Database of questions for the Medical Final Examination (LEK)

Part 1

Emergency medicine, Intensive therapy

Modified 21.05.2026

Question nr **1**

When is the tourniquet used?

A. to help as many victims of a catastrophe as possible.

B. in traumatic amputation injuries.

C. when other methods to stop bleeding failed.

D. A,B,C are correct.

E. A,B are correct.

Question nr **2**

Indicate the true statement on positive end-expiratory pressure (PEEP) ventilation:
1) all neonates requiring postnatal ventilation must receive PEEP;
2) improves lung aeration, lung compliance and gas exchange;
3) reduces the need to use higher concentrations of oxygen in the breathing mixture.
The correct answer is:

A. 2,3.

B. 1,2.

C. 1,3.

D. none of the above.

E. all the above.

Question nr **4**

The Doloplus-2 scale is a method of measuring pain:

A. in geriatric patients with impaired cognitive functions.

B. in children.

C. in mechanically ventilated patients.

D. in every patient after injury.

E. in none of the above patient groups.

Question nr **6**

According to the guidelines of the European Resuscitation Council (2015) the target temperature of the patient under post-resuscitation care is:

A. 37°C.

B. 36°C.

C. 35°C.

D. 34°C.

E. 33°C.

Question nr **7**

According to the European Resuscitation Council Guidelines 2015 the breaks for ventilation during CPR **should not** be longer than:

A. 5 seconds.

B. 10 seconds.

C. 15 seconds.

D. 20 seconds.

E. 30 seconds.

Question nr **8**

Which of the following should be given to a patient with hyperkalemia at the level of 7 mmol/l, if the ECG shows toxic influence of potassium on the heart muscle?

A. 30 ml of 10% calcium gluconate iv.

B. 30 ml of 10% calcium chlorate iv.

C. 6 mg of adenosine iv.

D. 500 ml of isotonic electrolyte solution iv.

E. 2 g of magnesium sulfate.

Question nr **9**

The Glasgow-Blatchford scale refers to patients with:

A. acute pancreatitis.

B. head trauma.

C. community-acquired pneumonia.

D. gastrointestinal bleeding.

E. septic shock.

Question nr **10**

The most common cause of septic shock in Poland are:

A. fungi.

B. adenoviruses.

C. rotaviruses.

D. Gram-negative bacteria.

E. Gram-positive bacteria.

Question nr **11**

Which of the following **<u>is not</u>** recommended in the management of a patient with irregular narrow QRS-complex tachyarrhythmia (without symptoms of heart failure):

A. pharmacological slowing of the rhythm.

B. vagal nerve stimulation.

C. pharmacological cardioversion.

D. electrical cardioversion.

E. prophylactic treatment against complications (e.g. anticoagulation).

Question nr **12**

The total dose of N-acetylcysteine used intravenously in paracetamol intoxication amounts to:

A. 100 mg/kg b.w.

B. 150 mg/kg b.w.

C. 200 mg/kg b.w.

D. 250 mg/kg b.w.

E. 300 mg/kg b.w.

Question nr **14**

If the victim of drowning survives 24 hours after the accident, than it is referred to as:

A. immersion syndrome.

B. asphyxia.

C. near drowning.

D. dry drowning.

E. incomplete drowning.

Question nr **15**

A 70-year-old man was admitted to the ER because of an aggravating dyspnoe lasting 2 hours. The patient is chronically treated for diabetes and arterial hypertension. The physical examination showed normal respiratory sounds with bibasal fine crackles. The heart rate was 90/min, blood pressure 190/80 mmHg. The first-choice medication in such a situation is:

A. thiamazole.

B. urapidil.

C. furosemide.

D. metoprolol.

E. amiodarone.

Question nr **16**

Instability found on the examination of the pelvis is the indication for:

A. oxygen therapy with the oxygen resuscitator.

B. infusion of large volumes of fluids.

C. placing the sling stabilizing the pelvis.

D. application of therapeutic procedures against hypothermia.

E. rolling the victim onto their side to assess possible back injuries.

Question nr **17**

A contraindication to the intraosseous access is:
1) a bone fracture in which the access is to be inserted;
2) skin or soft tissue infection;
3) severe osteoporosis;
4) previous attempt to establish the access in last 24 hours.
The correct answer is:

A. 1,2.

B. 1,2,3.

C. 1,3.

D. 2,3.

E. all the above.

Question nr **18**

The differential diagnostics of a sudden and strong epigastric pain, accompanied by sweating, occurring for the first time in lifetime in a 50-year-old tobacco smoker should include:
1) myocardial infarction;
2) ulcer perforation;
3) biliary colic;
4) incarcerated inguinal hernia;
5) bleeding in the digestive tract.
The correct answer is:

A. 1,2,3.

B. 2,3,4,5.

C. 1,2.

D. only 1.

E. only 3.

Question nr **19**

Which of signs listed below **is not** related to acute radiation syndrome?

A. injury of the central nervous system.

B. injury of bone marrow.

C. injury of the myocardium.

D. injury of the skin.

E. injury of the digestive tract.

Question nr **20**

Temporary cardiac pacing should be considered in the case of:
1) symptomatic bradycardia refractory to anticholinergic agents;
2) bradycardia in Wolff-Parkinson-White syndrome;
3) symptomatic second-degree atrioventricular block of type 2;
4) symptomatic second-degree atrioventricular block of type 1;
5) asystole with the P wave present on the ECG;
6) third-degree atrioventricular block.
The correct answer is:

A. all the above.

B. 1,3,4,6.

C. 1,3,5,6.

D. 1,2,3,6.

E. 3,4,5,6.

Question nr **21**

On the basis of the initial assessment, a newborn can be included in the first group (requiring only drying of the skin and covering) if it meets the following conditions:
1) is actively breathing or crying;

2) has normal muscle tone;
3) has normal or reduced muscle tone;
4) heart rate is above 100/min;
5) heart rate is below 100/min.
The correct answer is:

A. 1,2,4.

B. 1,2,5.

C. 2,4.

D. 1,3,4.

E. 1,3,5.

Question nr **22**

Typical signs and symptoms of lung contusion include:

A. hemoptysis.

B. dyspnoea.

C. cyanosis.

D. rales.

E. all the above.

Question nr **23**

Hypovolemic shock develops when the volume of blood loss exceeds:

A. 1/5.

B. 1/4.

C. 1/3.

D. 1/2.

E. 2/3.

Question nr **24**

Which of the following fractures **<u>are not</u>** characteristic of battered child syndrome?

A. oblique physeal fractures of long bones.

B. peri-epiphyseal fractures.

C. vertebral body fractures.

D. rib fractures.

E. shaft fractures of long bones.

Question nr **25**

Which of the following shows the highest electrical resistance?

A. nerves.

B. blood.

C. muscles.

D. damp skin.

E. bones.

Question nr **26**

Indicate the location where a rescuer’s hands should be placed on an adult patient while performing CPR:

A. in the middle of the chest.

B. in the lower half of the sternum.

C. on the intranipple line.

D. A,B are true.

E. A,B,C are true.

Question nr **27**

A 35-year-old man was admitted to the Emergency Unit because of black stools occurring for a few hours. He is also suffering from haemophilia. The primary treatment should include:

A. blood group determination and a transfusion of two units of red blood cell concentrate.

B. protonic pump inhibitor administration.

C. factor VIII immediate administration.

D. immediate gastroscopy.

E. determination of factor VIII concentration.

Question nr **28**

Skin infection with rapidly spreading connective tissue infection, purulent discharge from the wound, general symptoms and the formation of distant abscesses, caused by *Pasteurella multocida* is characteristic of wounds caused by:

A. dogs.

B. cats.

C. rodents.

D. venomous snakes.

E. none of them.

Question nr **29**

Which of the following may be observed in the ECG of a patient with sudden cardiac arrest and normally working artificial ventricular pacemaker?
1) asystole without stimulation artifacts;
2) ventricular fibrillation without stimulation artifacts;
3) ventricular fibrillation and stimulation artifacts;
4) asystole and stimulation artifacts;
5) ventricular fibrillation and transient stimulation artifacts.
The correct answer is:

A. all the above.

B. 2,3,4,5.

C. 2,3.

D. 2,4.

E. 1,2.

Question nr **30**

Quicktrach is used for:

A. decompression of pneumothorax.

B. diagnostic puncture of the pericardial sac.

C. execution of emergency needle cricothyrotomy.

D. performing tracheostomy.

E. none of the above.

Question nr **31**

Intensive care of patients after sudden cardiac arrest includes keeping:
1) glycemia about 180 mg/dL;
2) pCO_2 values about 30 mmHg;
3) pO_2 values about 100 mmHg;
4) body temperature about 32-34°C.
The correct answer is:

A. 1,2.

B. 1,3.

C. 3,4.

D. 1,4.

E. 2,4.

Question nr **32**

Multiple doses of activated charcoal should be used in poisoning with:

A. methyl alcohol.

B. paracetamol.

C. Datura seeds.

D. metformin.

E. carbamazepine.

Question nr **34**

During 'home labor', a large amount of meconium was found around the mouth of the

newborn. The proper procedure is to:

A. remove meconium from the mouth.

B. perform endotracheal intubation.

C. perform 5 breaths.

D. perform 3 chest compressions.

E. perform 15 chest compressions.

Question nr **35**

Which of the following are signs or symptoms observed in subarachnoid hemorrhage?
1) strong headache;
2) focal neurological deficits;
3) vomiting;
4) meningism.
The correct answer is:

A. 1,2,3.

B. 1,2,4.

C. 1,3,4.

D. 2,3,4.

E. all the above.

Question nr **36**

Which of the following should primarily be checked if there are no normal movements of the chest during the ventilation performed with the use of a bag valve mask?

A. whether the airways are patent.

B. whether the oxygen supply is correct.

C. whether the system is hermetic.

D. whether the pop-up valve is closed.

E. A and C are true.

Question nr **37**

Indicate the true sentences regarding lithium intoxication:
1) charcoal binds to lithium and therefore activated charcoal is indicated in the case of lithium intoxication;
2) gastric lavage in the case of lithium intoxication is indicated if the patient presents within one hour of the ingestion;
3) the character of kidney failure in the case of lithium intoxication is only renal;
4) lithium is absorbed and eliminated fast from tissues;
5) forced diuresis with urine alkalization allows lithium elimination
The correct answer is:

A. 1,2.

B. 1,3.

C. 2,3.

D. 4,5.

E. 2,5.

Question nr **38**

Electric defibrillation should be performed during chest compression breaks for a period **not longer** than:

A. 5 seconds.

B. 10 seconds.

C. 15 seconds.

D. 20 seconds.

E. the time does not matter.

Question nr **39**

According to the European Resuscitation Council Guidelines 2015 the time of immersion during drowning that is related to the bad prognosis is longer than:

A. 3 minutes.

B. 5 minutes.

C. 7 minutes.

D. 10 minutes.

E. 15 minutes.

Question nr **40**

The management of febrile convulsions in children includes:

A. ensuring airway patency.

B. application of anti-pyretic drugs.

C. cold compresses.

D. rectal application of diazepam.

E. all the above.

Question nr **41**

After falling off the bad a 18-month-old child was transported to the ER with head trauma. On physical examination the child actively flexes and extends their limbs, babbles and presents normal range of eye movement. How many points should the child be given according to the Pediatric Glasgow Coma Scale?

A. 15.

B. 14.

C. 13.

D. 12.

E. 11.

Question nr **42**

The so called “golden hour” to use hyperbaric oxygen in a heavy carbon monoxide poisoning is:

A. 1 hour.

B. 2 hours.

C. 3 hours.

D. 4 hours.

E. 6 hours.

Question nr **43**

The signs of neurogenic shock include:
1) decreased blood pressure;
2) tachycardia;
3) bradycardia;
4) pale, cold skin;
5) warm skin with a good blood supply.
The correct answer is:

A. 1,2,4.

B. 1,3,4.

C. 1,2,5.

D. 1,3,5.

E. 3,5.

Question nr **44**

A 38-week-pregnant woman had sudden cardiac arrest. Which of the following will have priority?

A. chest compressions.

B. 5 rescue breaths.

C. defibrillation.

D. laying the body on the left side.

E. early intubation.

Question nr **45**

The use of positive end-expiratory pressure (PEEP):

A. is contraindicated in severe chest and pulmonary injuries.

B. is not indicated in patients rescued from the drowning.

C. decreases venous return - thus it is contraindicated in hypovolemic shock.

D. is contraindicated in severe pulmonary edema.

E. is not possible during the ventilation with a bag valve mask.

Question nr **46**

Which of the following scales refers to the possibility to visualize particular structures (including the glottis) in direct laryngoscopy?

A. Young.

B. Tile's.

C. Cormack-Lehane.

D. Conwell.

E. Key’s.

Question nr **47**

Which of the following traumas may be an indication for immediate thoracotomy at the emergency department?

A. blunt chest trauma.

B. blunt abdominal trauma.

C. blunt pelvis trauma.

D. penetrating injury to the chest leading to cardiac arrest.

E. penetrating injury to the abdomen.

Question nr **48**

ERC 2015 guidelines allow administration of medications during the resuscitation of a neonate right after the birth. When the heart rate remains below 60/min the administration of which one below should be considered?

A. atropine.

B. epinephrine.

C. adenosine.

D. amiodaron.

E. anatoxin.

Question nr **49**

Assessment of the patient according to the ABCDE scheme is aimed at:

A. revealing possible injuries.

B. excluding direct threat to life.

C. obtaining precise diagnosis.

D. A,B are true.

E. A,B,C are true.

Question nr **50**

What size of an uncuffed endotracheal tube should be used for intubation of a 2-year-old child?

A. 3.0.

B. 3.5-4.0.

C. 4.0-4.5.

D. 5.0.

E. 5.5.

Question nr **51**

The quickest acting agent used in the treatment of acute hypertension is:

A. esmolol.

B. furosemide.

C. nitroglycerine.

D. sodium nitroprusside.

E. urapidil.

Question nr **52**

Indicate the lowest systolic blood pressure allowing to find the carotid pulse:

A. 20 mmHg.

B. 30 mmHg.

C. 40 mmHg.

D. 50 mmHg.

E. 60 mmHg.

Question nr **53**

“This type of burn involves the full thickness of the epidermis and partially of the dermis. However, it does not extends below the dermis. The skin at the site of the burn is pale, sometimes pink or reddish. After healing contracted scars are present”. To which stage of burns does the above description refer?

A. I degree.

B. IIA degree.

C. IIB degree.

D. III degree.

E. IV degree.

Question nr **54**

A patient with an implanted pacemaker fainted in the street. The arriving emergency team diagnosed cardiac arrest and the ECG monitor showed ventricular fibrillation. Should the rescuers perform defibrillation in this patient?

A. no, the pacemaker should be disconnected first.

B. yes, but it is recommended to place the electrodes in the ‘front-back’ position.

C. no, defibrillation may destroy the pacemaker.

D. yes, the presence of the pacemaker is irrelevant.

E. yes, but shock energy should be lowered.

Question nr **55**

An ambulance team was called for an unconscious man, aged about 35, who had been at a music club with his friends. His companions reported that they had come to the club after the whole day at work. The physical examination shows: the respiratory rate 8

breaths per minute, the pulse on the radial artery about 75/min, the skin wet and cold.
At the spot of the intervention the paramedics should:
1) determine glycemia;
2) determine blood alcohol concentration;
3) assess the pupils;
4) examine the muscle strength;
5) evaluate Glasgow Coma Scale score.
The correct answer is:

A. 1,2.

B. 1,3.

C. 1,3,5.

D. 3,4,5.

E. 4,5.

Question nr **56**

Indicate the true statement concerning the resuscitation of obese patients:

A. chest compressions are easier than in patients with normal body weight thus one rescuer can perform compressions for more than 2 minutes, and then rescuers should change.

B. chest compressions are more difficult than in patients with normal body weight thus one rescuer can perform compressions for less than 2 minutes, and then rescuers should change.

C. body weight does not influence the difficulty in performing resuscitation.

D. in the case of extreme obesity the resuscitation may not be undertaken.

E. ERC 2015 guidelines do not refer to this issue.

Question nr **57**

A compression of the sternum during heart massage in an infant is performed with:

A. tips of two fingers.

B. wrist of one hand.

C. wrists of two hands.

D. two thumbs.

E. A and D are correct.

Question nr **58**

The standard diagnostic procedure in a patient with multiorgan trauma should include:

A. diagnostic puncture of the pleural cavity.

B. diagnostic puncture of the pericardium.

C. diagnostic puncture of the peritoneal cavity.

D. diagnostic puncture of the subarachnoid space.

E. ultrasound imaging with FAST method.

Question nr **59**

A hypercalcaemic crisis may occur in the course of:

A. radioiodine therapy.

B. acute pancreatitis.

C. multiple blood transfusions.

D. Hodgkin lymphoma.

E. chronic kidney disease.

Question nr **60**

The most common cause of acute liver injury is:

A. HBV infection.

B. cocaine poisoning.

C. metastatic liver cancer.

D. malignant hyperthermia.

E. paracetamol poisoning.

Question nr **61**

Hospitalization is recommended in the case of:

A. I° burn covering the whole trunk and both lower limbs.

B. II° burn covering both lower limbs.

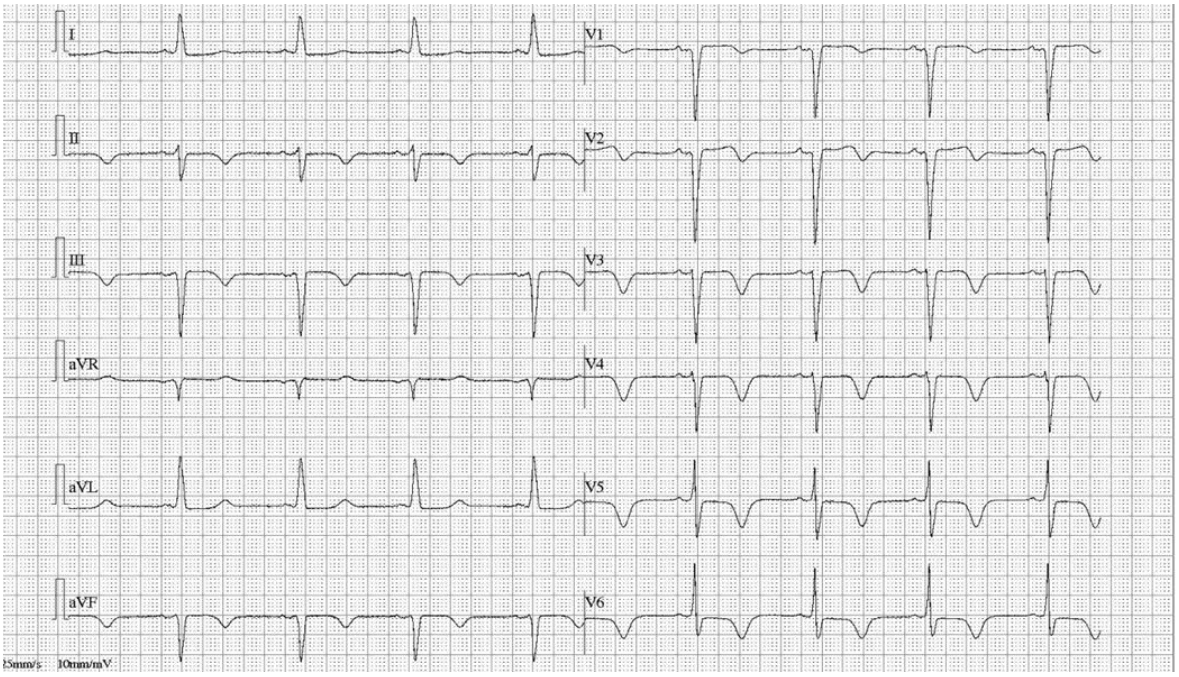
C. III° burn of the size of the hand, located on the forearm.

D. A,B,C are correct.

E. B,C are correct.

Question nr **62**

The QT interval in the following ECG (speed 25 mm/s) should be classified as:



A. normal.

B. shortened.

C. prolonged.

D. undetermined because T waves are negative.

E. undetermined because it differs between various leads.

Question nr **63**

A terrified patient came to the ER department after a chemical burn to his right eye with a clogged drain opener. Which of the following is a recommend procedure in the case of such a burning of the eye?

A. prompt enucleation.

B. examination of the eye and then conjunctiva rinsing.

C. rinsing of the conjunctiva before eye examination.

D. transplantation of the corneal limbus in the urgent mode.

E. none of the above.

Question nr **64**

The most common clinical sign of pulmonary embolism is:

A. hemoptysis.

B. chest pain.

C. dyspnea.

D. cough.

E. syncope.

Question nr **65**

Indicate the true statements regarding hyperbaric oxygen therapy (HBOT):
1) in the case of CO intoxication recommended therapy involves putting the patient under the pressure of 4.0 atm during for minutes;
2) “golden hour” for HBOT in severe CO intoxication is 6h;
3) one of indications for HBOT is COHb concentration over 25%;
4) HBOT shifts the oxyhemoglobin dissociation curve to the left;
5) HBO is known to be safe both for pregnant women and the foetus.
The correct answer is:

A. 1,2.

B. 1,3.

C. 2,3.

D. 4,5.

E. 1,5.

Question nr **66**

Which of the following medications is the safest in pregnant women?

A. metamizole.

B. fentanyl.

C. morphine.

D. paracetamol.

E. drotaverine.

Question nr **67**

The first disorder caused by an overdosage of sodium bicarbonate is:

A. metabolic acidosis.

B. metabolic alkalosis.

C. respiratory acidosis.

D. respiratory alkalosis.

E. hypoosmolality.

Question nr **68**

A resuscitation performed in an obese person can be difficult because of:

A. earlier fatigue of the rescuer.

B. problems with ventilation.

C. problems in identifying the correct place to apply chest compressions.

D. possibility of breaking the ribs.

E. A and B are correct.

Question nr **69**

A woman came to the ER department because of abdominal pain, frequent (8 daily) painful defecation of bloody stool, high fever, tachycardia and anemia. The physical examination revealed abdominal bloating and tenderness. Lab tests showed elevated C-reactive protein and ESR. The probable diagnosis is:

A. hemorrhagic gastritis.

B. toxic megacolon.

C. acute pancreatitis.

D. colon cancer.

E. ectopic pregnancy.

Question nr **70**

Indicate the true statement concerning the use of automated external defibrillator (AED):

A. it allows to perform a cardioversion.

B. it is not used in children under 8 years of age.

C. it is not used in pregnant woman.

D. nobody can touch the patient once the rhythm analysis has started.

E. patient should be placed in the safe position if AED gives information that the rhythm is non-defibrillable.

Question nr **71**

Cardio-pulmonary resuscitation should be continued until:

A. ALS providers take over.

B. AED orders to stop resuscitation.

C. victim starts regular breathing.

D. rescuer exhaustion.

E. A, C, D are true.

Question nr **72**

According to the European Resuscitation Council Guidelines 2015 when the first aid is provided to a person with seizures it should be initiated with:

A. control of breathing and exclusion of cardiac arrest.

B. protection of the head from secondary injuries.

C. placing an available object between the teeth in order to prevent tongue bites.

D. placing the patient in the recovery position.

E. refraining from taking any rescue actions until seizure cessation.

Question nr **73**

Indicate the true sentences regarding PBLS:
1) during an infant CPR tidal volumes of approximately 500 mL should be delivered;
2) spend about 10 seconds to determine whether the infant is breathing before starting CPR;
3) you should spend about a minute to perform 5 effective rescue breaths before you start CPR on an infant;
4) while performing CPR on an infant you should compress the chest at a rate of at least 100/min;
5) while performing CPR on an infant you should continue compressions and breaths in the ratio of 15:2;
6) while performing CPR on an infant you should press the centre of the sternum.
The correct answer is:

A. 1,5,6.

B. 2,3,6.

C. 1,3,6.

D. 2,4,5.

E. 2,5,6.

Question nr **74**

Unconscious patients suspected of meningitis should be:

A. subjected to lumbar puncture with CSF examination and then treated with antibiotics.

B. examined with CT of the head, and with cerebral edema excluded lumbar puncture with CSF examination should be performed.

C. immediately after obtaining the result of CT of the head empirically treated with antibiotics.

D. subjected to lumbar puncture with CSF examination and if the result is inconclusive, CT of the head should be performed.

E. treated with antibiotics before obtaining CSF for CSF culture.

Question nr **75**

The Mallampati classification is used to predict the difficulties in endotracheal intubation. What class according to this classification is assigned to the situation where the soft palate is not visible in a patient with their mouth open?

A. first.

B. second.

C. third.

D. fourth.

E. fifth.

Question nr **76**

Indicate **the false** statement concerning the electric stun gun (taser):

A. it causes painful muscle spasm, especially in large muscle groups.

B. it is dangerous for people under the influence of medications, alcohol, narcotics.

C. after being electrocuted by a stun gun, a victim may fall and suffer serious head and spine injuries.

D. use of the stun gun in people with cardiovascular diseases may lead to their death.

E. high intensity current is used in stun guns.

Question nr **77**

A 32-year-old male was transported to the emergency department with the signs of progressive hypovolemic shock. The patient demands quick fluid replacement. Which access and which cannula should be chosen?

A. central access, 22 G cannula of 30 cm in length.

B. central access, 20 G cannula of 21 cm in length.

C. peripheral access, 18 G cannula of 5.0 cm in length.

D. peripheral access, 16 G cannula of 5.0 cm in length.

E. intraosseous access, 20 G cannula of 8.0 cm in length.

Question nr **78**

A patient diagnosed with STEMI myocardial infarction, with severe chest pain, no

symptoms of cardiovascular failure, no dyspnea and hypoxemia **does not** require:

A. oxygen supplementation.

B. ticagrelor administration.

C. unfractionated heparin administration.

D. enoxaparin administration.

E. morphine administration.

Question nr **79**

Administration of an antibiotic is a routine and unconditionally indicated procedure in the case of the skin wound:

A. inflicted with a knife.

B. penetrating to the joint.

C. in elderly patients.

D. in obese patients.

E. in diabetic patients.

Question nr **80**

You are performing a segregation of patients in the mass event. You use START system. You reach the victim who cannot walk, is breathing (15 breaths per minute), his/her radial artery pulse is palpable, is not responding to commands. You qualify him/her to the group:

A. blue.

B. green.

C. yellow.

D. red.

E. black.

Question nr **81**

Which of the following **is not** a cause of epileptic seizure?

A. hypoglycemia.

B. hyponatremia.

C. hypokalemia.

D. hypocalcaemia.

E. hypomagnesemia.

Question nr **82**

The first aid in the case of humerus fracture is to put the immobilizing dressing on:

A. the arm.

B. the arm and the elbow joint.

C. the arm and the shoulder joint.

D. the arm, the elbow and the shoulder joints.

E. the arm, the elbow and the shoulder joints, as well as the radiocarpal joint.

Question nr **83**

Which of the potentially reversible causes of cardiac arrest are the most probable in a victim hit by a car?
1) hypoxia;
2) hypothermia;
3) hypovolemia;
4) electrolyte and metabolic disturbances;
5) tension pneumothorax;
6) tamponade;
7) thromboembolism;
8) intoxication.
The correct answer is:

A. 1,8.

B. 2,3.

C. 2,6.

D. 3,5.

E. 4,7.

Question nr **84**

In the patient after the chest trauma on the right side tachypnea and tachycardia occurred, and soon after the patient's skin turned pale blue. Low blood pressure was noted. In this situation the first procedure should be:

A. repeated measurement of blood pressure.

B. computed tomography of the chest.

C. pleural drainage with a chest tube placed in the 5^{th} intercostal space on the right.

D. insertion of a chest tube with a one-way valve system in the right 2^{nd} intercostal space on the upper rim of the rib.

E. insertion of a chest tube with a one-way valve system in the right 2^{nd} intercostal space on the lower rim of the rib.

Question nr **85**

A classic triad of symptoms in pulmonary embolism, occurring in 25% of patients, includes:

A. diffuse chest pain, hemoptysis, dyspnea.

B. pleuritic chest pain, hemoptysis, cough.

C. pleuritic chest pain, hemoptysis, dyspnea.

D. diffuse chest pain, cough, dyspnea.

E. cough, hemoptysis, dyspnea.

Question nr **86**

A 44-year-old male complains of severe abdominal pain and hematemesis. On examination: respiratory rate - 24/min, normal respiratory sounds over the lungs, SpO_2 - weak signal, heart rate - 130/min, no pulse on the distal arteries, blood pressure - 75/50 mmHg, the skin is pale and sweaty, on the ECG - a regular rhythm with narrow QRS complexes. Which of the following should be performed?

A. cardioversion.

B. vagal maneuvers.

C. adenosine 6 mg i.v. in rapid bolus.

D. fluid therapy.

E. amiodarone 300 mg i.v within 20-60 minutes.

Question nr **87**

A 45-year-old woman was admitted to the Emergency Department deeply unconscious, breathing shallowly at the rate of 10/min, with pinpoint pupils, heart rate 60/min, blood pressure 110/60 mmHg, glucose concentration 115 mg/dL. Her medical history includes back pain treated with meloxicam 15 mg daily and 10 mg oxycodone on demand.
Indicate the diagnosis and the treatment that should be initiated:

A. opiate intoxication, 0.5 mg of flumazenil i.v.

B. hypoglycemic coma, 10 mL of 40% glucose i.v.

C. opiate intoxication, 0.4 mg of naloxone i.v.

D. neurogenic shock, 200 mg of hydrocortisone i.v.

E. anaphylactic shock, 1 mg of epinephrine i.m.

Question nr **88**

The potentially reversible causes of cardiac arrest (so-called ‘four H’) **do not** include:

A. hypoxia.

B. hypovolemia.

C. hypercalcaemia.

D. hyperkalaemia.

E. hypothermia.

Question nr **89**

Members of the specialized ambulance team located a male breathing with difficulty at the site of the accident. Which of the following actions are the most useful in establishing the primary diagnosis?
1) chest percussion;
2) breath rate assessment;
3) chest auscultation;
4) evaluation of saturation.
The correct answer is:

A. 1,2.

B. 1,3.

C. 1,4.

D. 2,3.

E. 3,4.

Question nr **90**

What is the maximal inspiratory oxygen concentration achievable when the bag valve mask (Ambu bag) with the reservoir is used and oxygen flow is about 10L/minute?

A. 45%.

B. 60%.

C. 70%.

D. 85%.

E. 100%.

Question nr **91**

The LUCAS device is used for:

A. instrumental clearing of the upper respiratory tract.

B. peripheral chest compressions.

C. mechanical ventilation.

D. endotracheal intubation with a video laryngoscope.

E. none of the above.

Question nr **92**

An aneurysm of the abdominal aorta is most frequently misdiagnosed as:

A. pancreatitis.

B. urolithiasis.

C. heart attack.

D. neuralgia in the back muscles.

E. diverticulitis.

Question nr **93**

A drug administered during ALS at a dose of 300 mg in 20 ml of 5% glucose solution, which is recommended in the treatment of ventricular and supraventricular arrhythmia, as well as in defibrillation-resistant ventricular fibrillation. Which of the following refers to this description?

A. adrenaline.

B. atropine.

C. amiodarone.

D. lidocaine.

E. magnesium sulfate.

Question nr **94**

When used during the CPR amiodaron is administered in:

A. bolus dose of 300 mg.

B. bolus dose of 200 mg.

C. bolus dose of 150 mg.

D. bolus dose of 150 mg that can be repeated if needed.

E. dose of 300 mg, given slowly over 10-20 minutes.

Question nr **95**

Which of the following should be considered in the case of recurrent arrhythmia with a high heart rate, when electrical cardioversion and amiodarone are ineffective?

A. *overdrive* stimulation.

B. electrical defibrillation.

C. adenosine.

D. lidocaine.

E. epinephrine.

Question nr **96**

The possible causes of acidosis **do not** include:

A. diarrhea.

B. diabetes mellitus.

C. alcohol intoxication.

D. overdose of metformin.

E. diuretics.

Question nr **97**

Which of the following should be suspected if ECG shows the elongation of the PR interval >0.2 s, flat P waves, tall peaked T waves and QRS complexes widened above 0.12 s?

A. hypocalcemia.

B. hypercalcemia.

C. hypokalemia.

D. hyperkalemia.

E. hypernatremia.

Question nr **98**

A patient who has been exposed to cold is brought to the Emergency Department. He presents with chills, increased respiratory rate to 25/minute, core temperature 34°C, increased heart rate to 95/minute, he is agitated and completely conscious. The above clinical image suggests:

A. severe hypothermia.

B. moderate hypothermia.

C. mild hypothermia.

D. frostbite.

E. chilblains.

Question nr **99**

Levine's sign is:

A. increase in pain perceived by a patient while the hand of the examiner is taken away from the abdominal wall.

B. miosis caused by increased intracranial pressure.

C. clenched fist held over the chest to describe ischemic chest pain.

D. seizures occurring on neck forward flexion.

E. cyanosis of the ear flap subsiding on its massage.

Question nr **100**

In the case of the resuscitation of an adult with electric shock injury the recommended ratio of chest compressions to artificial breaths is:

A. 03:01

B. 05:01

C. 05:02

D. 15:02

E. 30:02:00

Question nr **101**

In the case of hypoglycemia, intramuscular administration of 1 mg of glucagon will increase glucose levels by about:

A. 1 mg/dL.

B. 10 mg/dL.

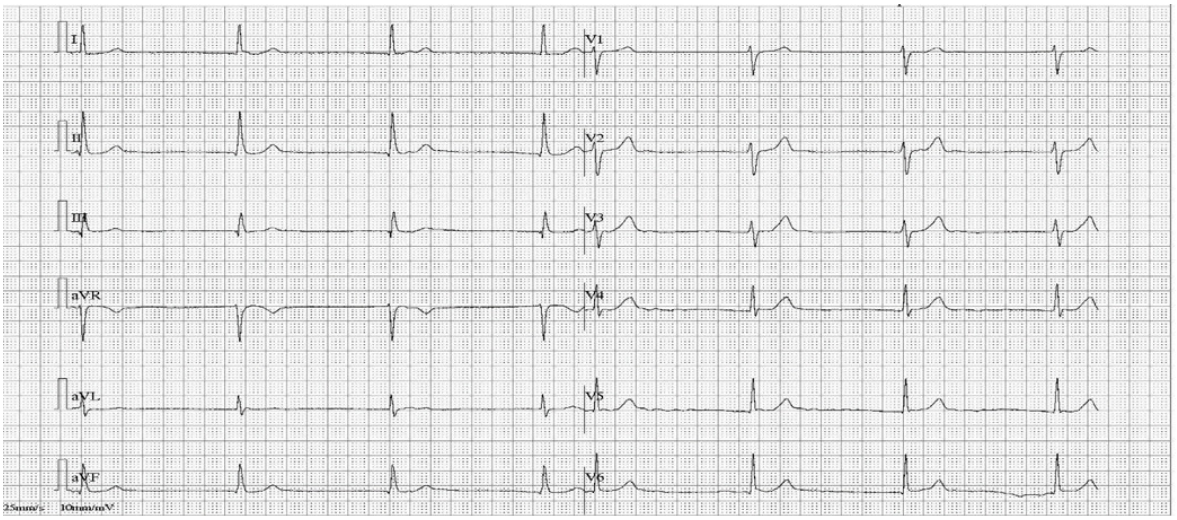
C. 50 mg/dL.

D. 100 mg/dL.

E. 150 mg/dL.

Question nr **102**

What cardiac rhythm can be noted in the ECG below (speed 25 mm/s)?



A. sinus bradycardia.

B. nodal rhythm.

C. atrial fibrillation with bradycardia.

D. sinus rhythm.

E. ventricular escape rhythm.

Question nr **103**

Which of the following **is not** used in the treatment of thyroid storm?

A. acetylsalicylic acid.

B. esmolol.

C. thiamazole.

D. hydrocortisone.

E. low molecular weight heparin.

Question nr **104**

The first line treatment for acute pulmonary edema **does not** include:

A. morphine.

B. dobutamine.

C. dopamine.

D. furosemide.

E. digoxin.

Question nr **105**

Which of the following **should not be** considered in the treatment of a patient with hypercalcemia?

A. hydration.

B. spironolactone.

C. bisphosphonates.

D. furosemide.

E. dialysis.

Question nr **106**

What is the correct frequency of chest compressions during cardiopulmonary resuscitation in an adult?

A. 60-70/min.

B. 80-90/min.

C. 100-120/min.

D. 130-140/min.

E. 140-150/min.

Question nr **107**

A patient with diabetes mellitus was transferred to the ED. On physical examination the characteristic acetone smell was noted. Which of the following was also highly probable in that patient?

A. reluctance to ingest fluids.

B. bradycardia.

C. hypoglycemia.

D. high arterial blood pressure.

E. infection.

Question nr **108**

Which of the following lowers the pressure in the portal venous system in patients bleeding from esophageal varices?

A. terlipressin.

B. glucagon.

C. urapidil.

D. propranolol.

E. sodium nitroprusside.

Question nr **109**

The following signs and symptoms:
1) headaches and vertigo;
2) blurred vision or vision loss;
3) severe metabolic acidosis;
are characteristic of the intoxication with:

A. corrosive substances.

B. paracetamol.

C. tricyclic antidepressants.

D. methanol.

E. organophosphates.

Question nr **110**

The treatment of hyperosmolar nonketotic hyperglycemic state includes:

A. administration of 1.0 g of glucagon.

B. aggressive insulin therapy.

C. administration of intravenous fluids (10 L).

D. thyroid hormone replacement therapy.

E. administration of 250 mg of hydrocortisone.

Question nr **111**

Naloxone is used in the case of poisoning with:

A. benzodiazepines.

B. amanita phalloides (‘death cap’).

C. atropine.

D. opioids.

E. methyl alcohol.

Question nr **112**

Dyspnea, tachycardia and cough suddenly appeared in the patient while the central venous catheter was being inserted to the subclavian artery. Which of the following is a probable cause of these symptoms?

A. pneumothorax on the side of the insertion.

B. irritation of the diaphragmatic nerve.

C. irritation of the recurrent laryngeal nerve.

D. damage to the brachial plexus.

E. puncture of the subclavian artery and a hematoma.

Question nr **113**

Which of the following is used in the resuscitation of a patient with cardiac arrest and asystole?

A. lidocaine.

B. epinephrine.

C. adenosine.

D. amiodarone.

E. amiodarone, lidocaine.

Question nr **114**

A patient with diarrhoea symptoms lasting several days was admitted to the hospital. Arterial blood gas test showed pH = 7.2, $PaCO_2$ = 28 mmHg. Which acid-base imbalance should be diagnosed in the patient?

A. respiratory acidosis.

B. metabolic acidosis.

C. metabolic alkalosis.

D. respiratory alkalosis.

E. none of the above.

Question nr **115**

Which of the following laboratory test is the first critical parameter determined in unconscious patient's blood at the emergency department?

A. glucose concentration.

B. arterial blood gas test.

C. carboxyhemoglobin concentration.

D. hemoglobin concentration.

E. potassium concentration.

Question nr **116**

Spurious hyponatremia occurs secondary to:

A. CNS disease.

B. Addison disease.

C. renal tubular acidosis.

D. hyperglycemia.

E. hypopituitarism.

Question nr **117**

Indicate the true statements on giant-cell arteritis:

1) it usually occurs before the age of 50;
2) it usually presents itself with headaches;
3) erythrocyte sedimentation rate is usually normal;
4) treatment of choice is the therapy with glucocorticosteroids;
5) untreated may lead to blindness.
The correct answer is:

A. 3,4,5.

B. 1,3,4.

C. 1,2,3.

D. 2,4,5.

E. 2,3,4.

Question nr **119**

Which of the following is an antidote to cyanide intoxication?

A. hydroxocobalamin.

B. atropine.

C. glucagon.

D. pyridoxine.

E. naloxone.

Question nr **120**

In which of the following cardiac arrests CPR starts with 5 rescue breaths?

A. caused by drowning.

B. in the pregnant.

C. caused by myocardial infarction.

D. in children.

E. A, D are true.

Question nr **121**

The European Resuscitation Council Guidelines 2015 underline the role of diagnosis of

reversible causes of cardiac arrest with the use of:

A. magnetic resonance.

B. ultrasound imaging.

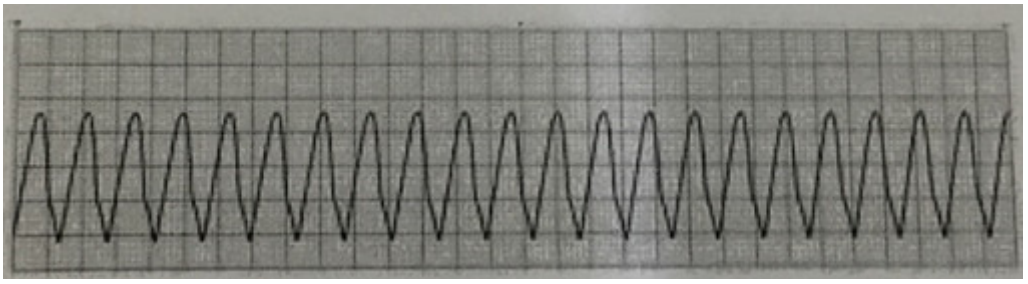
C. quick point-of-care testing (blood spot tests).

D. computed tomography.

E. scintigraphy.

Question nr **122**

Cardiac arrhythmia shown in the picture below is:



A. asystole.

B. ventricular fibrillation.

C. atrial fibrillation.

D. ventricular tachycardia.

E. torsades de pointes.

Question nr **123**

The consequences of ethylene glycol poisoning include:
1) metabolic acidosis;
2) metabolic alkalosis;
3) respiratory acidosis;
4) respiratory alkalosis;
5) acute renal failure;
6) chronic renal failure.
The correct answer is:

A. 1,6.

B. 2,5.

C. 1,5.

D. 3,6.

E. 4,5.

Question nr **124**

Cardioversion with the energy of 70-120 J is performed in the case of:

A. ventricular fibrillation.

B. bradycardia resistant to pharmacological therapy.

C. paroxysmal supraventricular tachycardia.

D. atrial fibrillation.

E. ventricular tachycardia.

Question nr **125**

Parkland formula is used for:

A. assessment of the risk of death after a sudden cardiac arrest.

B. calculation of X-ray radiation dose per body surface area.

C. calculation of the amount of fluids to infuse in burnt patients.

D. assessment of the state of consciousness.

E. calculation of the dose of methylprednisolone after the spine injury.

Question nr **126**

Hypothermia is a life-threatening condition defined as:

A. cooling of the body below 32°C as measured in the armpit.

B. internal body temperature decrease below 35°C.

C. lowering of the body temperature below 36°C with chills present.

D. lowering of the body superficial temperature below 35°C.

E. local cooling of the body below 35°C.

Question nr **127**

Currently, the medical operator at the Regional Dispatch Center plays a particular role during resuscitations carried out by non-professional bystanders. Which of the following **does not** belong to the competences of the operator?

A. to teach how to examine the pulse of the victim.

B. to provide instructions on CPR procedures by phone.

C. to localize the nearest AED.

D. to send the nearest AED.

E. to stay in continuous touch with a rescuing person.

Question nr **128**

An unconscious 60-year-old man who had been found unconscious about 12 hours earlier was brought to the hospital emergency department. A few minutes after the admission, he regained consciousness but did not remember the circumstances of the incident. In history: alcohol dependence syndrome, diabetes. On physical examination: CGS 9 points, slight swelling in the occipital region, heart rate 50/min, blood pressure 190/100 mmHg, 8 breaths/min. The presented situation points to:

A. hypoglycemic coma.

B. delirium syndrome.

C. alcohol intoxication.

D. metabolic acidosis.

E. epidural hematoma.

Question nr **129**

Which of the following sets of signs and symptoms **does not** allow to diagnose the systemic inflammatory response syndrome (SIRS)?

A. body temperature over 38 °C, leukocyte count in the peripheral blood above 12 000/mL, heart rate above 90/minute.

B. body temperature under 36 °C, respiratory rate over 20/minute, pCO_2 under 32 mmHg.

C. body temperature under 38 °C, heart rate under 80/minute, leukocyte count in the

peripheral blood under 2000/mL, respiratory rate under 20/minute.

D. body temperature over 40 °C, heart rate over 110/minute, respiratory rate over 30/minute.

E. body temperature under 35 °C, heart rate over 90/minute, pCO_2 under 32 mmHg.

Question nr **130**

A 36-year-old patient weighing 80 kg was taken to the ED because of burns from boiling water. Thorough examination revealed the burns to both legs and the right upper limb. What amount of fluids should be infused in this patient during the first 8 hours after the trauma?

A. 14400 mL.

B. 8640 mL.

C. 7200 mL.

D. 4800 mL.

E. 4320 mL.

Question nr **131**

The pain in severe acute pancreatitis **should not** be treated with:

A. buprenorphine.

B. bupivacaine.

C. metamizole.

D. morphine.

E. tramadol.

Question nr **132**

The maintenance fluid requirement in a child weighing 35 kg amounts to:

A. 1000 mL.

B. 1300 mL.

C. 1500 mL.

D. 1800 mL.

E. 2100 mL.

Question nr **133**

The term ”death triad” denotes:

A. hyperthermia, acidosis, coagulation disorders.

B. hypothermia, acidosis, coagulation disorders.

C. hypothermia, alkalosis, coagulation disorders.

D. hypothermia, alkalosis, water-electrolyte imbalance.

E. hyperthermia, alkalosis, coagulation disorders.

Question nr **134**

Which of the following **<u>is not</u>** used in patients with severe respiratory failure caused by status asthmaticus?

A. O_2 in the flow of 10-16 l/min given through an oxygen mask with reservoir bag.

B. 5 mg of nebulized salbutamol.

C. 6 mg of adenosine iv.

D. 0.5 mg of ipratropium bromide iv.

E. 2 g of magnesium sulfate iv.

Question nr **135**

Indicate the true statement on the triage in the case of a mass-casualty incident:

A. it includes the assessment of blood pressure.

B. green colour is assigned to victims who cannot walk.

C. yellow colour is assigned to pregnant women with gynecological hemorrhage.

D. red colour is assigned to victims in shock.

E. victims in cardiac arrest receive the highest priority.

Question nr **136**

The following lab results: glucose 651 mg/dl, Na^+ 120 mmol/l, K^+ 3.22 mmol/l, plasma osmolality 325 mOsm/l in a patient who is disoriented in time and place, dehydrated and who urinates about 5l/24h may indicate:

A. hypoglycemic coma.

B. diabetic ketoacidosis.

C. nonketotic hyperosmolar diabetic coma.

D. decompensated diabetes insipidus.

E. adrenal crisis.

Question nr **137**

A 20-year-old woman in the 34 week of pregnancy complains of headache, visual disturbances, nausea and edema. On physical examination: respiratory rate - 32/min, crepitation audible over the lungs, heart rate - 120/min, on the ECG a regular rhythm with narrow QRS complexes, blood pressure - 190/110 mmHg. During the examination seizures occurred. Which medication and dose should be administered?

A. adenosine 6 mg i.v.

B. furosemide 5 mg i.v.

C. morphine 3-5 mg i.v.

D. diazepam 40 mg i.v.

E. magnesium sulfate 4 g i.v.

Question nr **138**

Which of the following is a specific antidote in the intoxication with zolpidem?

A. naloxone.

B. atropine.

C. sodium bicarbonate.

D. glucagon.

E. flumazenil.

Question nr **139**

The laboratory test confirming carbon monoxide intoxication determines the concentration of carboxyhemoglobin (HbCO). Its values equal to 5%:

A. indicate severe CO intoxication.

B. are normal in habitual tobacco smokers.

C. are an indication for hyperbaric oxygen therapy, even if clinical signs of the intoxication are not present.

D. are an indication for the transfusion of 300 mL of packed red blood cells.

E. are an indication for naloxone administration.

Question nr **140**

Patients with ischemic brain stroke treated with fibrinolytic drugs should have their arterial blood pressure kept below:

A. 240/120 mmHg.

B. 220/120 mmHg.

C. 185/110 mmHg.

D. 165/105 mmHg.

E. 135/75 mmHg.

Question nr **141**

Indicate the sign or symptom which **is not** typical of acute epiglottitis in a 3-year-old child:

A. high fever.

B. drooling.

C. tachypnea.

D. barky cough.

E. difficulty in swallowing.

Question nr **142**

Which of the following tests should be preferred in the case of a low probability of

pulmonary embolism to verify the diagnosis?

A. CT angiogram of the thorax.

B. D-dimer concentration.

C. transthoracic echocardiogram.

D. natriuretic peptide concentration.

E. transesophageal echocardiogram.

Question nr **143**

Hypothermia is defined as a decrease in the core body temperature to:

A. 36°C or less.

B. 35°C or less.

C. 34°C or less.

D. 33°C or less.

E. 30°C or less.

Question nr **144**

A 50-year-old man referred to the emergency department after being beaten a day before. He complains of diplopia, tenderness and the pain in the area of the orbit. Oedema and cyanosis of the left eyelid are visible. What is the possible cause?

A. base of the skull fracture.

B. orbital blowout fracture.

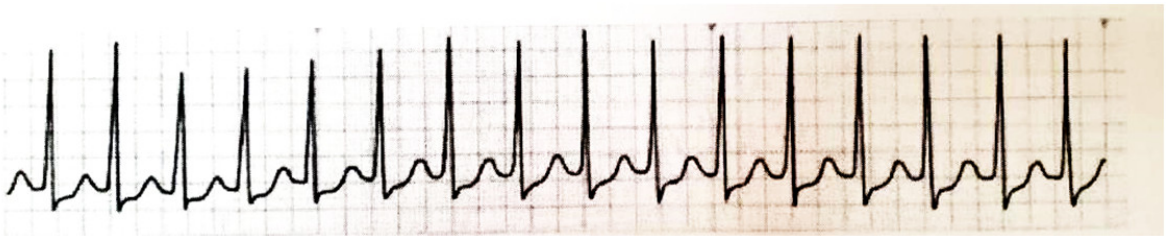
C. retinal detachment.

D. frontal sinus fracture.

E. type I Le Fort fracture.

Question nr **145**

A 70-year-old patient was admitted to the ER with the electrocardiogram shown below. The pulse was palpable on the carotid artery, and the paramedics reported that the ambulance had been called by patient’s wife who had found her husband fainted in the bathroom. Indicate the most appropriate treatment:



A. 200 J defibrillation.

B. 100 J defibrillation.

C. electric cardioversion.

D. transcutaneous pacing.

E. administration of catecholamines.

Question nr **146**

A 55-year-old male came by ER department because of intense, tearing pain that radiated to the back. The patient is a chain smoker and he irregularly takes hypotensive medications. The ECG showed no ST elevation. Which disorder should primarily be considered in the diagnostics?

A. peptic ulcer.

B. aortic dissection.

C. pericarditis.

D. pneumothorax.

E. pulmonary embolism.

Question nr **147**

The criteria for the diagnosis of ARDS **do not** include:

A. PaO_2/FiO_2 < 200 mmHg.

B. presence of predisposing factors.

C. acute onset.

D. bilateral infiltrations on chest X-ray.

E. SpO_2 < 90%.

Question nr **148**

In the case of massive blood transfusion each unit of packed red blood cells should be accompanied by:

A. 1 unit of fresh frozen plasma in the volume of 10-15 mL/kg.

B. 2 units of fresh frozen plasma in the volume of 10-15 mL/kg.

C. 3 units of fresh frozen plasma in the volume of 10-15 mL/kg.

D. 4 units of fresh frozen plasma in the volume of 10-15 mL/kg.

E. 5 units of fresh frozen plasma in the volume of 10-15 mL/kg.

Question nr **149**

Which of the following is the proper management of a low-voltage VF?

A. defibrillation 150 J.

B. defibrillation 200 J.

C. defibrillation 360 J.

D. chest pressures.

E. 300 mg of amiodarone given i.v.

Question nr **150**

The factors authorizing to determine death in a patient are:
1) livor mortis (hypostasis);
2) cardiac arrest;
3) respiratory arrest;
4) rigor mortis;
5) lowered body temperature;
6) failure of CPR carried out according to current guidelines.
The correct answer is:

A. 2,3.

B. 2,3,5.

C. 2,5.

D. 1,4,6.

E. all the above.

Question nr **151**

Intoxication with which of the following xenobiotics **does not** manifest itself in excessive constriction of the pupil?

A. tramadol.

B. morphine.

C. atropine.

D. fentanyl.

E. codeine.

Question nr **152**

Acute intoxication with which of the following **is not** an indication for hemodialysis?

A. methyl alcohol.

B. ethylene glycol.

C. salicylates.

D. diazepam.

E. lithium.

Question nr **153**

Which of the following are obligatory in the case of cardiopulmonary resuscitation performed by an unexperienced person?
1) chest compressions;
2) artificial ventilation;
3) pulse examination on the carotid artery;
4) pulse examination on the radial artery;
5) evaluation of consciousness and breathing.
The correct answer is:

A. 1,3.

B. 1,5.

C. all the above.

D. 1,2,3.

E. 1,2,3,5.

Question nr **154**

A 7-year-old child was bitten by an adder and suffered from anaphylactic shock. The dose of adrenaline that should be given is:

A. 0.15 ml 0.1% solution.

B. 0.3 ml 0.1% solution.

C. 0.5 ml 0.1% solution.

D. 0.75 ml 0.1% solution.

E. 1.0 ml 0.1% solution.

Question nr **155**

Which of the following is the most effective procedure that can lead to ventricular fibrillation or the return of normal rhythm in the case of asystole occurring directly after defibrillation?

A. chest compressions.

B. precordial thump.

C. 300 mg of amiodarone given i.v.

D. external electric stimulation of the heart.

E. two rescue breaths.

Question nr **156**

An ambulance team was called for an unconscious man found in the city park on a December morning. The paramedics should check for signs of life in this patient not longer than:

A. 10 seconds.

B. 20 seconds.

C. 30 seconds.

D. 60 seconds.

E. 120 seconds.

Question nr **157**

Which of the following medications **is not** used in order to lower the potassium concentration in the blood?

A. 1 mg/kg of b.w. of furosemide i.v.

B. 15 mg salbutamol in nebulization.

C. 10 j. of short-acting insulin and 25 g of glucose i.v. within 15-30 min.

D. 10 mL of 10% $CaCl_2$ i.v.

E. sodium bicarbonate 1 mmol/kg of b.w. i.v.

Question nr **158**

Hyperthermia is a characteristic symptom of:

A. acute ethyl alcohol intoxication.

B. acute intoxication with clonazepam.

C. opioid toxidrome.

D. neuroleptic malignant syndrome.

E. sedative/hypnotic toxidrome.

Question nr **159**

Which of the following is the cause of excluding the patient from thrombolytic treatment?

A. time from the onset of symptoms - 4 hours.

B. platelets count - 150 000/mm^3.

C. INR - 1.7.

D. age - 18 years.

E. stroke 2 months earlier.

Question nr **160**

After falling from height a 35-year-old male with head trauma was transported to the emergency department. On admission his heart rate is 135/min, RR 80/40 mmHg, breath rate 20/min. Which of the following is the most probable cause of the hypotension?

A. non-cerebral cause.

B. epidural hematoma.

C. subdural hematoma.

D. subarachnoid hemorrhage (SAH).

E. traumatic brain injury.

Question nr **161**

The patient complains of strong, sudden abdominal pain, bloody diarrhoea, vomiting and frequent atrial fibrillation. During the physical examination, you stated only tenderness on deep palpation of the abdomen without muscular defence. Which of the following is the most probable diagnosis?

A. acute intestinal ischemia.

B. acute pancreatitis.

C. intestinal obstruction.

D. nephrolithiasis.

E. acute appendicitis.

Question nr **162**

During the initial segregation of mass accident victims, using START protocol, a victim non-responding to any stimuli, not breathing spontaneously even after airway management should be:

A. triaged red code color (the highest priority for evacuation).

B. immediately evacuated to the medical point in order to be connected to a ventilator.

C. resuscitated at the place, according to ALS protocol.

D. treated with direct intracardiac epinephrine injection.

E. recognized as dead.

Question nr **163**

After defibrillation during cardiopulmonary resuscitation the ECG should be evaluated:

A. directly after defibrillation, but it should not take more than 5 seconds.

B. directly after defibrillation, but it should not take more than 10 seconds.

C. after 1 min of performing cardiopulmonary resuscitation.

D. after 2 min of performing cardiopulmonary resuscitation or earlier if the signs of spontaneous circulation occurred.

E. after 5 min of performing cardiopulmonary resuscitation or earlier if the signs of spontaneous circulation occurred.

Question nr **164**

An antidote for benzodiazepine intoxication is:

A. protamine sulfate.

B. glucagon.

C. naloxone.

D. activated carbon.

E. flumazenil.

Question nr **165**

Which of the following should be administered to a patient suspected of pulmonary embolism before the confirmation of the diagnosis?

A. urokinase.

B. tissue plasminogen activator.

C. apixaban.

D. enoxaparin.

E. acetylsalicylic acid.

Question nr **166**

Indicate the true statement concerning defibrillation performed in a patient in hypothermia (core temperature 27 ºC) with a sudden cardiac arrest due to ventricular fibrillation:

A. it is not recommended to perform defibrillation until the core temperature is ≥ 30 ºC.

B. it is recommended to perform single defibrillation before reaching core temperature ≥ 30 ºC.

C. it is not recommended to perform defibrillation until the core temperature is ≥ 32 ºC.

D. it is recommended to perform triple defibrillation before reaching core temperature ≥ 30 ºC.

E. it is recommended to repeat defibrillation till the effect according to the general algorithm for ventricular fibrillation.

Question nr **167**

A 40-year-old male patient has been admitted to the ER department because of severe pain located in the right hypochondrium, accompanied by high fever, chills, and jaundice. The CRP is elevated. The ultrasound imaging shows dilated extrahepatic bile ducts. The primary diagnosis should be:

A. acute pancreatitis.

B. acute cholecystitis.

C. hilar cholangiocarcinoma.

D. acute cholangitis.

E. sepsis.

Question nr **168**

Indicate the true statement concerning capnography (ETCO2) used during chest compressions in the course of CPR:

A. values of ETCO2 < 10 mmHg after 20 minutes of CPR suggest good outcome of the treatment.

B. values of ETCO2 are prognostically irrelevant during CPR.

C. values of ETCO2 are independent of the depth of chest compressions.

D. it helps to monitor the frequency of chest compressions.

E. it may allow to diagnose the return of spontaneous circulation (ROSC) during CPR.

Question nr **169**

Which of the following is an indication for chest compressions during the resuscitation of a neonate when correct mechanical ventilation is performed?

A. asystole or ventricular fibrillation only.

B. asystole only.

C. deceleration of the heart rate below 60/min.

D. deceleration of the heart rate below 100/min.

E. acceleration of the heart rate above 120/min.

Question nr **170**

The reversible causes of cardiac arrest **do not** include:

A. tension pneumothorax.

B. pneumothorax simplex.

C. hypovolemia.

D. hypothermia.

E. drugs overdose.

Question nr **171**

Indicate the recommended rate of chest pressures to rescue breaths during CPR:

A. 5:1 in newborns.

B. 3:1 in newborns.

C. 2:15 in neonates.

D. 2:15 in children under 8 years old.

E. 2:30 in adults.

Question nr **172**

Which of the following is the indication for cardioversion?

A. atrial fibrillation.

B. ventricular fibrillation.

C. asystole.

D. pulseless electrical activity.

E. pulseless ventricular tachycardia.

Question nr **173**

Kussmaul breathing is observed in the intoxication with:

A. benzodiazepine.

B. salicylate.

C. calcium channel blocker.

D. insulin.

E. beta antagonist.

Question nr **174**

Crystalloids include:
1) Ringer’s lactate;
2) albumins;
3) HES;
4) 0.9% NaCl.
The correct answer is:

A. 1,2.

B. 1,3,4.

C. 1,4.

D. 3,4.

E. only 4.

Question nr **175**

Which of the following **is not** a sign of anaphylaxis?

A. generalized hives.

B. respiratory insufficiency.

C. increase in systolic blood pressure.

D. urinary incontinence.

E. loss of consciousness.

Question nr **176**

The recommended value of defibrillation energy for children is:

A. 2 J/kg for the first and subsequent shocks.

B. 2 J/kg for the first and 3 J/kg for subsequent shocks.

C. 3 J/kg for the first and 4 J/kg for subsequent shocks.

D. 4 J/kg for the first and subsequent shocks.

E. 4 J/kg for the first and 5 J/kg for subsequent shocks.

Question nr **177**

A 68-year-old female with breast cancer and metastases to the vertebral column and ribs diagnosed 3 years earlier came to the emergency department. The main cause of her visit was abdominal pain lasting for several days. Additionally, she complained of polyuria, constipation and palpitations. Which of the following is the cause of the observed symptoms?

A. hyperkalemia.

B. hypokalemia.

C. hypercalcaemia.

D. hypocalcaemia.

E. hyponatremia.

Question nr **178**

The recommended management of the patient with regular narrow QRS complex

tachycardia **does not involve**:

A. bolus of 1 mg atropine i.v.

B. vagus nerve stimulation.

C. bolus of adenosine 6 mg i.v.

D. carotid sinus massage.

E. Valsalva maneuver.

Question nr **179**

Indicate the **false** sentence concerning hypothermia:

A. hypothermia is diagnosed, when the core body temperature decreases below 35 degrees Celsius.

B. factor that predisposes to hypothermia is a drop in heat production due to old age.

C. diagnosis of brain death is possible only after the restoration of core body temperature to normal values.

D. human body at a temperature below 20 degrees Celsius is able to tolerate cardiac arrest for more than 1 hour without neurological damage.

E. hypothermic bradycardia is sensitive to atropine treatment.

Question nr **180**

Specific antidotes **do not** include:

A. atropine in organophosphate poisoning.

B. acetylcysteine in benzodiazepine intoxication.

C. amyl nitrate in cyanide poisoning.

D. hydroxocobalamin in cyanide poisoning.

E. naloxone in opioid poisoning.

Question nr **181**

The man was admitted to the Emergency Unit due to syncope without loss of consciousness. The patient complains of pain in the chest and weakness. The patient is chronically treated with VKA due to atrial flutter. The examination reveals cold, pale and

sweat skin, a heart rate 130 per minutes, blood pressure 80/50 mmHg. The electrocardiography shows atrial flutter. First of all you should apply:

A. 300 mg amiodarone within 10 minutes intravenously.

B. electrical cardioversion up to three times.

C. 2 g magnesium sulphate solution intravenously.

D. 6 mg adenosine intravenously.

E. 0.25 mg digoxin intravenously.

Question nr **182**

Urgent electrical cardioversion is performed in the following conditions, **except for**:

A. ventricular tachycardia refractory to pharmacological treatment.

B. hemodynamically unstable ventricular tachycardia.

C. hemodynamically unstable recurrent supraventricular tachycardia.

D. pulseless ventricular tachycardia.

E. atrial fibrillation/flutter with low cardiac output syndrome and hemodynamic instability.

Question nr **183**

Which of the following **is not** administered during CPR before the restoration of spontaneous circulation?

A. magnesium sulphate.

B. dopamine.

C. epinephrine.

D. lidocaine.

E. amiodarone.

Question nr **184**

Information on the use of which of the following medications **does not** explain hyperkalemia observed in a patient:

A. ramipril.

B. ketoprofen.

C. propranolol.

D. trimethoprim.

E. torasemide.

Question nr **185**

Maneuvers that increase the tone of the vagal nerve (e.g. Valsalva maneuver) are frequently effective in the emergency treatment of:

A. atrial fibrillation.

B. bradycardia.

C. ventricular tachycardia with narrow QRS complexes.

D. ventricular tachycardia with wide QRS complexes.

E. none of the above.

Question nr **186**

The most sensitive and specific confirmation of the correct placement of an endotracheal tube can be achieved by the monitoring of:

A. pulse oximetry.

B. capnography.

C. capillary refill time.

D. pattern of breathing.

E. blood oxygen saturation.

Question nr **187**

In the case of the resuscitation of a newborn the recommended ratio of chest compressions to artificial breaths is:

A. 03:01

B. 05:01

C. 05:02

D. 15:02

E. 30:02:00

Question nr **188**

Wells' scoring system used to estimate the risk of pulmonary embolism **does not** include:

A. blood platelet count.

B. tachycardia > 100/min.

C. hemoptysis.

D. malignant tumor.

E. recent surgery.

Question nr **189**

The possible causes of hypokalemia **do not** include:

A. vomiting.

B. acidosis.

C. insulin administration.

D. Conn's syndrome.

E. treatment with loop diuretics.

Question nr **190**

The polymorphic ventricular tachycardia occurred in a patient intoxicated with tricyclic antidepressants. The treatment should include the administration of:

A. magnesium sulphate.

B. β-blocker.

C. digoxin.

D. amiodarone.

E. verapamil.

Question nr **191**

CURB-65 score facilitates making decision on the proper management of a patient with:

A. urinary incontinence.

B. pneumonitis.

C. acute pancreatitis.

D. ischemic brain stroke.

E. myocarditis.

Question nr **192**

Indicate body organs that are ranked **from the shortest to longest** time of tolerance to hypoxia:

A. cerebral cortex, brain stem, bones, skin, muscles.

B. cardiac muscle, brain stem, kidneys, liver.

C. cerebral cortex, brain stem, cardiac muscle, kidneys, liver.

D. skin, muscles, bones, kidneys, liver.

E. bones, skin, cardiac muscle, brain stem.

Question nr **193**

Indicate current guidelines on pharmacotherapy for sudden cardiac arrest:

A. intramuscular and subcutaneous injections are forbidden during resuscitation.

B. femoral vein injection is not recommended.

C. intracardiac injection is forbidden due to the risk of myocardial injury, cardiac tamponade, pneumothorax, and the necessity to discontinue resuscitation for the time needed to make the injection.

D. endotracheal route is not recommended, according to the European Resuscitation Council (ERC) Guidelines.

E. all of the above.

Question nr **194**

Indicate the **false** poison - antidote pair:

A. benzodiazepines - flumazenil.

B. opioids and opiates - naloxone.

C. methyl alcohol - ethyl alcohol.

D. ethylene glycol - methyl alcohol.

E. beta blockers - glucagon.

Question nr **195**

Indicate the fracture sites ranked **from the lowest to highest** volume of blood loss during fracture:

A. single vertebra, single rib, forearm bones, lower leg bones, pelvis.

B. single rib, shoulder and humeral bone, pelvis, femoral bone.

C. shoulder and humeral bone, forearm bones, lower leg bones, femoral bone.

D. pelvis, femoral bone, shoulder and humeral bone, single rib.

E. femoral bone, single vertebra, forearm bones, single rib.

Question nr **196**

In cardiac tamponade, characteristic symptoms, known as the Beck's triad, develop. These include:

A. chest pain, progressive dyspnoea, tachycardia/paradoxical pulse.

B. cold, pale skin, loss of consciousness, cardiac arrest.

C. hypotension, muffled heart sounds, jugular veins distension.

D. progressive dyspnoea, chest pain, muffled heart sounds.

E. chest pain, progressive dyspnoea, cold, pale skin.

Question nr **197**

In which particular cases can the skull X-ray be recommended for assessment of the clinical condition, even though CT is available:

A. penetrating trauma (from a gunshot).

B. suspected depressed skull fracture.

C. suspected basilar skull fracture.

D. in patients with previous craniotomy or external ventricular drainage.

E. all of the above are true.

Question nr **198**

Recent studies have shown that both in the case of resuscitation carried out in the hospital and outside, the frequency of heart rhythms susceptible to defibrillation decreases with time, from the onset of resuscitation. With each minute that the defibrillation is delayed, the chance of survival decreases by:

A. 1%.

B. 10%.

C. 20%.

D. 50%.

E. 90%.

Question nr **199**

The methods for monitoring the patient's condition at the site of the incident and during transport to hospital can be classified as instrumental and non-instrumental. Among the instrumental methods, body temperature measurement is essential. Indicate a **false** statement:

A. after cardiac arrest and CNS trauma, the risk of neurological complications increases with each degree of body temperature higher than 37.6 °C.

B. hyperthermia refers to body temperature increase over 40 °C, without a change in the body's temperature set point.

C. hyperpyrexia refers to body temperature increase over 41.1 °C.

D. fever is an increase in body temperature over 36.6 °C.

E. hypothermia is the core body temperature below 35 °C.

Question nr **200**

The non-invasive methods for cardiac monitoring include non-invasive blood pressure (NIBP) measurement. An additional non-invasive parameter is the pulse pressure (the difference between systolic and diastolic pressure), the normal values for which fall within the range of:

A. 10-30 mmHg.

B. 20-40 mmHg.

C. 30-50 mmHg.

D. 40-60 mmHg.

E. 50-70 mmHg.

Question nr **201**

Increased end-tidal CO_2 concentration ($EtCO_2$), measured with capnometry, **does not** occur during:

A. hypoventilation.

B. malignant hyperthermia.

C. hypothermia.

D. skeletal muscle activity.

E. thyroid storm.

Question nr **202**

The non-invasive methods for cardiac monitoring include non-invasive blood pressure (NIBP) measurement. An additional non-invasive parameter is the heart rate pressure product, defined as the heart rate multiplied by the systolic pressure. Indicate normal values for the heart rate pressure product:

A. up to 5 000.

B. up to 10 000.

C. up to 15 000.

D. up to 20 000.

E. up to 25 000.

Question nr **203**

During a physical examination, you have to determine the cause of headache. The facial pain can be caused by:

A. the condition of teeth and gums.

B. trigeminal neuralgia.

C. glossopharyngeal neuralgia.

D. answers A,B,C are correct.

E. answers B and C are correct.

Question nr **204**

Indicate **false** statements regarding carbon monoxide (CO) characteristics:

A. carbon monoxide is a colourless, odourless and tasteless gas.

B. CO has a 200-times greater affinity for haemoglobin than oxygen.

C. CO particles cannot pass through the drywall.

D. carboxyhaemoglobin (COHb) is a carbon monoxide carrier in the organism.

E. CO particles are small enough to pass through the drywall and induce intoxication of people staying in adjacent rooms.

Question nr **205**

In CT scan of the head, the early radiological symptoms of ischaemic stroke **do not** include:

A. smoothing of cerebral sulci.

B. loss of the insular ribbon sign.

C. reduced contrast of the basal ganglia.

D. hyperdense middle cerebral artery sign.

E. hypodense middle cerebral artery sign.

Question nr **206**

Indicate **false** statements regarding general principles of seizure control:

A. you should not put any material objects into the patient's mouth/between his teeth.

B. you should not try to revive the patient.

C. you should not pour water over the patient's face.

D. you should wake up the patient after the seizure.

E. you should put something soft under the patient's head when the seizure starts.

Question nr **207**

Most of the deaths of haemodynamically unstable patients who have gastrointestinal bleeding can result from:

A. renal failure.

B. cerebral ischaemia.

C. myocardial ischaemia.

D. liver ischaemia (in patients with limited hepatic functional reserve).

E. all of the above are true.

Question nr **208**

A 75-year-old female patient with persistent atrial fibrillation suddenly experienced right-sided paresis with aphasia. The patient has not been treated with anticoagulants. What should you do first?

A. take a head CT scan with contrast.

B. take a non-contrast head CT scan.

C. determine the glucose concentration.

D. administer tissue plasminogen activator.

E. administer heparin.

Question nr **209**

In the case of restoration of cardiovascular activity during CPR (cardiopulmonary resuscitation) in a patient with cardiac arrest, the end-tidal carbon dioxide (ETCO2)

level:

A. will increase.

B. will fall.

C. will not change.

D. will fall to zero.

E. will reach 200 mmHg.

Question nr **210**

A 40-year-old male patient has lost consciousness.The patient is unconscious at the time of arrival of an RRT (Rapid Response Team), takes 6 breaths per minute, and occasionally falls into apnea, pulse 120/min, saturation 78%, the pupils are constricted. What do you need to do first?

A. start to ventilate the patient with oxygen, intubate the patient, administer naloxone.

B. administer atropine to dilate the pupils.

C. pump the stomach.

D. administer naloxone, do not ventilate the patient.

E. administer 500 ml of BMES intravenously.

Question nr **211**

A 70-year-old male patient experienced palpitations and chest pain, his arterial blood pressure was 70/50 mmHg. The ECG showed atrial fibrillation with ventricular function 180/min. The appropriate management was to:

A. perform electrical cardioversion.

B. administer amiodarone.

C. perform Valsalva manoeuvre.

D. administer lidocaine.

E. administer digoxin.

Question nr **212**

In the case of multiorgan injuries in pregnant women:

A. the best treatment method of the foetus is ”intensive” resuscitation of the mother.

B. the foetus may be in the acute life-threatening condition despite the fact that no or only slight symptoms occur in the mother.

C. the examination of choice to assess the mother’s abdominal cavity and the condition of the foetus is an ultrasonography.

D. all necessary clinical radiological examinations should be performed regardless of the risk related to foetal irradiation.

E. all of the above are correct.

Question nr **213**

In the case of a ruptured abdominal aorta aneurysm the symptom triad includes:

A. abdominal pain, fever, nausea and vomiting.

B. abdominal pain, a pulsating bulge within the abdominal cavity and hypotension.

C. abdominal pain, fever and diarrhoea.

D. back pain, headache and hypertension.

E. abdominal pain, diarrhoea, nausea and vomiting.

Question nr **214**

The diseases that can imitate the so called ”acute abdomen” include:

A. diabetic ketoacidosis.

B. food poisoning.

C. pneumonia.

D. pelvis minor organs inflammation.

E. all the above.

Question nr **215**

The indications for hospitalization of patients suffering from pyelonephritis **do not include**:

A. compensated diabetes.

B. impossibiliy to hydrate the patient orally.

C. cases of a complicated urinary system infection.

D. severe course of the disease.

E. pregnancy.

Question nr **216**

Indicate the **false** statement concerning tetanus:

A. the primary course of tetanus vaccination in adults consists of three doses of a suitable tetanus-containing vaccine.

B. tetanus vaccine is dangerous for pregnant women.

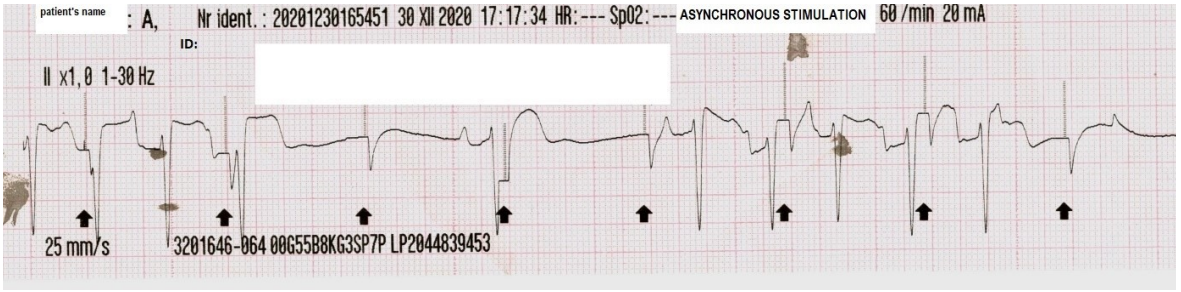
C. tetanus vaccine is safe for immunosuppressed patients.

D. the drug of choice in the case of tetanus is metronidazole.

E. high rate of mortality in tetanus is caused by autonomic system instability.

Question nr **217**

The figure shows an ECG during external stimulation in a patient with symptomatic bradycardia, in which the arrows indicate stimulation artifacts. Identify the true statement:



A. stimulation was effective, at a good frequency and current.

B. stimulation was effective, at too low a frequency and too high a current.

C. stimulation was effective, at a good frequency and too low a current.

D. stimulation was ineffective, at a good fequency and too low a current.

E. stimulation was ineffective, at too low a frequency and a good current.

Question nr **218**

A 34-year-old male without any medical history has been brought to hospital by the medical rescue team due to disorders of consciousness. The patient opens his eyes in response to pain and produces incomprehensible sounds. A decerebrate response is also observed. How many points will the patient score according to Glasgow Coma Scale?

A. 4.

B. 5.

C. 6.

D. 7.

E. 8.

Question nr **219**

The letter S in the SAMPLE acronym refers to:

A. drugs taken by the patient.

B. pregnancy.

C. drug allergies.

D. symptoms.

E. past surgeries.

Question nr **220**

Which of the following **is not** recommended in patients with multiple injuries?

A. pain intensity measurement every 30 minutes.

B. the administration of an analgesic within 20 minutes after the contact with the medical team when the pain is severe.

C. the use of simplified pain intensity scales.

D. the use of a Numerical Rating Scale (NRS) in children below 9 years of age.

E. the use of the Visual Analogue Scale (VAS) in people above 65 years of age.

Question nr **222**

The primary trauma examination (ABCDE) according to ATLS comprises all of the following elements **except for**:

A. examination of breathing.

B. examination of circulation.

C. neurological assessment.

D. exposure.

E. identification of all the injuries.

Question nr **223**

The letter ‘I’ in the AT-MIST acronym refers to:

A. symptoms.

B. injuries.

C. drug allergies.

D. treatment.

E. past surgeries.

Question nr **224**

Which of the following statements is true about acetabular fractures?

A. they are caused only by direct injuries.

B. they are often accompanied by a retroperitoneal haematoma in the lesser pelvis.

C. they are often treated conservatively.

D. skeletal traction in abduction is of no use in such cases.

E. a fracture occurring a week after the injury is an indication for conservative treatment.

Question nr **225**

Which of the following statements is true about proximal femoral fractures?

A. in an impacted fracture necrosis of the femoral head is more frequent.

B. a subcapital adduction fracture has the poorest prognosis for spontaneous healing.

C. an abduction fracture is never impacted.

D. in an adduction fracture there is no limb shortening.

E. hemiarthroplasty is preferred in young, mobile patients.

Question nr **226**

Which of the following statements is true about blunt renal trauma with bleeding?

A. angioembolisation is always contraindicated.

B. a pulsatile renal haematoma is an absolute indication for surgery.

C. 50 to 60% of all blunt renal injuries in females are treated surgically.

D. creatinine concentration is of no significance before a decision about surgical treatment is made.

E. blunt renal trauma grade V is always and without exception an absolute indication for surgery.

Question nr **227**

Which of the following statements is true?

A. enophthalmos is typically a symptom of an isolated orbital fracture.

B. enophthalmos is a symptom of a subarachnoid bleeding.

C. in the consensual reflex the examined eye’s pupil becomes dilated.

D. an exophthalmometre is not used to assess enophthalmos.

E. an exophthalmometre measures intraocular pressure.

Question nr **228**

A 53-year-old man fell from a tree, lost consciousness and has a 3 cm head injury. He opens his eyes in response to voice command and makes incomprehensible sounds. There is a localized pain stimulus response in the left upper limb and lack of motor response of the right upper limb. How many points would this patient receive on the Glasgow Coma Scale (GCS)?

A. 6.

B. 7.

C. 8.

D. 9.

E. 10.

Question nr **229**

A 65-year-old man had an ischemic stroke with hemiparesis and speech disturbances. At discharge for outpatient treatment, the physician entered into the medical history report that the patient has been classified as Cerebral Performance Category (CPC) category 3, which refers to:

A. lack of neurologic deficits.

B. minimal neurologic deficits.

C. moderate neurologic deficits.

D. severe neurologic impairment.

E. vegetative state.

Question nr **230**

The Injury Severity Score (ISS) defines 6 body regions. How many body regions are used to calculate the final ISS score?

A. 1.

B. 2.

C. 3.

D. 4.

E. 5.

Question nr **231**

Which of the following is a **false** statement regarding trauma centres (CU) and the format for collecting medical data by the emergency medical team (ZRM) for a trauma centre according to the AT-MIST scheme:

A. trauma team is always led by an anaesthesiologist.

B. trauma team can be led by a surgeon.

C. AT-MIST scheme includes a pre-hospital trauma assessment.

D. AT-MIST scheme includes a description of the mechanism of injury.

E. AT-MIST scheme includes a description of the patient's symptoms and signs.

Question nr **232**

A 53-year-old man fell from a tree. He rates his pain as 7 on the NRS scale. Select the optimal pain management in this case:

A. a non-opioid analgesic only.

B. only metamizole.

C. a strong opioid, e.g., fentanyl.

D. only paracetamol and metamizole.

E. none of the above.

Question nr **233**

A 63-year-old conscious man with tachycardia, GCS=15 and hemodynamic instability requires:

A. defibrillation under sedation.

B. defibrillation under general anaesthesia.

C. pharmacologic defibrillation.

D. cardioversion under general anaesthesia.

E. cardioversion under local anaesthesia.

Question nr **234**

The procedure for providing airway management using the technique of rapid sequence intubation (RSI) in patients having a full stomach includes:

A. oxygen therapy using a face mask with a reservoir at a flow rate of 8 L/min over 3-5 minutes.

B. endotracheal intubation with a tube without a guide.

C. in an unconscious patient, placement of a gastric tube before endotracheal

intubation.

D. placement of the patient in the Fowler position (trunk raised to 30-45° relative to the legs) following intubation.

E. performance of the Sellick manoeuvre following endotracheal intubation.

Question nr **235**

In case of bradycardia, adult patients with a heart transplant should:

A. receive atropine.

B. receive aminophylline.

C. receive adrenaline.

D. undergo cardioversion.

E. undergo defibrillation.

Question nr **236**

A 39-year-old man with obesity (BMI=44 kg/m^2) was transported by the emergency medical services (ZRM) to the emergency department. The cardiac monitor shows asystole with P waves. In this case the ERC guidelines recommend:

A. pharmacological cardioversion.

B. electrical cardioversion.

C. defibrillation.

D. cardiac pacing.

E. none of the above.

Question nr **237**

Which of the following is a true statement regarding tachycardia?

A. in the case of atrial flutter and paroxysmal supraventricular tachycardia, the first delivered shock should be 70-120 J.

B. in the case of atrial fibrillation, it is more advisable to use stepwise increases in energy rather than a maximal-energy synchronized shock available for a given device.

C. to achieve conversion of atrial and ventricular tachyarrhythmia, the shock must by

synchronized with the Q wave on the ECG.

D. in the case of ventricular tachycardia with a pulse, the first shock should be 70-100 J.

E. none of the above.

Question nr **238**

Indicate the true statement regarding anisocoria:

A. anisocoria is diagnosed when the difference in the pupil size is more than 1 mm.

B. anisocoria must be associated with abnormal accommodation.

C. anisocoria must be associated with diplopia.

D. post-injury anisocoria is most often an isolated symptom.

E. progressive anisocoria in an unconscious patient is not suggestive of the increasing severity of intracranial hypertension.

Question nr **239**

Indicate the true statement regarding quaternary blast injuries:

A. they are caused by the impact of the blast wave.

B. they are caused by the impact of blast debris.

C. they are the result of the transposition of the victim’s body on the ground due to the impact of the blast wind.

D. these are burns of the respiratory tract due to inhalation of toxic gases.

E. none of the above.

Question nr **240**

In the case of eyeball dislocation, you should, as first aid measure:

A. instil an antibiotic to the affected eye.

B. instil an anaesthetic to the affected eye.

C. try to reduce the eyeball through the eyelid.

D. try to reduce the eyeball directly.

E. do not attempt any medical actions.

Question nr **241**

Which of the following statements regarding intraocular foreign body is **false**?

A. do not cover eyes with a dressing.

B. tetanus prophylaxis should be applied.

C. wood causes inflammatory reaction.

D. glass leads to chemical injury.

E. porcelain leads to chemical injury.