterized by reduced tissue perfusion.
- E. all the above.

**Nr 4.** During pregnancy cardiovascular system undergoes changes to cover increased metabolic needs of mother and a fetus. These changes include:

- A. increased blood volume; increased cardiac output; increased peripheral resistance and decreased blood pressure.
- B. increased blood volume; increased cardiac output; decreased peripheral resistance and decreased blood pressure.
- C. decreased blood volume; increased cardiac output; decreased peripheral resistance and decreased blood pressure.
- D. decreased blood volume; decreased cardiac output; decreased peripheral resistance and decreased blood pressure.
- E. increased blood volume; no changes in cardiac output; increased peripheral resistance and decreased blood pressure.

**Nr 5.** Hypertension was diagnosed with repeated blood pressure measurements in a 60-year-old woman with obesity. She smokes cigarettes. She has not been treated with any antihypertensive drugs so far. The blood pressure was 190/120 mmHg. The following treatment should be recommended:

- A. salt intake should be reduced before starting antihypertensive treatment with drugs.
- B. increased physical activity before starting antihypertensive treatment with drugs.
- C. smoking cessation before starting antihypertensive treatment with drugs.
- D. weight reduction before starting antihypertensive drug therapy.
- E. antihypertensive drug therapy should be started without delay.

**Nr 6.** The risk for contrast-induced nephropathy could be reduced by:

- A. furosemide.
- B. thiazide diuretics.
- C. potassium-sparing diuretics.
- D. reduction of fluid intake before and after contrast infusion.
- E. none of the above.

**Nr 7.** A 70-year-old man reports excessive urination at night - at least 3 times per night. The symptoms have been noted for several months. They can be caused by:

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

**Nr 8.** The symptom which differentiates the diagnosis of severe pseudomembranous colitis and ulcerative colitis is:

- A. paralytic ileus.
- B. fulminant colitis and toxic megacolon.
- C. perforation of the colon.
- D. oedema.
- E. severe microcytic anemia.

**Nr 9.** The indications for introducing pancreatic enzyme substitution therapy in chronic pancreatitis are:

- 1) high levels of serum amylase;
- 2) severe pain;
- 3) low levels of serum lipase;
- 4) progressive loss of body weight;
- 5) fatty diarrhea.

The correct answer is:

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

**Nr 10.** Which of these sentences are **false** with regard to esophageal cancer?

- 1) cancer markers do not play an important role in diagnosis of esophageal cancer;
- 2) radiotherapy and chemotherapy are the main therapeutic methods in adenocarcinoma of the esophagus;
- 3) incidence rate of the squamous-cell esophageal cancer is positively associated with gastroesophageal reflux disease (GERD);
- 4) incidence rate of esophageal adenocarcinoma increases continuously;
- 5) cellular type and clinical stage of the disease determine the treatment of esophageal cancer.

The correct answer is:

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

**Nr 11.** Which of these sentences are true with regard to diffused esophageal spasm (DES)?

- 1) medical history and physical examination are sufficient methods to establish diagnosis of DES;
- 2) the main tests that are used in diagnosis of DES are x-ray of the upper gastrointestinal tract, esophageal manometry and gastrofiberscopy;
- 3) DES is a condition in which uncoordinated contractions of the esophagus can lead to the typical appearance of the esophagus as the corkscrew esophagus on barium swallow x-ray test;
- 4) in some severe cases DES can lead to malnutrition;
- 5) after observing characteristic (typical) abnormalities in esophageal manometry and x-ray tests, the doctor is not required to perform gastrofiberscopy.

The correct answer is:

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

**Nr 12.** Which of the following statements concerning acute toxic megacolon are true?

- 1) the diagnosis is based on CT- or NMR-enteroclysis;
- 2) the diagnosis is based on clinical evaluation and abdominal X-ray;
- 3) the treatment is based on parenteral nutrition;
- 4) intravenous wide spectrum antibiotics are used in the treatment;
- 5) oral GCS are recommended for the treatment.

The correct answer is:

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

**Nr 13.** Which of the following information about Crigler and Najjar syndrome type I is false?

- 1) incidence of this syndrome is very low;
- 2) this syndrome is inherited as an autosomal recessive type;
- 3) serum bilirubin level is usually > 17 mg/dl;
- 5) serum bilirubin level decreases after phenobarbital application;
- 6) liver transplantation is effective treatment.

The correct answer is:

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

**Nr 14.** The confirmed predisposing factors for hepatic cirrhosis include:

- 1) alcohol;
- 2) hepatitis B, C or D;
- 3) sarcoidosis;
- 4) autoimmune hepatitis;
- 5) syphilis.

The correct answer is:

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

**Nr 15.** A 75-year-old man with sigmoid diverticulosis - complaining of abdominal pain localized in the left lower abdominal quadrant and irregular bowel motions without the presence of blood in stools, presented with fever and elevated white blood count. Palpation of the left lower abdominal quadrant revealed abdominal mass, muscular guarding and a positive Blumberg's sign. What kind of first line treatment should be considered in this patient:

- 1) surgical treatment;
- 2) elementary diet;
- 3) diet rich in soluble fiber;
- 4) fasting (bowel rest);
- 5) antibiotics for 7-10 days.

The correct answer is:

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

**Nr 16.** Sudden increase in creatinine concentration with hyperuricemia (>890  $\mu\text{mol/L}$ . >15 mg/dl) and hyperkalemia may indicate:

- A. acute urate nephropathy.
- B. tumor lysis syndrome.
- C. prerenal acute renal failure.
- D. all the above.
- E. A and B are correct.

**Nr 17.** Heavy proteinuria is a typical feature of:

- A. acute interstitial nephritis following nonsteroidal anti-inflammatory agents (NSAIDs).
- B. acute glomerulonephritis.
- C. membranous nephropathy.
- D. all the above.
- E. B and C are correct.

**Nr 18.** Albuminuria:

- A. serves as a key factor for monitoring response to therapy in acute kidney injury.
- B. is a basic tool for monitoring treatment of acute pyelonephritis.
- C. serves as a key adjunctive tool for monitoring nephron injury.
- D. is a basic tool to define the stage of chronic kidney disease (CKD).
- E. is all the above.

**Nr 19.** What is the most probable diagnosis in a 70-year-old man who 1 month after aortography developed acute renal failure with painful blue toe of the right foot with livedo reticularis above and retinal plaques?

- A. prerenal renal failure.
- B. arterial atheroembolism.
- C. obstructive nephropathy.
- D. contrast nephropathy.
- E. acute glomerulonephritis.

**Nr 20.** In urinary tract infection in a pregnant woman the drug of the first choice is:

- A. amoxicillin.
- B. gentamycine.
- C. rifampin.
- D. ciprofloxacin.
- E. imipenem-cilastatin.

**Nr 21.** The typical feature of nephritic syndrome is:

- A. active urinary sediment.
- B. arterial hypertension.
- C. proteinuria <3.5 g/dl.
- D. all the above.
- E. A and C are correct.

**Nr 22.** Indicate which state **is not** a cause of hypercalcemia:

- A. primary hyperparathyroidism.
- B. sarcoidosis.
- C. vitamin D depletion.
- D. multiple myeloma.
- E. metastatic bone disease.

**Nr 23.** Which of the following statements concerning the initiation of dialysis therapy in chronic kidney disease is **false**:

- A. creatinine clearance must be >20 ml/min.
- B. no survival advantage was shown for early initiation of renal replacement therapy.
- C. clinical criteria for dialysis initiation are the most important.
- D. there is considerable interindividual variability in the severity of uremic symptoms and renal function.
- E. serum creatinine concentration is not a good indicator for renal dysfunction.

**Nr 24.** Which of the following **is not** a feature of renal artery stenosis?

- A. unexplained hyperkalemia.
- B. abrupt onset of hypertension.
- C. accelerated or malignant hypertension.
- D. refractory hypertension.
- E. unilateral small kidney.

**Nr 25.** A clinical picture showing the inflammation of Achilles tendon is typical of:

- A. rheumatoid arthritis.
- B. seronegative spondyloarthropathies.
- C. systemic lupus erythematosus.
- D. osteoarthritis.
- E. Marfan's syndrome.

**Nr 26.** Which of the following drug(s) is/are useful in the treatment of Raynaud phenomenon?

- A.  $\beta$ -blockers.
- B. NSAIDs.
- C. calcium channel blockers.
- D. colchicine.
- E. tramadol.

**Nr 27.** A 32-year-old female reported to the hospital due to rapidly occurring hemiplegia of the left side. An ischemic stroke was diagnosed. In the history: thrombophlebitis of both legs one year ago, two miscarriages. In the laboratory testing: platelet count 90 G/l, APTT time 65s. What kind of autoantibodies should be determined in this clinical case?

- A. antiphospholipid antibodies.
- B. rheumatoid factor.
- C. anti-SS-A, anti-SS-B autoantibodies.
- D. anti-CCP antibodies (anti-citrulline antibodies).
- E. antibodies against *Borrelia burgdorferi*.

**Nr 28.** First line therapy in the treatment of osteoporosis includes the following drug(s):

- A. calcitonine.
- B. bisphosphonates.
- C. estrogens.
- D. glucocorticosteroids.
- E. B and C are correct.

**Nr 29.** Antinuclear antibodies may be present in the serum of:

- A. patients with systemic lupus erythematosus.
- B. patients with drug induced lupus.
- C. patients with mixed connective tissue disease.
- D. healthy elderly.
- E. all the above.

**Nr 30.** A 55-year-old female is complaining about dry eyes, problems with swallowing dry meals. In physical examination found: painless enlargement of cervical and axillary lymph nodes, as well as parotid and submandibular glands on both sides. In Schirmer's test: 3 mm on both sides. In laboratory testing: ESR 105 mm/h, anti-SS-A, anti-SS-B antibodies present. The presented case should be recognized as:

- A. systemic lupus erythematosus.
- B. mixed connective tissue disease.
- C. polymyalgia rheumatica.
- D. systemic sclerosis.
- E. Sjögren's syndrome (sicca syndrome).

**Nr 31.** Which of the following joints may be involved in psoriatic arthritis?

- 1) proximal interphalangeal;
- 2) distal interphalangeal;
- 3) knee;
- 4) ankle;
- 5) sacroiliac.

The correct answer is:

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

**Nr 32.** Which of the following clinical forms of the necrotizing vasculitis is accompanied by bronchial asthma?

- A. Wegener's granulomatosis.
- B. Churg-Strauss syndrome.
- C. giant cell arteritis.
- D. polyarteritis nodosa.
- E. Takayasu disease.

**Nr 33.** Which of the following autoantibodies are the most specific ones for generalized systemic sclerosis (SSc)?

- A. anti-Scl 70.
- B. anti-dsDNA.
- C. rheumatoid factor (RF).
- D. anti-CCP.
- E. lupus anticoagulant (LA).

**Nr 34.** The following are all typical of ankylosing spondylitis except for:

- A. inflammatory back pain.
- B. male predominance.
- C. rheumatoid factor presence.
- D. enthesitis (Achilles tendon insertion inflammation).
- E. iridocyclitis (anterior uveitis).

**Nr 35.** The risk of thromboembolic complications is one of the most important things to consider related to treatment of patients with atrial fibrillation. The most commonly used scale which facilitates the selection of proper treatment strategy for an individual patient is called:

- A. CHADS<sub>2</sub>.
- B. HAS-BLED.
- C. SCORE.
- D. CCS.
- E. NYHA.

**Nr 36.** The prevention of sudden cardiac death in patients who survived cardiac arrest in the mechanism of ventricular fibrillation unrelated to acute coronary syndrome requires:

- A. proper drug treatment only.
- B. cardiac pacemaker implantation.
- C. automatic cardioverter-defibrillator implantation.
- D. cardiac ablation.
- E. first cardiac pacemaker implantation and in the next stage cardiac ablation.

**Nr 37.** Indicate correct statements concerning chylomicronemia:

- 1) increases the risk of atherosclerosis;
- 2) does not increase the risk of atherosclerosis;
- 3) clinically is manifested by recurrent abdominal pain;
- 4) clinically is manifested by chronic headache;
- 5) clinically is manifested by acute pancreatitis;
- 6) clinically is manifested by xanthelasma.

The correct answer is:

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

**Nr 38.** Cardiac syndrome X is a clinical condition characterized by the presence of:

- A.** chest pain, ST segment elevation in ECG exercise testing, coronary artery stenosis.  
**B.** diabetes type 2, hypertension, lipid disorder.  
**C.** obesity, diabetes type 2, coronary artery disease.  
**D.** diabetes type 2, obesity, hypertension.  
**E.** chest pain, ST segment depression in ECG exercise testing, normal coronary arteries.

**Nr 39.** In order to decrease the risk of thromboembolism a patient with atrial fibrillation lasting for more than 48 hours should be given oral anticoagulants:

- A.** at least for 4 weeks before cardioversion.  
**B.** at least for 3 week before cardioversion and 4 weeks after cardioversion.  
**C.** at least for 4 weeks before cardioversion and then till the end of their life.  
**D.** at least for 3 weeks after cardioversion.  
**E.** oral anticoagulants in hemodynamically stable patients are not necessary.

**Nr 40.** Chronic cough, coughing up of excessive amount of purulent sputum in the morning, rales in the lower parts of the lungs in a child of pre-school age are suggestive of:

- A.** bronchial asthma.      **D.** bronchiectasis.  
**B.** relaxation of trachea.      **E.** chronic obstructive lung disease.  
**C.** acute sinusitis.

**Nr 41.** Constipation may be caused by:

- 1) low intake of cellulose and fluids;
- 2) changes in lifestyle;
- 3) application of some drugs, e.g. alkalies, opiates;
- 4) anatomical anomalies of the rectum;
- 5) functional perianal disorders.

The correct answer is:

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

**Nr 42.** Hydrogen breathing test:

- 1) is used to diagnose disaccharide intolerance;
- 2) is used to diagnose Helicobacter pylori infection;
- 3) measures expiratory hydrogen concentration after disaccharide loading;
- 4) measures hydrogen concentration after oral urea intake;
- 5) is a functional test for FEV1 and VC estimation.

The correct answer is:

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

**Nr 43.** The symptom that speaks against severe dehydration is:

- A. positive skin fold sign.
- B. dryness of the mucosa.
- C. oliguria.
- D. bradycardia.
- E. decreased blood pressure.

**Nr 44.** A 10-year-old boy presents with skin changes in popliteal and elbow pits. These are inflammatory infiltrations with significant lichenization, excoriation and small skin erosions. He complains of excessive itching. From the past medical history you learn that he is treated for bronchial asthma with montelukast. The most probable cause of skin changes is:

- A. montelukast allergy.
- B. scabies.
- C. tinea cutis.
- D. atopic dermatitis.
- E. ichthyosis.

**Nr 45.** Which of the following genetic disorders **does not** give phenotypic changes during infancy?

- A. Turner syndrome.
- B. Klinefelter syndrome.
- C. Edward syndrome.
- D. Down syndrome.
- E. Prader-Willi syndrome.

**Nr 46.** Which of the following symptoms **is not** characteristic of iron deficiency anaemia?

- A. Hb level below 9 g/dl (5.6 mmol/l).
- B. hematocrit below 0.30/l.
- C. serum Fe below 17  $\mu$ mol/l.
- D. serum ferritin 20-25 ng/ml.
- E. slowdown in growth and weight gain.

**Nr 47.** Which of the following symptoms **is not** characteristic of irritable bowel syndrome?

- A. alternating occurrence of loose stools up to 3 times a day and bated stools at least twice per week for at least 3 months during a year.
- B. coexistence of abdominal pain with the symptoms mentioned above.
- C. abdominal distension and bowel urgency.
- D. longer periods without discomfort.
- E. physical developmental delay, mainly deficiency in body weight.

**Nr 48.** Which of the following plays the main role in the development/pathophysiology of acute otitis media in infants?

- A. anatomical ear differences.
- B. local isolated viral ear infection.
- C. viral infections of nasal cavity and nasopharynx.
- D. primary bacterial middle ear infections.
- E. bacterial middle ear infections secondary to sinusitis.

**Nr 49.** In the treatment of asthma one **should not**:

- A. minimize chronic symptoms of the disease.
- B. prevent exacerbation.
- C. reduce the use of short-acting  $\beta$ -adrenergics.
- D. avoid tobacco smoke.
- E. minimize physical activity.

**Nr 50.** The indication for the introduction of other meals (except milk) from 6 months of life **is not**:

- A. necessity of 8-10 feedings a day.
- B. infant drinking approx. 1L of milk mix a day.
- C. when infant doubles its birth weight.
- D. when monthly weight gain decreases below 500 g.
- E. continuation of breast feeding and the introduction of 2-3 g of porridge containing gluten in 6 month of life.

**Nr 51.** Subsequent milk served to milk-mix-fed 6- to 12-month-old infant **does not** have to contain/provide:

- A. increased caloric content of meals per kg of body weight.
- B. decreased amount of proteins.
- C. predominant whey proteins.
- D. the lowest salt and sugar amount.
- E. adequate calcium intake.

**Nr 52.** Which of the following **is not** an absolute **contraindication** to gastric lavage in children?

- A. haemorrhagic diathesis.
- B. ingestion of caustic substances.
- C. patient's agitation and no cooperation.
- D. past esophageal surgeries.
- E. esophageal varices.

**Nr 53.** Which of the following pathogens is the most common cause of community acquired pneumonia in infants?

- A. group B Streptococcus.
- B. Klebsiella pneumoniae.
- C. Mycoplasma pneumoniae.
- D. Staphylococcus aureus.
- E. Haemophilus influenzae.

**Nr 54.** A 6-year-old boy presented with fever, fatigue, sore throat and abdominal pain lasting for a few days. Medical examination revealed high fever, pharyngeal inflammation, enlarged submandibular and cervical lymph nodes, painfulness in epigastric and umbilical region with splenomegaly and hepatomegaly. Blood cell count showed lymphocytic leucocytosis with atypical lymphocytes. The most probable diagnosis is:

- A. borreliosis.
- B. typhoid fever.
- C. scarlet fever.
- D. streptococcal angina.
- E. infectious mononucleosis.

**Nr 55.** Which of the following drugs should be used in the treatment of a 10-year-old boy with giardiasis?

- A. amoxicillin.
- B. metronidazole.
- C. nifuroxazide.
- D. amoxicillin with clavulanic acid.
- E. clarithromycin.



**Nr 63.** Which of the following **is not** an alarming symptom of gastroesophageal reflux disease in children?

- A. dysphagia.
- B. weight loss.
- C. nocturnal abdominal pain.
- D. anaemia.
- E. nocturnal cough and dyspnea.

**Nr 64.** Which of the following drugs **should not** be applied in the treatment of a 2-year-old girl with a functional constipation?

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

**Nr 65.** A 11-year-old boy presents with a two-day history of intense pain in the umbilical region, nausea and loss of appetite. Few hours before the examination he vomited few times with a large amount of blood and noticed two tarry stools. The most probable diagnosis is:

- A. Meckel's diverticulum.
- B. esophageal varices.
- C. infectious diarrhoea.
- D. peptic ulcer.
- E. inflammatory bowel disease.

**Nr 66.** A 7-year-old girl, weight 20 kg, was admitted to the ER because of severe diarrhea. Potassium level 2.5 mmol/l. The most appropriate procedure would be:

- 1) only oral supplementation of potassium containing fluids;
- 2) bolus of potassium solution iv;
- 3) intravenous supplementation of potassium solutions 20-40 mmol/L (1-2 ml 15% KCl/100 ml of solution);
- 4) potassium drip (15% KCl+5% sol. glucose) at a rate 10 mmol per hour, under the control of monitor;
- 5) simultaneous correction of gasometric disorders and magnesium deficiency.

The correct answer is:

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

**Nr 67.** A 7-year-old girl hospitalized because of urinary tract infection said that she often slept with her uncle and that in the night her 'tummy', legs and bottom were being touched. The doctor should:

- 1) note that in the child's medical history;
- 2) refer the child to psychological tests;
- 3) talk to the girl's mother;
- 4) immediately notify the prosecutor's office or the police;
- 5) according to the Act on Physician and Dentist Professions keep this information confidential because its disclosure could be harmful to the child.

The correct answer is:

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

**Nr 68.** Which of the following are indications for screening for celiac disease?

- |                         |                          |
|-------------------------|--------------------------|
| 1) diabetes type II;    | 4) tarry stools;         |
| 2) lactose intolerance; | 5) recurrent oral aftae. |
| 3) Turner's syndrome;   |                          |

The correct answer is:

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

**Nr 69.** Abdominal pain, retention of gases, constipation, nausea and vomiting are the symptoms of:

- |                      |                   |
|----------------------|-------------------|
| 1) paralytic ileus;  | 4) hyperkalemia;  |
| 2) mechanical ileus; | 5) hypernatremia. |
| 3) biliary colic;    |                   |

The correct answer is:

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

**Nr 70.** Indicate the correct statements regarding hernias:

- 1) laparoscopic surgery is most commonly used;
- 2) surgeries with the use of plastic mesh give the best results;
- 3) there is always a risk of incarceration;
- 4) inguinal hernias are a few times more often in men than in women;
- 5) only big hernias should be treated with surgery.

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 71.** The common symptoms of diverticulitis are:

- |   |                                     |
|---|-------------------------------------|
| 1) left lower abdomen pain;               | 4) retention of gases and vomiting; |
| 2) admixture of blood in the stool;       | 5) narrow stools.                   |
| 3) painful resistance above the left hip; |                                     |

The correct answer is:

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

**Nr 72.** Which of the following statements regarding urgent blood transfusion is true? (PRBC-Packed Red Blood Cells, FFP – Fresh Frozen Plasma).

- A.** in the cases of emergency there is a possibility of blood group AB PRBC transfusion, without compatibility testing, and without the recognition of the blood group type of the recipient.
- B.** in the case of pregnant only the group 0 Rh(+) PRBC may be transfused, without compatibility testing, and without the recognition of the blood group type of the recipient.
- C.** in the cases of emergency there is a possibility of the AB group FFP transfusion, without compatibility testing, and without the recognition of the blood group type of the recipient.
- D.** A and C are correct.
- E.** blood transfusion cannot be performed without the recognition of the blood group of the recipient.

**Nr 73.** Soft tissue infection limited to subcutaneous tissue, often infiltrating one phalanx bone, and in the case of spreading to proximal one it shows the tendency of expansion to the hand. Initially it forms an inflammatory infiltration, later purulent vesicle. Which of the diagnoses seems to be correct?

- A.** paronychia.    **B.** empyema.    **C.** felon (whitlow).    **D.** seroma.    **E.** fibroma.

**Nr 74.** Which of the following disorders are the most characteristic of hypogastric and left iliac fossa pain?

- |                             |                        |
|-----------------------------|------------------------|
| 1) sigmoid diverticulitis;  | 4) pancreatitis;       |
| 2) small bowel obstruction; | 5) renal colic;        |
| 3) urine retention;         | 6) splenic infarction. |

The correct answer is:

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

**Nr 75.** The patient was admitted to the surgery ward with suspected appendicitis. Additional tests (ultrasound imaging) confirmed periappendicular inflammatory infiltration. Conservative therapy was administered, and after the pain withdrawal and the reduction of white blood cells count in peripheral blood, the patient was discharged. On the second day the patient was readmitted to the emergency room, complaining of fever, dizziness, and mild pain in the right iliac fossa. Indicate the correct conclusions and action:

- A.** the ultrasonography of the abdomen should be done in this patient.  
**B.** the CT scan may be done in this patient.  
**C.** the patient probably will require urgent invasive treatment.  
**D.** the peritoneal abscess would be possible to diagnose.  
**E.** all of the answers are correct.

**Nr 76.** Which of the operations would be most suitable in the case of 3 synchronous colon tumors localized in ascendent, transverse and descendent colon respectively if these are adenocarcinomas, and the stage is not later than T3NXM0?

- |  |   |
|--|---|
| <b>A.</b> endoscopic polypectomy.                  | <b>D.</b> endoscopic prosthesis implantation. |
| <b>B.</b> Transanal Endoscopic Microsurgery (TEM). | <b>E.</b> paliative treatment.                |
| <b>C.</b> colectomy.                               |   |

**Nr 77.** A 40-year-old woman, weight 104 kg, height 172 cm, a history of two births – this is a woman with tendency to:

- |   |                            |
|---|----------------------------|
| <b>A.</b> gastric and duodenal ulcer.           | <b>D.</b> duodenal ulcer.  |
| <b>B.</b> choledocholithiasis and urolithiasis. | <b>E.</b> nephrolithiasis. |
| <b>C.</b> cholelithiasis.                       |                            |

**Nr 78.** A 27-year-old patient reported to his GP because of low abdominal aching while coughing and after strenuous exercise. Body temperature normal, rather regular urination, without constipation. Physical exam: a soft abdomen with no pathological resistance. Peristalsis normal. There is a small lump (size of tangerine) in the region of the left groin appearing during slight cough. This description suggests:

- A. lipoma of the inguinal canal.
- B. enlarged lymph node.
- C. lymphadenitis.
- D. left scrotal hydrocele.
- E. inguinal hernia.

**Nr 79.** A female patient vomiting for the last few months. The vomiting occurs almost immediately after a meal and brings relief. The vomiting is preceded by pain within the central epigastric region. She has been previously treated for chronic peptic ulcer disease. Physical exam: gastric splash present. This clinical condition will be characterized in biochemical findings by:

- A. compensated metabolic acidosis and hypokalaemia.
- B. metabolic alkalosis and hypochloraemia.
- C. metabolic alkalosis and hypokalaemia with hypochloraemia.
- D. uncompensated metabolic acidosis with hypochloraemia.
- E. compensated metabolic acidosis and the beginning of alkalosis.

**Nr 80.** A 50-year-old man with left low abdominal pain lasting for 2 days. Physical exam: body temperature 37.8°C, tenderness and Blumberg sign present in the left iliac region. Laboratory findings: leucocytes 17,000 per mm<sup>3</sup>, CRP 45 U/l. Abdominal CT scan: sigmoid wall thickening and the presence of inflammatory infiltrations in the fat tissue surrounding the sigmoid colon. The most appropriate procedure would be:

- A. empirical antibiotics with following CT scan after 48-72 hours if the symptoms of localized peritonitis persist.
- B. emergency laparotomy with bowel resection and primary intestinal anastomosis.
- C. emergency colonoscopy or double-contrast enema due to suspected sigmoid tumor.
- D. emergency surgery – sigmoid resection m/o Hartman – due to suspected diverticulitis.
- E. laparoscopic sigmoid resection with anastomosis without waiting for disease progression.

**Nr 81.** A 28-year-old man has been admitted to the ER in a severe condition after the fall from scaffolds (height 3 m). The patient, primarily unconscious, regained consciousness in the ambulance. ER Glasgow Coma Scale (GCS) – 6. Blood pressure 175/80 mmHg. Pulse 50/minute. Irregular breathing. Upon examination: anisocoria and bruises within the left temporal region. The most probable diagnosis is:

- A. fracture of the skull base and optical nerve injury.
- B. subdural hematoma.
- C. epidural hematoma.
- D. extensive intracranial hematoma.
- E. posterior cranial fossa fracture.

**Nr 82.** A 45-year-old patient was admitted to the ER because of severe peri-rectal pain and fever. Upon examination: significant tenderness during per rectum exam and tender, reddish tumor located on the right buttock 3 cm from anus. The most appropriate procedure in this case would be:

- A. tumor incision and drainage.
- B. drainage under ultrasound control.
- C. antibiotic therapy and drainage after the resolution of inflammation.
- D. drainage directed from the lumen of the rectum.
- E. puncture, antibiogram and targeted antibiotic therapy.

**Nr 83.** Pleomorphic microcalcifications in the upper outer quadrant of the right breast have been found in a 52-year-old woman on screening mammography. They have been classified as BIRADS IV. Please choose subsequent procedure:

- A. observation.
- B. mammography after 3 months.
- C. surgical biopsy.
- D. modified radical mastectomy.
- E. neoadjuvant chemotherapy.

**Nr 84.** There has been an upper gastrointestinal (GI) bleeding in a patient treated because of advanced liver hepatitis C cirrhosis. Successful first aid treatment has been applied and hemostasis obtained. The patient is now discharged from hospital with treatment recommendations. Which of the therapeutic options listed below is the least successful in the prophylaxis of recurrent GI bleeding?

- A. beta-adrenolytics.
- B. endoscopic use of rubber garters.
- C. transdermal portocaval anastomosis.
- D. interferon.
- E. liver transplantation.

**Nr 85.** A 40-year-old man has been admitted to hospital with symptoms of gastrointestinal (GI) bleeding. In the past medical history there have been a few episodes of upper GI bleeding for the last year. The patient has been suffering from frequent, massive diarrhea for a few months. What is the most common localization of the pathology which causes this disorder?

- A. lung.
- B. right half of colon.
- C. lymph nodes.
- D. pancreaticoduodenal region.
- E. brain stem.

**Nr 86.** Obstructive jaundice, dilation of the biliary ducts and of gallbladder are the symptoms of:

- 1) pancreatic body cancer;
- 2) carcinoma of the ampulla of Vater;
- 3) pancreatic head cancer;
- 4) common bile duct cancer;
- 5) hepatocellular carcinoma.

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 87.** A 75-year-old woman suffered from severe, constant abdominal pain on the 5th day after right hemicolectomy. Upon examination: abdomen tenderness, peritoneal signs present, peristalsis absent, body temperature 39°C, pulse 120/minute. The most probable diagnosis is:

- A. paralytic ileus.
- B. intestinal anastomosis leakage.
- C. peptic ulcer perforation.
- D. pancreatitis.
- E. abscesses between the intestinal loops.

**Nr 88.** What is the appropriate treatment of intestinal necrosis caused by superior mesenteric artery embolism?

- 1) embolectomy;
- 2) intraoperative thrombolytic therapy;
- 3) necrotic intestine resection;
- 4) revision 24-48 hours after the primary laparotomy;
- 5) fractionated heparin application.

The correct answer is:

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

**Nr 89.** A 26-year-old patient suffered from a low abdominal injury (run over by a tractor). Unstable pelvic fracture complicated with massive bleeding and a rectum injury were diagnosed. The primary surgical procedure is:

- A. fixation of the pelvic fractures with a blocked plate.
- B. placement of an external pelvis fixator.
- C. laparotomy to stop the bleeding and peritoneal drainage.
- D. laparotomy: pelvic packing.
- E. exteriorization of the rectum.

**Nr 90.** Vomiting, pain within the right half of the abdomen and body temperature 39°C occurred in a 47-year-old patient on the 2nd day after a blunt abdominal injury. Laboratory findings: elevated plasma amylase level, leucocytosis. Abdominal X-ray: air bubbles along the right iliopsoas muscle. The most probable diagnosis is:

- A. duodenal ulcer perforation – “stress ulcer”.
- B. post-traumatic pancreatitis.
- C. extraperitoneal duodenal rupture.
- D. post-traumatic ascending colon rupture.
- E. pancreatic contusion.

**Nr 91.** A 46-year-old woman suffered from severe abdominal pain and vomiting. In the past medical history: laparotomy 2 years ago due to similar symptoms, but without finding the cause of the symptoms. Recently she has been taking sedative and anti-inflammatory drugs. The cause of her symptoms may be:

- A. acute porphyria.
- B. Ogilvie syndrome.
- C. lead poisoning.
- D. type IV hyperlipidemia.
- E. hemolytic crisis in sickle-cell anemia.

**Nr 92.** Which of the following statements regarding abdominal angina are true?

- 1) it is caused by stenosis or occlusion of visceral vessels;
- 2) the most often cause is atherosclerotic stenosis or occlusion of the superior mesenteric artery;
- 3) the most frequent cause is fibro-muscular hypertrophy of the arterial walls and Burger's disease;
- 4) patient waste with epigastric colic pain after the meals and diarrhea dominates in clinical picture;
- 5) it is rarely symptomatic disease owing to multiple junctions of visceral vessels with the internal iliac artery.

The correct answer is:

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

**Nr 93.** The indication for performing thoracic sympathectomy is:

- A.** acute upper extremity ischemia.  
**B.** Paget-Schrotter syndrome.  
**C.** thoracic outlet syndrome.  
**D.** Raynaud disease with fingers' ischemia.  
**E.** severe pain syndrome in advanced pancreatic cancer.

**Nr 94.** Which of the following symptoms differentiate acute appendicitis from acute pyelonephritis?

- |  |                                 |
|--|---------------------------------|
| 1) chills in the beginning of the disease; | 4) regular rhythm of urinating; |
| 2) body temperature above 39°C;            | 5) positive Rovsing sign;       |
| 3) marked peritoneal signs;                |                                 |

The correct answer is:

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

**Nr 95.** To assess the prognosis of acute pancreatitis one can use:

- |                         |                        |
|-------------------------|------------------------|
| 1) APACHE scale;        | 4) Ranson's scale;     |
| 2) Milan criteria;      | 5) GCS classification. |
| 3) CEAP classification; |                        |

The correct answer is:

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

**Nr 96.** Which of the following is the best definition of the perineum?

- A.** entire area between the thighs from the symphysis to the coccyx, bounded caudally by the skin and cephalically by the levator muscles of the pelvic diaphragm.  
**B.** anus and perineal area.  
**C.** superficial skin layer of the vulva.  
**D.** tendon joining the deep muscles to the external genitalia.  
**E.** complex of the bulbocavernosus, ischiocavernosus, and transverse perineal muscles.

**Nr 97.** How do Nabothian cysts arise?

- A. they are wolffian duct remnants.
- B. because of the blockage of crypts in the uterine cervix.
- C. because of squamous cell debris that causes cervical irritation.
- D. they are carcinoma.
- E. they are paramesonephric remnants.

**Nr 98.** Which of the following is the best description of the levator ani?

- A. superficial muscular sling of the pelvis.
- B. a tripartite muscle of the pelvic floor penetrated by the urethra, vagina, and rectum.
- C. is made up of the bulbocavernosus, the ischiocavernosus, and the superficial transverse perineal muscle.
- D. a muscle that abducts the thighs.
- E. is part of the deep transverse perineal muscle.

**Nr 99.** During the menstrual cycle the histological appearance of the endometrium will change significantly. During the first half of the menstrual cycle, the endometrium becomes thicker and rebuilds largely in response to which of the following?

- A. progesterone.
- B. follicle-stimulating hormone (FSH).
- C. estradiol.
- D. luteinizing hormone (LH).
- E. gonadotropin-releasing hormone (GnRH).

**Nr 100.** Gonadotropin-releasing hormone (GnRH) stimulates the release of which of the following?

- A. adrenocorticotrophic hormone (ACTH).
- B. growth hormone (GH).
- C. luteinizing hormone (LH).
- D. opiate peptides.
- E. thyroid-stimulating hormone (TSH).

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

**Nr 101.** Put the three principal estrogens in women in decreasing order of potency?

- A. estradiol, estriol, estrone.
- B. estradiol, estrone, estriol.
- C. estriol, estradiol, estrone.
- D. estriol, estrone, estradiol.
- E. estrone, estriol, estradiol.

**Nr 102.** Which of the following concerning cholestasis during pregnancy is false?

- A. incidence of the disease is approx. 0.5 – 1.5%.
- B. disease occurs more often in twin pregnancy.
- C. it increases the risk of preterm delivery and fetal hypoxia.
- D. termination of pregnancy before 36 week is recommended to avoid neonatal complications.
- E. ursodeoxycholic acid is the first-line drug.

**Nr 103.** Measurement of chorionic gonadotropin is used:

- 1) for diagnosing early pregnancy;
- 2) as a marker of neoplasms of trophoblastic origin;
- 3) for diagnosing ectopic pregnancy;
- 4) for predicting spontaneous abortion;
- 5) for diagnosing multiple pregnancy.

The correct answer is:

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

**Nr 104.** Which of the following are the indication for hospitalization in pelvic inflammatory disease (PID)?

- 1) tubo-ovarian abscess;
- 2) pregnancy;
- 3) *Chlamydia trachomatis* infection;
- 4) mediocre vaginal bleeding.

The correct answer is:

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

**Nr 105.** Which of the following statements concerning the mechanism of operation of intrauterine device is **false**?

- A.** copper ions increase the synthesis of endometrial prostaglandins leading to sluggish egg transport.  
**B.** because of the sluggish egg transport, the egg does not reach uterine cavity.  
**C.** copper ions promote other secretory changes than in the regular cycle.  
**D.** A, B, C are true.  
**E.** A, B, C are false.

**Nr 106.** Acute pyelonephritis affects approx. 1-2% of pregnant women. The infection occurs mostly via the ascending route. The **least likely** cause is:

- A.** *Proteus mirabilis*.      **D.** *Klebsiella sp.*  
**B.** *Ureaplasma hominis*.      **E.** *Staphylococcus saprophyticus*.  
**C.** *Escherichia coli*.

**Nr 107.** A 20-year-old woman menstruates regularly but the cycles last up to 21 days. This clinical picture should be called:

- A.** hypomenorrhea.      **D.** metrorrhagia.  
**B.** menorrhagia.      **E.** oligomenorrhea.  
**C.** polymenorrhea.

**Nr 108.** In a 40-year-old woman the menses are profuse, prolonged, and their regularity is difficult to determine because the cycles last from 16 to 45 days. This clinical picture should be called:

- A.** hypomenorrhea.      **D.** metrorrhagia.  
**B.** menorrhagia.      **E.** oligomenorrhea.  
**C.** polymenorrhea.

**Nr 109.** Germinal neoplasms **do not** include:

- A. embryonic carcinoma.
- B. mature teratoma.
- C. gynandroblastoma.
- D. yolk sac tumor.
- E. gonadoblastoma.

**Nr 110.** Gestational diabetes is diagnosed when blood glucose 2 hours after the administration of 75 g glucose solution is **at least**:

- A. 7.5 mmol/l.
- B. 6 mmol/l.
- C. 7 mmol/l.
- D. 7.8 mmol/l.
- E. 8.5 mmol/l.

**Nr 111.** The primary mode in the treatment of endometrial carcinoma which is confined to the uterine corpus is:

- A. external beam radiation.
- B. intracavitary radium.
- C. hysterectomy.
- D. chemotherapy.
- E. progestin therapy.

**Nr 112.** Ovarian neoplasm most commonly arise from:

- A. celomic epithelium.
- B. nonspecific mesenchyme.
- C. specialized gonadal stroma.
- D. primitive germ cells.
- E. connective tissue elements within the ovary.

**Nr 113.** Glucocorticoids administered to a pregnant woman decrease:

- 1) frequency and severity of RDS in premature infants;
- 2) frequency of NEC;
- 3) frequency of ASD;
- 4) frequency of patent ductus arteriosus;
- 5) perinatal mortality.

The correct answer is:

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

**Nr 114.** The criteria for the administration of anti-D IgG after delivery include:

- 1) mother Rh (-) negative;
- 2) mother Rh (+) positive;
- 3) no signs of mother immunization – anti-D antibodies absent in blood serum;
- 4) newborn Rh (+) positive;
- 5) newborn Rh (-) negative.

The correct answer is:

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

**Nr 115.** Progesterone in women is produced:

- A. in follicular phase during reproductive period.
- B. in ovulatory phase during reproductive period.
- C. in luteal phase during reproductive period.
- D. after menopause.
- E. all the above.

**Nr 116.** Which of the following ultrasound features indicates malignant ovarian lesion?

- A. mixed cystic and solid lesion of the ovary.
- B. multilocular lesion.
- C. walls between cyst compartments.
- D. internal papillary excrescences.
- E. all the above.

**Nr 117.** Which of the following factors definitely increase the risk for endometrial carcinoma?

- A. premature menopause.
- B. combination (estrogen and progesterone) hormone replacement therapy.
- C. diabetes.
- D. low body mass index.
- E. multiparity.

**Nr 118.** Which of the following symptoms best describe the usual manifestation of invasive cervical carcinoma?

- A. watery, blood-tinged vaginal discharge.
- B. significant hemorrhage.
- C. pelvic pain.
- D. renal failure from ureteral obstruction in the pelvis.
- E. all the above.

**Nr 119.** Women with advanced ovarian carcinoma most commonly complain about:

- A. weight loss and dyspareunia.
- B. nausea and abnormal vaginal discharge.
- C. constipation and frequent urination.
- D. abdominal distention and pelvic pain.
- E. all the above.

**Nr 120.** Low height less than 150 cm, webbed, short neck, broad (shield) chest with widely spaced nipples, cubitus valgus are characteristic of the following syndrome:

- A. Turner.
- B. Sweyer.
- C. Klinefelter.
- D. Kallman.
- E. PCO.

**Nr 121.** Which of the following glucocorticoids is used in pregnant women with risk of preterm delivery in order to prevent neonatal respiratory distress syndrome (RDS):

- A. hydrocortisone.
- B. prednisone.
- C. betamethasone.
- D. A, B and C.
- E. A and C.

**Nr 122.** Aphasia is defined by one of the following:

- A. disorders of performing desired movements.
- B. one of speech disorders caused by the dysfunction of the executive apparatus.
- C. inability to perform simplest arithmetic operations.
- D. difficulties with speaking or understanding spoken language.
- E. impaired recognition of emotional experiences.

**Nr 123.** Which of the following **is not** a symptom that suggests streptococcal pharyngitis?

- A. coughing.
- B. temperature > 38.5°C.
- C. painful enlargement of the anterior neck lymph nodes.
- D. sudden beginning of the disease.
- E. purulent exudates on the back of the throat and tonsils.

**Nr 124.** Which of the following may be the cause of eosinophilia?

- A. psoriasis.
- B. parasite disease.
- C. allergy.
- D. B, C are true.
- E. A, B, C are true.

**Nr 125.** According to the Polish vaccination calendar, tuberculosis vaccine is administered to healthy children:

- A. in the first 24 hours of life.
- B. in 12 month only in children without BCG scar.
- C. in 6 year only in children with negative tuberculin test.
- D. A and B are true.
- E. A, B and C are true.

**Nr 126.** Which of the following should be the first-line examination to make the diagnosis in an infant with recurring bronchitis and abundant, fat, smelly stools, with a history of meconium obstruction?

- A. concentration of anti-endomysial antibodies.
- B. abdomen ultrasound imaging.
- C. sweat chlorides level.
- D. concentration of specific IgE against dietary proteins.
- E. testing with D-xylose.

**Nr 127.** Which is the screening test for strabismus:

- A. Hirschberg test.
- B. white pupil test.
- C. examination with fork plates.
- D. examination with Ishihara plates.
- E. ear-eyelid reflex.

**Nr 128.** What is the appropriate procedure in a 4-year-old properly growing boy with a lack of testes in the scrotum?

- A. calm the mother and arrange an appointment in 6 months.
- B. refer to the endocrinologist.
- C. refer to the surgeon.
- D. refer to genetic out-patient clinic.
- E. administer chorionic gonadotropin (hCG) or/and gonadoliberin (GnRH).

**Nr 129.** Which of the following is the recommended therapeutic approach to more than 1-year-old child with the first episode of a slight course of acute otitis media?

- A. "watchful waiting" for 24-48 hours and symptomatic treatment.
- B. immediate administration of amoxicillin (75-90 mg/kg body weight/day) applied twice a day.
- C. immediate administration of amoxicillin with clavulanic acid (the dose of amoxicillin 75-90 mg/kg body weight/day) applied twice a day.
- D. referral for urgent ENT consultation.
- E. topical nose and throat application of mucosa decongesting specimen.

**Nr 130.** Which of the following is the first-line analgesic and anti-inflammatory drug recommended in the treatment of acute otitis media in children?

- A. paracetamol.
- B. ibuprofen.
- C. naproxen.
- D. acetylsalicylic acid.
- E. metamizole.

**Nr 131.** Which of the following drugs is recommended as a treatment of choice of acute otitis media in patients with delayed hypersensitivity to amoxicillin?

- A. doxycycline.
- B. clarithromycin.
- C. cefuroxime axetil.
- D. fluoroquinolone.
- E. trimethoprim/sulphamethoxazole.

**Nr 132.** Which of the following HbA1c levels is the recommended criterion of good diabetes control in a pregnant or pregnancy planning woman with type 2 diabetes?

- A.  $\leq 6.1$  %.
- B.  $\leq 6.5$  %.
- C.  $\leq 7.0$  %.
- D.  $\leq 7.5$  %.
- E.  $\leq 8.0$  %.

**Nr 133.** Diabetes screening, irrespective of age, should be performed once a year in patients:

- A. overweight and obese.
- B. hypertensive.
- C. with HDL-cholesterol  $<35$  mg/dl.
- D. with gestational diabetes in the past.
- E. all the above.

**Nr 134.** One portion of a standard unit of alcohol, i.e. 10 g of 100% ethanol equals to:

- A. 500 ml of beer (5%).
- B. 200 ml of wine (12%).
- C. 100 ml of vodka (40%).
- D. 50 ml of vodka (40%).
- E. 30 ml of vodka (40%).

**Nr 135.** Pharmacological treatment of moderate COPD includes:

- A. regular administration of short-acting anticholinergics 3-4 times per day.
- B. regular administration of long-acting inhaled bronchodilators.
- C. regular administration of selective phosphodiesterase 4 inhibitors.
- D. regular administration of inhaled low-dose GKS.
- E. emergency administration of selective short-acting  $\beta$ 2-mimetics.

**Nr 136.** The first-line antiplatelet drug in prehospital management of acute coronary syndrome (ACS), which may be used independently of the type of the following ACS therapy is:

- A. acetylsalicylic acid.
- B. clopidogrel.
- C. prasugrel.
- D. platelet glycoprotein IIb/IIIa inhibitor.
- E. each of the above.

**Nr 137.** In which of the following types of dermatitis only local treatment is indicated?

- A. impetigo.
- B. erysipelas.
- C. erythema migrans.
- D. infections following animal bites.
- E. tularemia.

**Nr 138.** Prophylaxis of venous thrombosis of the lower extremities in a person travelling by plane (flight  $< 6$  hours) without risk factors for thromboembolic disease includes:

- A. avoidance of dehydration and performing calf muscles exercise.
- B. use of knee-length stockings during the flight.
- C. use of acetylsalicylic acid (375 mg) on the day of the travel.
- D. application of a single dose of low molecular weight heparin before the travel.
- E. application of 2.5 mg vitamin K before the travel.

**Nr 139.** Considering a lack of studies indicating benefits resulting from the reduction of fever in the treatment of acute infections of the upper airways, it is not recommended to routinely apply fever-reducing medicines in these diseases.

- 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; however, they do not remain in a mutual cause-effect relationship.
- E. both statements are true; however, they remain in a mutual cause-effect relationship.

**Nr 140.** According to the current recommendations, body temperature in a child over 5 years of age should be measured in:

- A. the rectum.
- B. the ear.
- C. the mouth.
- D. the armpit.
- E. all the above.

**Nr 141.** According to actual recommendations diagnosis and treatment **is not** necessary in the case of:

- A. inherited hydrocoele in a 2-month-old infant.
- B. uncontrolled urinating in a 18-months-old child.
- C. foreskin stuck to the glans in a 2-year-old boy.
- D. A and B are true.
- E. A, B, C are true.

**Nr 142.** Which of the following **does not** belong to the criteria of erotic delusions?

- A. false belief.
- B. object of delusions usually possess a high social status.
- C. object of the delusions is attracted to the patient.
- D. object of the delusions is in love with the patient.
- E. delusions are accompanied by physical (sexual) pleasure.

**Nr 143.** The following substances are hallucinogenic, **with the exception of:**

- A. hashish.
- B. LSD.
- C. ketamine.
- D. psilocibine.
- E. all the above are hallucinogenic substances.

**Nr 144.** The type of schizophrenia characterized by dominating negative symptoms and a distinct change of behaviour, with no hallucinations or delusions, is called:

- A. schizophrenia deficit.
- B. paranoid schizophrenia.
- C. schizophrenia simplex.
- D. catatonic schizophrenia.
- E. undifferentiated schizophrenia.

**Nr 145.** For the treatment of acute mania the following principles have to be followed, **with the exception of:**

- A. hospitalization.
- B. use of an antipsychotic drug.
- C. use of a mood stabilizer.
- D. use of benzodiazepines.
- E. pharmacotherapy is necessary.

**Nr 146.** Threatening with a suicide, preparations for a suicide, the suicidal attempt or suicidal act, all together are called:

- A. suicidal thoughts.
- B. suicide attempt.
- C. deliberate self harm.
- D. suicidal tendencies.
- E. suicidal behaviour.

**Nr 147.** Which of the following must be confirmed for the diagnosis of posttraumatic stress disorder (according to ICD-10)?

- A. delayed or prolonged reaction to a stressful event.
- B. threatening or catastrophic character of stressful event.
- C. predisposing personality traits.
- D. A and B are correct.
- E. A, B and C are correct.

**Nr 148.** Panic attacks most frequently appear in all of the following conditions, with the exception of:

- A. life threatening situations.
- B. states with positive emotional loading.
- C. acute pain.
- D. severe difficulty in breathing.
- E. heart rhythm disturbances.

**Nr 149.** Which of the following does not belong to insomnias?

- A. difficulty in falling asleep.
- B. difficulty with sleep maintaining.
- C. sleep apnea.
- D. too early awakening.
- E. lack of rest after sleep.

**Nr 150.** The rules of pharmacological treatment of schizophrenia include all the following, with the exception of:

- A. start pharmacological treatment as soon as possible after the diagnosis of schizophrenia.
- B. as soon as possible administer an antidepressant in the presence of a depressive mood.
- C. avoid the need for drugs correcting the side-effects of antipsychotics.
- D. adjust the dose of an antipsychotic to individual needs of the patient.
- E. assure patient's satisfactory drug compliance.

**Nr 151.** The drug antipsychotic activity depends, first and foremost, on the following activity:

- A. D2 agonism.
- B. D2 antagonism.
- C. NMDA agonism.
- D. 5HT2 antagonism.
- E. M1 antagonism.

**Nr 152.** Which of the following statements concerning clozapine is false?

- A. in small doses it is indicated for the treatment of insomnia.
- B. it is efficacious in treatment-resistant schizophrenic patients.
- C. it is not indicated for patients with the risk of metabolic syndrome.
- D. treatment with clozapine requires monitoring of blood cell count.
- E. it is considered the most powerful antipsychotic drug.

**Nr 153.** Which of the following antidepressants **does not** belong to the SSRI group (selective serotonin reuptake inhibitors)?

- A. citalopram.
- B. fluoxetine.
- C. paroxetine.
- D. fluvoxamine.
- E. venlafaxine.

**Nr 154.** In comparison with diazepam, which of the following benzodiazepine derivatives is characterized by shorter period of action:

- A. chlordiazepoxide.
- B. clorazepate.
- C. alprazolam.
- D. clonazepam.
- E. all benzodiazepines have a similar period of activity.

**Nr 155.** According to the Polish Mental Health Act (art 23) the mandatory admission to psychiatric hospital is allowed when the person:

- A. has mental disorder.
- B. poses danger to others' health.
- C. is of minor age.
- D. suffers from mental disease.
- E. poses danger to the legal order.

**Nr 156.** The causes of tachycardia **do not** include:

- A. exercise, stress.
- B. hypothyroidism, sleep.
- C. hyperpyrexia, septic shock.
- D. hyperthyroidism, pain.
- E. all the above.

**Nr 157.** The most probable causes of a palpable mass in the epigastrium are:

- A. abscess of the appendix, pancreatic tumour.
- B. food retention, hepatomegaly.
- C. gastric tumour, aortic aneurysm.
- D. sigmoid tumour, peptic ulcer.
- E. all the above.

**Nr 158.** Indicate the true statement concerning flail chest:

- A. it occurs as a result of a fracture of at least 3 neighboring ribs and each of them is broken in at least 2 places.
- B. force necessary to cause such kind of trauma usually leads to the pulmonary contusion.
- C. airway maintenance is of primary importance – the method of choice is intubation.
- D. all the above are true.
- E. none of the above is true.

**Nr 159.** The left side of the sternum at the second intercostal junction is the place of auscultation of:

- A. aortic valve.
- B. mitral valve.
- C. tricuspid valve.
- D. pulmonary valve.
- E. none of the above.

**Nr 160.** If the palpation of the left lower quadrant of a person's abdomen causes the pain felt in the right lower quadrant, the patient is said to have a positive sign of:

- A. Chełmoński.
- B. Blumberg.
- C. Rovsing.
- D. Cullen.
- E. Goldflam.

**Nr 161.** Bell's palsy is a result of a dysfunction of:

- A. vagus nerve
- B. facial nerve.
- C. greater occipital nerve.
- D. hypoglossal nerve.
- E. trigeminal nerve.

**Nr 162.** Pulse deficit can be observed in a patient with:

- A. tension pneumothorax.
- B. paroxysmal atrial fibrillation.
- C. cardiac tamponade.
- D. second degree AV block.
- E. schizophrenia.

**Nr 163.** A patient with myocardial infarction should receive:

- A. morphine 2-4 mg iv.
- B. low flow oxygen therapy.
- C. aspirin 300 mg.
- D. A,C are true.
- E. A,B,C are true.

**Nr 164.** 'Red flags' in fainting **do not** include:

- A. Right bundle branch block (RBBB) / left bundle branch block LBBB.
- B. fainting during physical exercise.
- C. dyspnoea.
- D. history of arterial hypertension.
- E. all the above are 'red flags' in fainting.

**Nr 165.** Choose the **false** statement:

- A. crepitations at the base of the lungs are the sign of a right heart failure.
- B. wheezes are the consequence of spasm of the bronchioles in asthma.
- C. crepitations occur if there is fluid in the alveoli.
- D. rales are typical of pneumothorax.
- E. all the above are true.

**Nr 166.** Which of following conditions **should not** be considered in the differential diagnosis of hypoglycemia?

- A. beta-adrenergic blocking agents overdose.
- B. alcohol intoxication.
- C. dehydration.
- D. renal failure.
- E. stroke.

**Nr 167.** The intravenous dosage of adrenaline recommended in neonatal resuscitation is:

- A. 10-30 µg/kg.
- B. 50-100 µg/kg.
- C. 500 µg.
- D. 1 mg.
- E. adrenaline should not be given i.v.

**Nr 168.** Agitation, tachycardia, hypertension, hyperthermia and coronary arteries spasm leading to myocardium ischemia with angina pectoris are characteristic of poisoning with:

- A. atropine.
- B. morphine.
- C. cocaine.
- D. digoxin.
- E. clonidine.

**Nr 169.** A 26-year-old woman is brought to the ED by her agitated boyfriend. The boyfriend informs you that they were on a party and suddenly his girlfriend started to feel dizzy, uncomfortable and she said that her heart was palpitating. She has no chest pain or the shortness of breath. She has never felt like that before. Her temperature is 36,5°C, BP is 130/86 mm Hg, HR is 180 beats per minute, and RR is 13 breaths per minute. Her physical examination is normal. You obtained following ECG strip. What is your second-line treatment for this patient?



- A. amiodarone 300mg IV push.
- B. adenosine 12-mg IV push.
- C. Valsalva maneuver.
- D. verapamil 3-mg IV push.
- E. adenosine 6-mg intravenous (IV) push.

**Nr 170.** Which of the following **does not** constitute the basic changes in ERC 2010 recommendations:

- A. delivery of drugs via a tracheal tube is no longer recommended – if intravenous access cannot be achieved, drugs should be given by the intraosseous (IO) route.
- B. when treating VF/VT cardiac arrest, adrenaline 1mg is given after the third shock once chest compressions have restarted and then every 3–5 min (during alternate cycles of CPR). Amiodarone 300mg is also given after the third shock.
- C. atropine is not recommended for routine use in asystole or pulseless electrical activity.
- D. after cardiac arrest, blood glucose values >180mg/dL should be treated but hypoglycaemia must be avoided.
- E. role of the precordial thump is emphasised.

**Nr 171.** All the conditions listed below may be regarded as the reversible causes of cardiac arrest **except**:

- A. hypocalcaemia.
- B. hypovolemia.
- C. cardiac tamponade.
- D. tension pneumothorax.
- E. hypoxia.

**Nr 172.** A 65-year-old patient has been admitted to the ED because of malaise, fainting and cardiac arrhythmia. He has suffered from diarrhea for 5 days, it did occur in his family members. He has no cardiovascular risk factors. On physical examination: RR 75/50, irregular pulse on the radial artery. His diagnostic test are as follows: ECG – recurring episodes of ventricular tachycardia with premature ventricular and atrial beats; blood electrolytes: Na 130 mEq/l, K 2.0 mEq/l, Cl 99 mEq/l, Ca 8.9 mg/dl, Mg 0.8 mmol/l. Which of the following is the optimal treatment:

- A. iv fluids infusion, furosemide 1 mg/kg iv, hydrocortisone 200–300 mg iv.
- B. iv fluids infusion, KCl iv in the dose of 2 mmol/min for 10 minutes, then 10 mmol within 5–10 minutes.
- C. iv fluids infusion, CaCl<sub>2</sub> 10%, 10–40 ml, MgSO<sub>4</sub> 50% 4–8 mmol (if necessary) and 60 mmol/h KCl.
- D. iv fluids infusion, 2g 50% MgSO<sub>4</sub> (4 ml = 8 mmol) iv within 15 minutes, and then potassium gluconate 270 mg orally.
- E. iv fluids infusion, CaCl<sub>2</sub> 10%, 5–10 ml, repeated if necessary and mechanical ventilation if needed.

**Nr 173.** In resuscitation of children with shockable rhythms the recommended strategy of defibrillation is:

- A. single shocks using non-escalating dose of 2J/kg.
- B. single shocks using non-escalating dose of 4J/kg.
- C. triple shocks using non-escalating dose of 4J/kg.
- D. single shocks using escalating dose of 4J/kg.
- E. single shocks using total dose not exceeding 40 J/kg.

**Nr 174.** It is **not true** that in the treatment of acute coronary syndrome:

- A. non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided.
- B. nitrates should not be used for diagnostics purposes.
- C. 'rescue PCI' should be routinely undertaken also after successful fibrinolysis.
- D. supplementary oxygen is to be given only to patients with hypoxaemia, breathlessness or pulmonary congestion.
- E. acetyl salicylic acid (ASA) may now be given by bystanders even without EMS dispatcher assistance.

**Nr 175.** The classic Beck's triad is a collection of three signs associated with cardiac tamponade, which are:

- A. bradycardia, muffled heart sounds, jugular venous distention.
- B. bradycardia, loud heart sounds, jugular venous distention.
- C. hypotension, muffled heart sounds, collapsed jugular veins.
- D. hypotension, muffled heart sounds, jugular venous distention.
- E. hypotension, loud heart sounds, jugular venous distention.

**Nr 176.** A physician is allowed to disclose all information about his patient and patient's environment that he has acquired in the course of his professional activities:

- A. always when the physician considers it to be the right thing to do.
- B. to any other physician.
- C. to any person assisting the physician at work or helping him at his professional activities.
- D. after obtaining patient's consent.
- E. always after patient's death.

**Nr 177.** Hitting the person who is a physician's patient by this physician:

- A. is allowed always when patient has earlier hit or insulted the physician or a nurse.
- B. is not allowed, because hitting a patient by a member of medical staff does not belong to the catalog of the means for restraining patients physically, cases of which are allowed by the law, under strict constraints.
- C. is always allowed when the physician considers it to be the right thing to do.
- D. is always allowed when the patient is underage or the patient's rights to decide about himself have been limited as a result of proper law procedure.
- E. is allowed when the patient has been earlier diagnosed with mental disturbances.

**Nr 178.** Applying direct physical restrains towards a patient by a physician not only by the means of holding them down or compulsory drug administration but, if needed, also by immobilizing or by isolating them:

- A. is allowed only in the case of mentally disturbed patient who endangers his or other people's life or health, endangers public safety or his violent behaviour destroys or damages objects surrounding him.
- B. is not allowed in any case, because it constitutes a violation of patients rights, to which the patient is entitled as a human being and citizen. These rights are guaranteed by the Polish Constitution.
- C. is allowed in the case of any patient under any circumstances, when the physician considers it personally the right thing to do.
- D. is allowed in the case of mentally disturbed patient who by his behaviour seriously interferes with the functioning of the health care unit or prevents it from functioning.
- E. is allowed in the case of any patient under any circumstances, if the patient has been diagnosed with mental disturbances.

**Nr 179.** A physician, willing to use a conscience objection clause, has to:

- 1) obtain the consent from his superior;
- 2) inform the Patient Ombudsman;
- 3) indicate a real possibility of obtaining the service from another physician;
- 4) report and explain this fact in the medical record;
- 5) apply for authorization to a competent court.

The correct answer is:

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

**Nr 180.** Regional commissions deciding on medical events deal with matters relating to medical events concerning health care services provided exclusively:

- A. by dental practitioners.
- B. in hospitals.
- C. by physicians in individual practices.
- D. by physicians in group medical practices.
- E. by non-physician health care professionals.

**Nr 181.** The act on therapeutic activities provides a possibility to introduce the so called opt-out clause. This construction allows for the following:

- A. it is possible to employ pregnant women for night shifts.
- B. working time accounting period is extended up to 12 months.
- C. standard day working time may be increased up to 14 hours.
- D. employer is excused from the obligation to grant the employee a leave for the maximum period of 3 years.
- E. employee may work in excess of an average of 48 hours per week in the accounting period.

**Nr 182.** In the case of patient's death which occurred in a hospital, death certificate is made:

- 1) by the physician treating the patient;
- 2) only by the head of the department;
- 3) by the physician on duty;
- 4) by the physician authorized by the hospital manager;
- 5) only by a forensic medical specialist.

The correct answers is:

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

**Nr 183.** During a surgery on an adult and competent patient under general anesthesia a necessity arose to broaden the operating field, to which the patient did not express his consent (or objection) before the operation. The operation is permitted only if:

- 1) the surgeon is authorized by the patient's legal representative;
- 2) a close person to the patient gives the consent;
- 3) not taking into account this new circumstance would put the patient's life at risk or cause severe personal injury or severe health disorder;
- 4) the surgeon, if possible, obtains an opinion of another doctor, possibly of the same specialty;
- 5) direct threat to the life of the patient occurs.

The correct answers is:

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

**Nr 184.** Does the Polish Code of Medical Ethics contain a provision on euthanasia?

- A. there is no such provision.
- B. the Code recommends physicians exercising euthanasia.
- C. the Code prohibits physicians from exercising euthanasia.
- D. the Code leaves decision to physicians.
- E. the Code leaves decision to patients.

**Nr 185.** Does the Polish Code of Medical Ethics contain a provision on causing heritable genetic changes in humans?

- A. the Code does not deal with genetics.
- B. only an indirect one.
- C. the Code refers here to the law.
- D. it prohibits inducing heritable genetic changes in humans.
- E. it recommends inducing positive heritable genetic changes in humans.

**Nr 186.** The Act of Law of 25 June 1999 on financial benefits paid out from social insurance in the case of sickness and maternity specifies the conditions and amounts of the financial benefits for insured persons. Which of the following **is not** paid out from the sickness fund?

- A. sickness benefit.
- B. rehabilitation benefit.
- C. training pension.
- D. compensatory benefit.
- E. care allowance.

**Nr 187.** The basic beneficial period in social insurance for farmers is 180 days. If the insured person is still unable to work after that time but owing to further treatment and rehabilitation may regain full working capacity then the beneficial period is prolonged up to the predicted time of such recovery. However, the prolonged period **cannot exceed**:

- A. 90 days.
- B. 120 days.
- C. 180 days.
- D. 250 days.
- E. 360 days.

**Nr 188.** In accordance with the Law on cash benefits from social insurance in the case of disease and maternity, medical rulings on temporary incapacity to work for the period earlier than 3 days prior to the medical examination day of the insured person can be issued by:

- A. medical unit manager.
- B. hospital administrator.
- C. psychiatrist.
- D. SIF (ZUS) certifying doctor.
- E. ASIF (KRUS) certifying doctor.

**Nr 189.** SIF (ZUS) certifying doctors and medical boards issue rulings determining the entitlements to benefits from Social Insurance Fund. They **do not** issue rulings on:

- A. work incapacity for pension purposes.
- B. need for rehabilitation as a form of pension prevention.
- C. permanent or long-lasting damage to health due to accident at work or occupational disease.
- D. degree of disability.
- E. reference between incapacity to work and accident at work or occupational disease.

**Nr 190.** Disability pension due to incapacity to work is paid to the insured person from the Pension Fund. In order to be entitled to this pension, the insured person must have the required contributory and noncontributory period and hold a medical ruling on:

- A. incapacity to work which occurred during the period of insurance or not later than 18 months from the date of the termination of employment.
- B. moderate degree of disability.
- C. incapacity to work which occurred during the period of insurance or not later than 24 months from the date of the termination of employment.
- D. incapacity to work which occurred during the period of insurance or not later than 36 months from the date of the termination of employment.
- E. considerable degree of disability.

**Nr 191.** Occupational diseases are those which are indicated on the list of occupational diseases (the Cabinet of Ministers Regulation dated 30 June 2009) and which occurred because of work environment agents harmful to health or as a result of the ways of working. The aforementioned list **does not** include:

- A. pneumoconiosis.
- B. bronchial asthma.
- C. allergic rhinitis.
- D. myocardial infarction.
- E. vibration syndrome.

**Nr 192.** In accordance with the Law on cash benefits from social insurance in the case of disease and maternity, the insured person is entitled to the sickness benefit from the first day of their sickness insurance if the temporary incapacity to work:

- A. is caused by tuberculosis.
- B. is a consequence of alcohol abuse.
- C. was a consequence of an accident on the way to or from work.
- D. takes place during pregnancy.
- E. was a result of going through necessary medical examinations stipulated for cell, tissue and organ donors as well as through the procurement of those entities.

**Nr 193.** The following infectious diseases require obligatory hospitalization:

- A. plague.
- B. diphtheria.
- C. smallpox.
- D. cholera.
- E. all the above.

**Nr 194.** Screening is performed in:

- A. sick people, i.e. with symptoms of specific disease.
- B. healthy people, without clinical symptoms, testing for specific disease.
- C. only people with insurance, at high risk of a specific disease.
- D. everybody who potentially may become ill.
- E. B and D are true.

**Nr 195.** Life expectancy at birth – is one of the key public health indicators reflecting:

- A. living conditions.
- B. health of the population.
- C. environment quality.
- D. quality of medical care.
- E. all the above.

**Nr 196.** The main goal of the National Health Program for 2007-2015 entitled “The improvement in the health of the population and health-related quality of life and the reduction of inequalities in healthcare” – is realized through:

- A. development of pro-health lifestyle.
- B. creating health-promoting life and learning environment.
- C. creating health-promoting work environment.
- D. activation of local administration and NGOs to work for health.
- E. all the above.

**Nr 197.** According to WHO risk factors for chronic disease are:

- A. diet with low fruit and vegetable content.
- B. low physical activity.
- C. tobacco, alcohol, overweight.
- D. elevated cholesterol.
- E. all the above.

**Nr 198.** Which of the following United Nations documents refers to the human right to healthcare? It has been stated there that “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.”

- A. United Nations Charter.
- B. International Covenant on Economic, Social and Cultural Rights.
- C. Universal Declaration of Human Rights.
- D. International Convention on The Rights of Children and Women.
- E. Convention on Human Rights and Biomedicine.

**Nr 199.** Which legal act currently in force in the Republic of Poland includes the following entries?

- 1) everyone has the right to healthcare;
- 2) public authorities provide citizens, irrespective of their financial situation, with equal access to healthcare services financed from public funds. The conditions and scope of healthcare are specified in the Act;
- 3) public authorities are obliged to ensure special healthcare to children, pregnant women, disabled and elderly people;
- 4) public authorities are obliged to combat epidemic illnesses and prevent negative health consequences of environmental degradation;
- 5) public authorities are obliged to support the development of physical care, especially among children and adolescents.

- A. The Constitution of the Republic of Poland of April 2<sup>nd</sup> 1997, Article 68.
- B. Act of August 27<sup>th</sup>, 2004 on the financing of health services, Article 3.
- C. Act of February 6<sup>th</sup>, 1997 on general health insurance, Article 2.
- D. Act of December 5<sup>th</sup>, 2008 on prevention and control of infections and infectious diseases in humans, Article 1.
- E. Act of October 13<sup>th</sup> 1998 on health insurance system.

**Nr 200.** Morbidity is defined as follows:

- A.** all the existing diseases in a defined population at a given time.
- B.** selected groups of diseases in selected populations.
- C.** new cases of the disease that occurred within the specified period of time.
- D.** number of infectious diseases occurring in a given territory at a given time.
- E.** a rate of the number of new cases of disease that occurred during a given period of time to the number of people exposed to the disease at this time.

**Thank you!**