

# **TEST questions**

*III. year*

**1. What is the aim the surgical examination ?**

- a) establishing of the diagnosis
- b) establishing of the diagnosis and eventually the indication for operation
- c) indication for operation
- d) treatment of the injury

**2. What is history in medicine ?**

- a) lost of memory
- b) is the interview of the physician with the patient, and the patient is verbally describing his problems
- c) informations from the patient about his problems
- d) temporary lost of sensitivity

**3. What is the aim of allergic history:**

- a) to gain the information about pills
- b) alimentary stuff
- c) other materials
- d) a,b,c is correct

**4. In clinical examination „5P“ means :**

- a) palpation of 5 organs
- b) examination by aspection
- c) examination by means of aspection, palpation, percussio, auscultation and per rectum
- d) examination of 5 quadrants

**5. Which parts does the surgical file (documentation) contain?**

- a) status praesens localis
- b) status praesens generalis and localis
- c) status praesens generalis and organorum
- d) status praesens generalis, organorum and localis

**6. The important part of the preoperative management is:**

- a) prevention of stress ulcer
- b) thromboembolic disease
- c) ATB
- d) a, b and c is correct

**7. What are the contraindications to of vital indication:**

- a) big lost of blood
- b) low blood pressure
- c) lost of consciousness
- d) none of a,b and c

**8. The preoperative preparation of the patient depends on:**

- a) difficulty of the operation
- b) global state of the patient
- c) time factor of the operation
- d) all in a, b and c is correct

**9. Informed consent of the patient for the operation is necessary by:**

- a) head operations
- b) oncologic operations
- c) acute states
- d) elective operations

**10. The haemorrhage by epidural hematoma is:**

- a) mild
- b) arterial
- c) between dura and pia mater
- d) from adrenal glands

**11. The haemorrhage by subdural hematoma is:**

- a) hidden
- b) between pia and dura mater
- c) below the fascia of the muscle
- d) in patients with coagulopathy

**12. What is patho-physiological mechanism of the brain injuries?**

- a) acceleration and deceleration
- b) compression
- c) rotation
- d) a,b and c or their combination (a, b, c)

**13. The most common cause of head injuries are:**

- a) traffic accidents, work injury, sport
- b) suicidium, marriage issues, acrobacy
- c) jumps to the water, falls from heights, traffic accidents
- d) work injuries, working in forrest, shooting injury

**14. The anatomical border in strict sense between non-penetrating and penetrating injuries is:**

- a) calva
- b) pia mater
- c) dura mater
- d) brain

**15. What do we use for assessment of the consciousness:**

- a) a mirror
- b) Glasgow coma scale
- c) Geneva coma scale
- d) painful insult

**16. The suverreign diagnostic method in serious head injuries is:**

- a) ultrasound
- b) X-ray
- c) blood count
- d) CT

**17. The patient after commotio cerebri has:**

- a) fever
- b) reduced bowel peristalsis
- c) retrograde amnesia
- d) increased appetite

**18. What is the possible points count in Glasgow coma scale?**

- a) 3-15
- b) 0-15
- c) 0-10
- d) 3-30

**19. The patients in deep areflexive coma has GCS:**

- a) 15
- b) 3
- c) 30
- d) 0

**20. What do we assess in GCS:**

- a) eyes opening, verbal contact, motoric response
- b) eyes color, color (tone) of the voice, muscles
- c) width of pupillae, orientation, signs on extremities
- d) signs on extremities, orientation, verbal action

**21. What is not a bloody surgical procedure?**

- a) injection
- b) insertion of the urinary catheter
- c) venesection
- d) punction

**22. What is not a bloody surgical procedure ?**

- a) reposition non-cruenta
- b) endoscopic examination
- c) insertion of the nasogastric tube

- c) all in a, b and c is correct

**23. Which from following classifications of surgical procedures (operations) are the best describing – from the time of urgency point of view ?**

- a) elective, un-elective, urgent, acute operations
- b) elective, non-elective operations
- c) acute, chronic operations
- d) urgent and non-urgent operations

**24. Operations in gastrointestinal tract perforations belong to procedures which are:**

- a) elective
- b) acute
- c) urgent
- d) none of a, b and c

**25. What is the name of the operation indication, when without the operation the patient dies?**

- a) absolute indication
- b) life saving operation ( or the operation quo ad vitam)
- c) vital indication
- d) all in a, b and c

**26. What does not belong to relative operative indication?**

- a) prophylactic indication
- b) diagnostic indication
- c) cosmetic indication
- d) non-elective operation

**27. What kind of indication to surgical procedure is taking blood for alcohol testing?**

- a) forensic
- b) social
- c) cosmetic
- d) prophylactic

**28. What belongs to the term „operation tactic“?**

- a) appropriate position of the patient
- b) appropriate type of anesthesia
- c) appropriate operation Access
- d) all in a, b and c is correct

**29. What is the most important before closing the operated cavity of the human organism?**

- a) choosing of the suture material
- b) choosing of surgical devices
- c) controlling of the number of operation towels
- d) changing of gloves of the operator

**30. Into miniinvasive operations does not belong:**

- a) thoracoscopy
- b) arthroscopy
- c) laparotomy
- d) classical cholecystectomy

**31. We apply Sengstaken tube in:**

- a) gastric ulcer bleeding
- b) esophageal varices bleeding
- c) duodenal ulcer bleeding
- d) all in a, b and c is correct

**32. What is exarticulation?**

- a) removal of the limb in the joint
- b) amputation most closest to the pathological process
- c) amputation most far from the pathological process
- d) none of a, b and c

**33. Asepsis is reached by:**

- a) sterile gloves

- b) sterile instruments
- c) sterile textile
- d) all in a,b and c

**34. Antisepsis is:**

- a) destruction of the viruses in on the surface of the instrument
- b) destruction of the parasites in the excrements
- c) process of destruction of the majority of microorganisms on the surface of the skin and mucoses or in tissues using of antiseptics
- d) none of a, b and c is correct

**35. Desinfection is executed:**

- a) on vital tissues of the organism
- b) only in operating theatres
- c) only by application of intravenous medicaments and infusions
- d) on non-vital things, surfaces, in the air and in water

**36. By desinfection we can use:**

- a) only non-toxic agents and materials
- b) only material which are not irritating the surface of the human body
- c) only material which do not cause the corrosion of the instruments
- d) relatively toxic agents as well, because desinfection is not executed on vital tissues of the organism

**37. Classification of desinfection according to the grade of effectivity:**

- a) classification total and zero
- b) there is no classification
- c) total and partial
- d) minimal and maximal

**38. Sterile material (e.g. infusion solution)**

- a) can not contain pyrogens
- b) always contains pyrogens
- c) can contain pyrogens and therefore after application of sterilized material into the body can cause the pyrogenic reaction
- d) none of a,b and c

**39. Two main types of sterilization are:**

- a) total and partial desinfection
- b) water and steam
- c) physical and chemical
- d) none of a, b and c

**40. The control of sterilization and desinfection:**

- a) is not executed
- b) is not compulsory
- c) is executed by bioindicators
- d) depends on the decision of the leader at the workplace, if it is necessary to realize it

**41. The cause of pathological fractures is:**

- a) mechanical power
- b) deceleration
- c) structural changes of bone tissue
- d) repetitive overcharge of the skeleton

**42. Tscherne classification involves:**

- a) damage of the bone only
- b) x-ray picture of the fracture
- c) prognosis of the treatment
- d) damage of the soft tissues in closed fractures as well

**43. Into the sure signs of fractures belongs:**

- a) deformity
- b) pathological movements
- c) crepitation
- d) all in a, b and c is correct

**44. What is the pseudoarthrosis?**

- a) badly developed joint
- b) a state when during the healing of the bone there is no osseal adhesion of the fragments
- c) a state after the injury of the joint with insufficient healing
- d) none of a, b and c

**45. For good results of fractures treatment it is necessary to:**

- a) perfect reposition
- b) appropriate long a correct immobilisation and fixation
- c) adequate and complex rehabilitation
- d) all in a, b and c is correct

**46. What is the most serious failure of the osteosynthesis?**

- a) bad axial position
- b) infection and technical mistake
- c) bad cosmetical effect of the wound
- d) pain in the place of osteosynthesis

**47. What is correct in treatment of fractures?**

- a) important is the the good choice of the company producing the osteosynthetic material
- b) important is to most decrease the X-rays exposition the site of the fracture
- c) to apply in every patients the local acting ATB in the site of osteosynthesis
- d) early mobilisation, but late loading

**48. Extraosseal osteosynthesis is executed by metal material:**

- a) on the surface of the body – extremity of the patient
- b) out of the surface of the body – extremity of the patient
- c) on the surface of the bone
- d) into the subcutaneous tissue in the site of the fracture

**49. How much per-cent of open fractures patients are contaminated during hospitalisation:**

- a) 0%
- b) 25%
- c) 50%
- d) 75%

**50. How much degrees has Gustillo – Tscherné classification of open fractures ?**

- a) 3
- b) 4
- c) 5
- d) this classification does not exist

**51. The most common isolated complication after bigger surgeries is:**

- a) myocardial infarction
- b) pancreatitis
- c) respiratory complication
- d) syndroma hyperuricemicum

**52. Risk group for respiratory complications are:**

- a) urgent operations
- b) older patients
- c) patients with preexisting chronic obstruct pulmonary diseases
- d) all in a, b and c is correct

**53. Pulmonary atelectasis after abdominal operations:**

- a) in 25% of patients
- b) in 50% of patients
- c) in 5% of patients
- d) in 75% of patients

**54. Pulmonary atelectasis is more frequent in:**

- a) smokers
- b) obese patients
- c) older patients

d) all in a, b and c is correct

**55. Immediate cause of pulmonal atelectasis is:**

- a) leukocytosis
- b) decreased oxygenation of blood
- c) decreased diuresis
- a) anaemia

**56. Obstructive factors for development of atelectasis are:**

- a) increases diuresis
- b) increased production of secrete in airways
- c) leukocytosis
- d) anaemia

**57. Non-obstructive factors for pulmonal atelectasis are:**

- a) blood thrombi in airways
- b) increased secretion in airways
- c) absence of deep breathing
- d) anaemia

**58. What is not a clinical sign of pulmonal atelectasis:**

- a) tachypnoe
- b) tachycardia
- c) fever
- d) hypertension

**59. What is not preventive in pulmonal atelectasis:**

- a) early mobilisation
- b) coughing
- c) administering of cardiotonics
- d) preoperative breathing preparation

**60. Pulmonal aspiration is caused by:**

- a) reduction of bowel peristalsis
- b) reduction of gastroesophageal and pharyngoesophageal sphincters
- c) spasm of the sphincter of Oddi
- d) when there is the reduction of gastric secrets

**61. Mortality in patients with massive aspiration and following pneumonia is:**

- a) 30%
- b) 50%
- c) 70%
- d) 10%

**62. What is not a risk factor for pulmonal aspiration:**

- a) the state of consciousness
- b) gravidity
- c) hypertension
- d) status ileosus

**63. The possibility of pulmonal aspiration is not affected:**

- a) insertion of nasogastric tube
- b) position of the patient
- c) insertion of urinary catheter
- d) by the reduced function of CNS by medicaments

**64. The quantity of damage by pulmonal aspiration is not affected by:**

- a) the volume of aspirated content
- b) Ph less tahn 2.5
- c) the quality of the aspirated content
- d) brething frequention

**65. In pulmonal aspiration are most often affected:**

- a) basal segments
- b) left pulmonal lobe

- c) right pulmonal lobe
- d) upper segments

**66. Pulmonal aspiration is most often occurring:**

- a) preoperatively
- b) in the begining and finishing of anesthesia
- c) in the late postoperative course
- d) during rehabilitation

**67. What is not a clinical sign in pulmonal aspiration:**

- a) tychypnoe
- b) hypoxy
- c) paralytic ileus
- d) cyanosis

**68. What is not prophylactic in pulmonal aspiration:**

- a) empty stomach before anesthesia
- b) omeprazol before operation
- c) treatment by cardiotonics before operation
- d) decent intubation

**69. What is not in the clinical picture of fat emolism:**

- a) bowel paralysis
- b) neurological signs
- c) respiratory signs
- d) coagulopathy

**70. The operation in patient with chronic obstructive disease:**

- a) is without preoperative management
- b) after 2-7 days preoperative preparation with bronchodilators
- c) is never done
- d) the patient needs diuretics and cardiotonics

**71. An absolute contraindication for abdominal operation is:**

- a) infection of the lower part of airways
- b) 10 % reduced pulmonal capacity
- c) bronchial astma after preparation
- d) obesity

**72. The effect of anesthesia to myocard is:**

- a) tonising
- d) not affecting the myocard
- c) depressing
- d) all in a, b and c is correct

**73. Anticoagulants preoperatively:**

- a) we increase the dose
- b) we decrease the dose
- c) we do not use it 3 days before the operation
- d) we do not use it 3 days before operation and replace it by miniheparins (LMWH)

**74. Fluid overdosing preoperatively can cause:**

- a) failure of right ventricle
- b) failure of the left ventricle
- c) pneumonia
- d) does not make any problems

**75. Incidence of preoperative arhythmias is:**

- a) 50%
- b) 40%
- c) 70%
- d) 20%

**76. Postoperative heart complication is:**

- a) myocardial infarction

- b) heart failure
- c) arrhythmia
- d) all in a, b and c is correct

**77. The cause of postoperative parotitis is:**

- a) malnutrition
- b) bad hygiene of oral cavity
- c) dehydration
- d) all in a, b and c is correct

**78. Postoperative ileus is caused by:**

- a) the obstruction in the bowel
- b) anaesthesia and surgical manipulation
- c) dehydration
- d) peritonitis

**79. Postoperative cerebrovascular complications are the cause of:**

- a) insufficient perfusion of the brain
- b) decreased diuresis
- c) pain in the site of the wound
- d) increased pressure

**80. The incidence of postoperative myocardial infarction is:**

- a) 4%
- b) 0.4%
- c) 14%
- d) 20%

**81. Vulnus lacerum is:**

- a) cutting wound
- b) lacerated wound
- c) bite wound
- d) bullet wound

**82. Debridement of the wound is:**

- a) necrosectomy and toilette of the wound
- b) suture of the wound
- c) inflammation in the wound
- d) placing the drain into the wound

**83. Wound healing per primam intentionem is:**

- a) healing of the wound by inflammation
- b) healing of the wound after the treatment of the inflammation
- c) non-complicated healing after primary suture of the wound
- d) creation of the fistula in the wound

**84. Healing of the wound per secundam intentionem is:**

- a) non-complicated healing of the wound after primary suture
- b) primary healing of the sutured wound after evacuation of abscess
- c) healing of the wound after lavage of the wound by disinfection solution
- d) healing of the wound with prophylactic drainage

**85. Healing of the wound per tertiam intentionem is:**

- a) healing of the primary sutured wound after the evacuation of abscess by secondary suture
- b) non-complicated healing of the wound with ATB
- c) healing of the wound with fever
- d) creation of fistula in the wound

**86. ATB prophylaxis in colorectal surgery is applied:**

- a) immediately before surgical procedure
- b) 24 hours before surgical procedure
- c) 48 hours before surgical procedure
- d) 12 hours before surgical procedure

**87. Prophylactic application of LMWH is used for:**

- a) prevention of infection
- b) prevention of thromboembolic disease
- c) better healing of wounds
- d) prevention of small bowel ischaemia

**88. Mechanical preparation of the colon preoperatively is:**

- a) cleaning of the bowel by laxatives and clysmas
- b) ATB p.o.
- c) 2 days lasting diet before the operation
- d) p.o. application of probiotics

**89. Preoperative internal examination in patient who needs an acute surgical procedure:**

- a) is not indicated
- b) is indicated
- c) an older report of internal examination is enough
- d) there is not enough time for its realisation

**90. Reservation of blood transfusions in colorectal surgery is indicated:**

- a) in every patient
- b) only in patients with chronic anaemic syndrome
- c) only in difficult and longer procedures
- d) is not indicated

**91. Preoperative anaesthesiologic premedication is:**

- a) application of anetics and sedatives
- b) application of ATB
- c) application of myorelaxant medicaments
- d) inhalation of O<sub>2</sub> by the mask

**92. Preoperative blood transfusion is indicated is:**

- a) severe anaemic syndrome
- b) mild chronic anaemic syndrome
- c) is not indicated
- d) in every patient, when we are awaiting big blood lost

**93. Preoperative application of blood transfusion casues:**

- a) immunosuppression
- b) improving of imunity
- c) does not have any effect to imunity
- d) slows down the cellular immune reaction

**94. The borders of chopping wound are:**

- a) smooth
- b) irregular
- c) contused
- d) none of a, b and is correct

**95. Chopping wound in latin:**

- a) vulnus punctum
- b) vulnus lacerum
- c) vulnus sectum
- d) vulnus sclopetarium

**96. Chopping wound is caused:**

- a) by pressure and drawing of sharp object
- b) by rectangle or tangential downfall of sharp object on the surface of the body
- c) by penetrating of thin sharp or blunt object into the depth of the body
- d) by strong drawing and pressure

**97. Chopping wound:**

- a) is usually thin and in its whole length has approximately similar depth
- b) is usually the most deep in the middle and in both poles is the depth smaller
- c) has typical slide line
- d) does not penetrate into the cavity of the organism

**98. In chopping wound :**

- a) neuronal and vascular structures are contused
- b) bone is never damaged
- c) borders are never regular
- d) none of a, b and c is correct

**99. In short-term preoperative preparation the patient can not have per os intake:**

- a) minimum 6 hours
- b) minimum 12 hours
- c) minimum 3 hours
- d) a patient can drink liquids

**100. In a risk patient we preoperatively in elective cases realize:**

- a) minimal internal preoperative examination
- b) internal and anaesthesiologic examination is enough
- c) internal, anesthesiologic and special examination according to the state of the patient
- d) minimal anesthesiologic examination

**101. The aim of pre-medication is:**

- a) psychical calm down of the patient
- b) to decrease the tonus of parasympathic NS and avoid the reflexes of n.vagus
- c) to make easier the beginning of anesthesia by decreasing of reflexive irritation
- d) all in a, b and c is correct

**102. Short term pre-operative treatment:**

- a) involves 24h before an operation
- b) involves minimal 48h before an operation
- c) involves 2h before an operation
- d) involves 72h before an operation

**103. Antibiotic prophylaxis:**

- a) is indicated in operations of all oncologic patients
- b) is indicated in all operations
- c) is indicated in each operation in immunocompromised patient
- d) nowadays is not indicated

**104. The prophylaxis of thrombo-embolic complications involves manners:**

- a) pharmacological
- b) mechanical
- c) operative
- d) all in a, b and c is correct

**105. Preoperative management before the operation of small bowel involves:**

- a) orthograde lavage
- b) retrograde lavage
- c) it is not important to clean the small bowel
- d) we use orthograde and retrograde lavage

**106. According to the risk factors in anesthesiologic examination we distinguish:**

- a) groups ASA 1-5, and ASA 1 patients have the highest risk
- b) groups ASA 1-5, and ASA 5 patients have the highest risk
- c) groups ASA 1-3, and ASA 1 patients have the highest risk
- d) groups according to GCS

**107. In preoperative management of the patient with ileus is necessary:**

- a) to clean the bowel by lavage
- b) to insert the nasogastric tube for prevention of aspiration during intubation
- c) to insert the nasogastric tube for administering of nutrition
- d) none of a, b and c is correct

**108. Anticoagulants pills (e.g. warfarin):**

- a) preoperatively we can change and use acetylsalicylic acid
- b) could be used during the whole perioperative course
- c) is necessary preoperatively change and use LMWH
- d) before the operation we increase their dose for prevention of thromboembolic complications

**109. Stab wound is characterised by:**

- a) stab-in point
- b) stab channel
- c) stab-out point
- d) stab point

**110. is most often visible in the injury of:**

- a) abdomen
- b) thorax
- c) extremity
- d) head

**111. Choose the correct statement:**

- a) in the surrounding of stab point there are no changes of the skin
- b) the width of stab point on the clothing is usually smaller than stab subject
- c) stab channel is normally direct, but it could change its previous direction in case of the hit of the stab subject on the hard tissue or during the sudden change of position of the victim
- d) similarly moving organs (heart, lungs, diaphragm) can not change their previous direction of the stab channel

**112. Choose the incorrect sentence:**

- a) the length of the stab channel can be the same like the length of the stab subject
- b) the length of the stab channel can be shorter (if the stab subject is not stabbed totally)
- c) in the muscles or in organs, which have the muscle layer (stomach) there is a retraction (spasm) of the stab channel and it is usually thinner like the stab subject
- d) for forensic reasons is important, that the post mortem rigor does not change the width of the stab channel in the muscles

**113. The mortality in stab injury of the right ventricle is:**

- a) more than 90%
- b) more than 80%
- c) more than 70%
- d) more than 60%

**114. The patient after decompensation in pulmonary circulation can be electively operated:**

- a) after 3 weeks from the decompensation
- b) after 2 weeks
- c) after 3 months
- d) after 6 months

**115. In the patients after myocardial infarction is the risk of new ischaemia after operation until 3 months:**

- a) 30%
- b) 50%
- c) 70%
- d) 5%

**116. Choose the incorrect sentence. Perioperative prevention of thromboembolism is done by:**

- a) low molecular heparins - LMWH
- b) only in cases with coagulopathy
- c) elastic bandage of lower extremities
- d) oral anticoagulants

**117. The perioperative management in the patient with thyrotoxicosis does not need:**

- a) thyrostatic medicaments
- b) oto-rhino-laryngologic examination
- c) endocrine examination
- d) foniatric examination

**118. The basis of preoperative management of patient with ileus is:**

- a) nasogastric tube
- b) rehydration by bristoloids
- c) correction of homeostasis
- d) cleaning of the colon by x-prep

**119. The correction of metabolic alkalosis in gastric atonia is done by:**

- a) by solutions of glucosis
- b) by saline
- c) by plasmaexpanders
- d) total parenteral nutrition

**120. In preoperative management of hyperparathyreosis caused by adenoma of parathyroidal gland is not necessary:**

- a) infusion therapy
- b) diuretics
- c) prevention of thromboembolism
- d) thyreostatics

**121. The diagnostics of intracranial injury is done:**

- a) X-ray of the skull in 2 projections
- b) ultrasound
- c) clinical examination and CT
- d) clinical examination and X-ray of the skull in 2 projections

**122. Valve pneumothorax:**

- a) necessary is the immediate decompression by puncture in 2nd intercostal space in middle clavicular line
- b) is less dangerous than open pneumothorax
- c) does not limitate the blood circulation
- d) necessary is immediate decompression by puncture in 7th intercostal space in middle clavicular line

**123. In the patient with the fracture of sternum:**

- a) we perform the bandage of 2/3 of the thorax by elastic bandage
- b) we must exclude the heart and pulmonal injury
- c) there is never the subcutane emphysema
- d) could be the injury of the heart and never the injury of the lungs

**124. In case of suspicion in fracture of distal ribs:**

- a) we perform X-rays of the heart, lungs and the skeleton of thorax
- b) we perform X-rays of the heart, lungs and the skeleton of thorax + ultrasound of the abdomen
- c) clinical examination of thorax and abdomen is enough + X-rays of the skeleton of the thorax
- d) we perform X-rays of the skeleton of the thorax and native X-ray of the abdomen

**125. In the fracture of the wrist we always use:**

- a) zincum-glei circular bandage
- b) gypsum plaster and a bail (3 corner bail)
- c) circular gypsum plaster
- d) circular gypsum plaster and a bail (3 corner bail)

**126. In the injury of profound flexor of the finger:**

- a) there is the lesion of flexion in metacarpophalangeal joint
- b) there is the lesion of flexion in distal interphalangeal joint
- c) there is the lesion of distal and proximal interphalangeal joint
- d) there is long term extension of the injured finger

**127. The injury of the kidneys:**

- a) at the right side is always associated with the injury of the liver
- b) the best diagnosis is by X-rays native scan
- c) can be associated with haematuria
- d) it is not possible to establish the diagnosis by ultrasound and CT scan

**128. The pneumoperitoneum in X-ray native scan of the abdomen:**

- a) is the sign of the perforation of the part of the gastric tract
- b) is the sign of increased content of bowel gas
- c) can appear after diet mistake
- d) is the sign of insufficient treatment of pneumothorax

**129. The ballotement of the patela:**

- a) appears when the knee joint is filled by the fluid
- b) appears in the thrombosis of v. poplitea
- c) appears in the fracture of the cruris
- d) never appears in the injury of cross ligaments of the knee joint

**130. Lacero-contused wound:**

- a) we make always the desinfection
- b) we make always desinfection and suture
- c) we make always desinfection, suture and apply TAT (tetanic anatoxine)
- d) we make never the suture

**131. What is the septic shock:**

- a) it is the localised infection, the organism is defending against it, there is no outflow of the pathogens into the organism, the symptomatology is fulminant, without the failure of the cardiovascular system
- b) it is a severe infection accompanied by systemic signs of inflammation a overreaction of inflammatory mechanisms, caused by outflow of pathogenic microorganisms from the infectious focus into the whole organism with the continuous failure of the vital organs
- c) it is a severe infection caused by repetitive outflow of pathogens, ATB treatment is sufficient
- d) it is a severe infection, most commonly caused by G+ bacteriemia

**132. The treatment of septic shock is:**

- a) applying of the oxygen and support of airways
- b) prompt identification of the focuses of pathogenic microorganisms, its surgical treatment and early ATB treatment
- c) supporting treatment of failed organs
- d) all in a, b and c is correct

**133. Into hypovolemic shock we count:**

- a) cardiogenic shock
- b) shock burn
- c) neurogenic shock
- d) septic shock

**134. The most common type of shock in surgery is:**

- a) cardiogenic shock
- b) anaphylactic shock
- c) hemorrhagic shock
- d) none of a, b and c

**135. The size of burn injury is estimated:**

- a) approximately by „rule of 9“
- b) approximately by „rule of 8“
- c) approximately by „rule of 7“
- d) none of a, b and c is correct

**136. The severity of the burn injury depends on:**

- a) mostly on the approximate assessment of the extension of the burn injury by rule of 9 and its depth
- b) the size, depth, mechanism of the injury, localisation of the injury, age and the health status of the patient
- c) only by the size of the burn injury, its depth, cause and localisation of the injury
- d) the main criterium is the age and global health status of the patient

**137. What is the grade of the burn injury when the whole skin and adnexa are involved:**

- a) I
- b) II
- c) III
- d) IV

**138. Combustio erythematosa according to the depth of burn injury is classified like:**

- a) I. grade
- b) II. grade
- c) III. grade
- d) IV. grade

**139. In the burn injuries of both upper extremities is the size of the lesion approximately (%):**

- a) 9%
- b) 18%
- c) 36%
- d) 30%

**140. What is involved into acute abdomen:**

- a) status ileosus
- b) bleeding in the gastrointestinal tract
- c) perforation of gastrointestinal tract
- d) all in a, b and c

**141. Melena is:**

- a) outflow of fresh blood from the anus
- b) vomiting of the digested blood
- c) outflow of digested blood from the anus
- d) vomiting of fresh blood

**142. Hematemesis is:**

- a) outflow of fresh blood from the anus
- b) vomiting of fresh blood
- c) vomiting of digested blood
- d) outflow of fresh blood from the anus

**143. Pneumoperitoneum means:**

- a) air in the abdominal cavity
- b) hydroaeric phenomena of small bowel in X-ray nativ scan
- c) absence of brightening below diaphragm in X-ray of the abdomen
- d) inflamatory acute abdomen

**144. Melena means:**

- a) bleeding from lower gastro-intestinal-tract
- b) bleeding from upper gastro-intestinal.-tract
- c) vomiting of fresh blood
- d) outflow of the fresh blood by the stool

**145. One of the main signs during examination of ileous patients is:**

- a) fever
- b) blod in stool
- c) no peristalsis by auscultation
- d) vomiting of bile

**146. The most frequent inflammatory acute abdomen is cased by:**

- a) diverticulitis
- b) acute appendicitis
- c) acute cholecystitis
- d) acute pancreatitis

**147. In bleeding from esophageal verices we use:**

- a) sengstaken tube
- b) nasogastric tube
- c) lavage of the stomach via nasogastric tube
- d) we do not use any tube

**148. Typical sign of perforation acute abdomen is:**

- a) vomiting
- b) pruritus
- c) pneumoperitoneum
- d) bleeding from the gastrointestinal tract

**149. Haemoperitoneum is:**

- a) air in the abdominal cavity
- b) blood in stool
- c) blood in urine
- d) blood in the abdominal cavity

**150. Types of ileus are:**

- a) obstructive
- b) paralytic
- c) vascular
- d) all in a, b and c

**151. Typical sign of diffuse peritonitis is**

- a) bleeding from gastrointestinal tract
- b) air in the abdominal cavity
- c) defense musculaire
- d) vomiting

**152. Haematuria is:**

- a) appearing of the blood
- b) blood in the stool
- c) vomiting of the blood
- d) painful urination

**153. The signs of haemorrhagic shock are:**

- a) lost of blood volume
- b) decreased cardiac output
- c) vasodilation
- d) all in a, b and c

**154. The sign of haemorrhagic shock is:**

- a) bradycardia
- b) hypotension
- c) leukocytosis
- d) hyperuricaemia

**155. Before applying of erythrocytes is conditionally necessary:**

- a) to measure the body temperature
- b) to make the biologic test
- c) to make the cross test
- d) all in a, b and c

**156. The signs of deep venous thrombosis is:**

- a) edema and livid colour of the extremity
- b) pain
- c) positive Homans test
- d) all in a, b and c

**157. The most serious complication of deep venous thrombosis is:**

- a) bleeding
- b) neurocirculatory disorders in the periphery of the extremity
- c) pulmonal embolia
- d) none in a, b and c

**158. Which grade of burn injury appears like blister and pain:**

- a) I.
- b) II.
- c) III.
- d) IV.

**159. The burn injuries can caused by:**

- a) dry heat
- b) wet heat
- c) electricity
- d) all in a, b and c

**160. In patients with burn injury of bilateral lower extremities is the size of damaged area approximately:**

- a) 9%
- b) 18%
- c) 36%
- d) 30%

**161. The types of local anaestheisa is:**

- a) infiltrating
- b) field block
- c) epidural
- d) all in a, b and c

**162. The most frequent postoperative complication is:**

- a) bleeding
- b) wound infection
- c) thrombosis
- d) necrosis

**163. In the the patient with wound absces we have to:**

- a) evacuate the pus and make the drainage of the wound
- b) use ATB
- c) wait
- d) controle the parameters of inflammation

**164. An absces is:**

- a) cavity filled by fluid
- b) cavity filled by pus
- c) diffuse inflammation of subcutaneous tissue
- d) non-inflammatory collection of fluid

**165. Treatment of abscess is:**

- a) in principle surgical
- b) incision and drainage
- c) ATB treatment does not have a principial importance
- d) all in a, b and c is correct

**166. Slash wound is:**

- a) vulnus morsum
- b) vulnus scissum
- c) vulnus sectum
- d) vulnus sclopetarium

**167. In stab wound injury of the abdomen:**

- a) operational revision of abdomen in total anesthesia is always indicated
- b) we indicate the revision only in case of apparent bleeding into the abdominal cavity
- c) we do not have to operate, when the wound is smaller than 2 cm
- d) we make the revision of the wound in local anaesthesia

**168. The prevention of tetanus secured by:**

- a) revaccination in every open injury
- b) revaccination once a year
- c) vaccination in childhood makes the imunity for the whole lifespan
- d) vaccination in childhood and then every 15 years, in case of open injury earlier

**169. Tetanus:**

- a) nowadays does not appear
- b) is not serious wound infection
- c) appears only in countries with low hygienic standard
- d) is serious complication of contaminated wound with high mortality

**170. The case of death in a patient with tetanus is:**

- a) opistotonus
- b) stop of heart beating
- c) spasm of respiratory muscles
- d) risus sardonicus

**171. Folliculitis is:**

- a) inflammation of the hair folliculus wherever on the body
- b) cavity filled by pus
- c) inflammation of ceruminous gland
- d) inflammation of sweat gland

**172. Tendovaginitis is:**

- a) inflammation of synovia
- b) non-inflammatory increasing of bursa
- c) inflammation of tendineal capsule

d) none of a, b and c

**173. Replantation means:**

- a) translocation of cutaneous lobe
- b) transplantation of the big toe instead of a thumb
- c) transplantation from the cadaverous donor
- d) microsurgical suture of completely amputated part of the body

**174. Disturbed wound healing is:**

- a) wound dehiscence
- b) seroma in the wound
- c) abscess in the wound
- d) all in a, b and c

**175. Healing per secundam intentionem:**

- a) is healing with complications
- b) is occurring, when there is a necessity of adding of the missing tissue
- c) infections blocks the wound healing
- d) all in a, b and c is correct

**176. Purulent inflammation of fingers is:**

- a) panaritium
- b) phlegmone
- c) abscess
- d) tendovaginitis, osteomyelitis and gangrene

**177. Panaritium we distinguish:**

- a) superficial, intermedial and deep
- b) peracute and chronic
- c) superficial and deep
- d) specific, nonspecific and parainfectious

**178. Purulent diseases of hand are:**

- a) specific by their slow course
- b) painful and dangerous
- c) could be treated by tetanic antitoxin
- d) by their character dangerous and potentially invalidizing disease

**179. The main signs of panaritium is:**

- a) sudden pain, fever, disturbed function
- b) anaesthesia of the involved finger, disturbed function
- c) hypesthesia of the involved finger, hyperflexion of interphalangeal joints
- d) anaesthesia or hypersensitivity of the involved finger, hyperflexion or hyperextension of interphalangeal fingers

**180. Typical pain in panaritium is:**

- a) spasm like
- b) tearing pain, agonising pain
- c) spreading to right hypochondrium
- d) not serious, easily overlooked

**181. In diagnostic of panaritium is important:**

- a) CT scan
- b) history, clinical examination, eventually X-rays
- c) history, actual epidemiologic situation, level of CA 19-9
- d) history, recommendation document from general practitioner

**182. What is important in treatment of panaritium:**

- a) early and radical amputation
- b) immobilisation of affected finger, hand and eventually antebrachium too
- c) in principle early immobilisation of the whole extremity
- d) osteosynthesis of affected parts of the finger Kirschner metallic fixator or corrective splint

**183. What is not an important aspect in the treatment of panaritium:**

- a) immobilisation
- b) ATB treatment

- c) ATB and antitussives
- d) surgical operation

**184. What is the most frequent microbial agent in paronychia:**

- a) Neisseria gonorrhoe
- b) G+ bacteria (Staphylococci, Streptococci)
- c) anaerobic agents
- d) Erysipelothrix rhusiopathiae

**186. What does not belong to superficial paronychia:**

- a) paronychia pulposum
- b) paronychia bullosum
- c) paronychia erythematousum
- d) paronychia periunguale, paraunguale and subunguale

**186. Paronychia pulposum:**

- a) is localised at the palmar (volar) side in soft tissue of the subcutis of the finger
- b) typical is very strong throbbing pain
- c) a) and b) is correct
- d) we make X-form incision resp. Y over the belly of the finger

**187. Paronychia pulposum:**

- a) is not a dangerous infection of the finger
- b) the joint capsule must be early evacuated between 2 phalanges of the finger
- c) is the parainfectious complication in scarlatina
- d) in its progression an incision is necessary

**188. Incision in paronychia pulposum:**

- a) must be always done in form of „shark mouth“ in whole circle of the finger
- b) is not recommended in any form of anaesthesia
- c) wide incision through the middle line of the belly of the finger
- d) is done on the lateral parts of the finger, eventually with contra-incision

**189. Paronychia of the middle or basal phalanx of the finger:**

- a) the course is florid, complications are frequent
- b) does not spread to the tendon or its capsule
- c) normally does not spread to the deep without treatment
- d) normally is healed without incision

**190. Paronychia of the interphalangeal sulcus:**

- a) do not appear in small stab injuries into interphalangeal sulcus
- b) appear in small stab injuries of interphalangeal sulcus
- c) use to spread to adjacent phalangi and into the .....
- d) b) and c) is correct

**191. Paronychia tendinea:**

- a) affects the tendons of flexors only
- b) affects the extensors only
- c) the whole finger is edematous, painful, erythematous
- d) typical sign is pruritus around the unguis

**192. Tendosynovitis and tendovaginitis purulenta:**

- a) affected tendon necrotizes fast
- b) affected tendon is immune against infection
- c) is described only in experimental settings
- d) does not appear by systemic clinical signs

**193. „V“ phlegmone:**

- a) affected are tendineal capsules of 2. and 3. or 3. and 4. finger
- b) affected are the tendineal capsules of 1. and 5. finger
- c) affected are always 2 adjacent tendineal capsules, 1st and 2nd, 2nd and 3rd. or 4th and 5th finger
- d) is superficial paronychia

**194. „V“ phlegmone:**

- a) does not have systemic signs

- b) its severity is in minimal local signs
- c) in treatment Camphor-ichtamol locally is enough
- d) is between-purulent tendovaginitis

**195. Panaritium osseum:**

- a) first signs are visible at X-rays first after 1-2 weeks
- b) is the complication of panaritium pulposum
- c) appears after injury too
- d) all in a, b and c is correct

**196. Panaritium osseum:**

- a) affected bone after its excochleation we replace by osseal cement
- b) all sequesters should be removed
- c) does not exist, the bone is extremely immune against infection
- d) immobilisation is not appropriate, movement improves the perfusion of the bone and facilitates the restitution of the sequester

**197. Panaritium articulare:**

- a) affected joint is in semiflexion
- b) affected bone is in maximal extension
- c) affected joint is not painful
- d) b and c is correct

**198. Panaritium articulare:**

- a) is healed by opening of the joint, evacuation of pus, repetitive lavages with ATB
- b) has systemic signs too – fever and
- c) a and b is correct
- d) lavage with H<sub>2</sub>O<sub>2</sub> is not indicated

**199. The phlegmone of regio thenari:**

- a) is healed by X-rays antiinflammatory therapy
- b) local administration of corticosteroid is possible
- c) incision is never indicated
- d) signs are: pain, edema, erythema or semiflexion of the thumb

**200. Local anaesthesia in the treatment of panaritium:**

- a) for reduction of bleeding is good combination of local anestheticum with adrenalin
- b) the base is local infiltration anaesthesia
- c) for the possibility of allergic and anaphylactic reaction is not used today
- d) field block anaesthesia of the finger, intravenous regional anaesthesia and total anaesthesia is necessary for correct surgical management

**201. What is not possible to apply for the nutrition of the patient?**

- a) intravenous
- b) nasogastric tube
- c) gastrostomy
- d) intraarterial

**202. Enteral nutrition is not possible to apply:**

- a) by jejunostomy
- b) nasojejunal tube
- c) per rectum
- d) percutane endoscopic gastrostomy

**203. What is not possible to use for administration of parenteral nutrition:**

- a) insertion of canule into peripheral vein
- b) insertion of central venous catheter via v. subclavia
- c) insertion of the needle into peripheral vein
- d) insertion of the needle into peripheral artery

**204. What is not an advantage of the insertion of the central venous catheter:**

- a) possibility of measurement of central venous catheter
- b) possibility of measurement of wsged pressure in a.pulmonalis
- c) possibility of administering of high volume solutions
- d) possibility of administering of high concentration solutions like in administering into peripheral vein

**205. What is the advantage of enteral nutrition vs. parenteral nutrition:**

- a) stimulation of peristalsis
- b) fast administering of high volume of liquids
- c) administering of trace element
- d) administering of vitamins

**206. Which access is not a part of enteral nutrition:**

- a) intrathecal
- b) jejunostomic
- c) gastrostomic
- d) nasogastric

**207. What is the advantage of parenteral nutrition:**

- a) stimulates the peristalsis of gastrointestinal tract
- b) allows the administration of
- c) stimulates the gastrointestinal tract
- d) has an antiinflammatory effect

**208. What is not a complication of the insertion of central venous catheter:**

- a) pneumothorax
- b) catheter sepsis
- c) cardial decompensation
- d) haemothorax

**209. Which veins are not used for parenteral nutrition:**

- a) superficial veins of upper extremity
- b) deep veins of lower extremity
- c) v. subclavia
- d) v. jugularis interna

**210. What is used for insertion of central venous insertion:**

- a) v. subclavia
- b) v. saphena magna
- c) v. basilica
- d) v. radialis

**211. What is not a crystalloid solution:**

- a) saline
- b) Ringer solution
- c) Hartmann solution
- d) dextran

**212. What is not a colloid solution:**

- a) human albumine
- b) gelatine preparates
- c) derivates of hydroxyetylestarch
- d) preparates of lipides

**213. What is not indicated to administer in septic shock:**

- a) krystaloids
- b) colloids
- c) blood transfusion
- d) solutions of aminoacids

**214. What is not an infusion solution for parenteral nutrition:**

- a) saline
- b) solutions of aminoacids
- c) 10% glucosis
- d) 10% manitol

**215. Colloid solutions are:**

- a) Ringer solution
- b) human albumine
- c) concentrate of thrombocytes

d) saline

**216. What is not a blood derivative:**

- a) erythrocyte mass
- b) concentrate of thrombocytes
- c) fresh frozen plasma
- d) manitol

**217. What is not a complication of blood transfusion:**

- a) transmission of infectious diseases
- b) pyretic reaction
- c) allergic reaction
- d) paralytic ileus

**218. Post-transfusion complication is:**

- a) anorexia
- b) obstipation
- c) polyuria
- d) hemolytic reaction

**219. Cross-test is necessary by administering of:**

- a) human albumine
- b) dextran
- c) mass of erythrocytes
- d) manitol

**220. Into the peripheral vein as a part of parenteral nutrition can be administered:**

- a) any infusion solution
- b) any solution of aminoacids
- c) max. 10% solution of glucosis
- d) any solution of lipides

**221. What is indicated to administer in liver failure:**

- a) blood transfusion
- b) human albumine
- c) aminoacids with branched chains
- d) lipides

**222. Indication for administering of parenteral nutrition is:**

- a) cardiac decompensation
- b) renal failure
- c) acute pancreatitis
- d) acute bronchopneumonia

**223. The newest trend in postoperative management of the patient is:**

- a) delayed (late) administering of enteral nutrition
- b) long-term parenteral nutrition
- c) early enteral nutrition
- d) preoperative administering of enteral nutrition

**224. Which concentration of glucosis is not used in parenteral nutrition:**

- a) 5% solution
- b) 10% solution
- c) 20% solution
- d) 40% solution

**225. Parenteral nutrition is:**

- a) administering of medicament intravenously
- b) administering of infusion solutions into the systemic venous circulation
- c) administering of infusion solution into the systemic arterial circulation
- d) administering of infusion solutions into portal circulation

**226. What is not a risk factor for surgical infection:**

- a) exogenic factors
- b) endogenic factors

- c) microbiological factors
- d) factors of hemocoagulation

**227. What is not a surgical infection:**

- a) bronchopneumonia
- b) appendicitis
- c) paronychia
- d) intraabdominal abscess

**228. Exogene risk factor for surgical infection is:**

- a) abnormal blood loss during operation
- b) age of the patient
- c) diabetes mellitus
- d) abuse of alcohol

**229. What is not the risk factor causing a surgical infection:**

- a) prolonged operation time
- b) immunodeficiency
- c) implantation of protetic material during the operation
- d) higher blood loss

**230. What is not the endogene risk factor for causing a surgical infection:**

- a) state after radiotherapy
- b) high age of the patient
- c) bacterial virulence
- d) metabolic diseases

**231. Diabetes mellitus belongs to:**

- a) exogene risk factors of surgical infection
- b) endogene risk factor of surgical infection
- c) microbiologic risk factors of surgical infection
- d) environmental risk factors of surgical infection

**232. The microbiological risk factor of surgical infection is:**

- a) asepsis
- b) antisepsis
- c) type and virulence of pathogens
- d) sterilisation of instruments

**233. Depilation of the site of surgical operation:**

- a) is not recommended
- b) is done 24 hours before the operation
- c) is done immediately before the operation
- d) is done after the operation

**234. Antibiotic prophylaxis is:**

- a) the treatment of surgical infection
- b) treatment of adjacent infections
- c) short-term administration of ATB in perioperative period
- d) long-term administration of ATB in perioperative treatment

**235. For antibiotic prophylaxis is not used:**

- a) penicilins
- b) cefalosporins
- c) chinolones
- d) macrolides

**236. Most often used prophylactic ATB is:**

- a) caezolin
- b) tetracyclin
- c) vancomycin
- d) chloramfenicol

**237. First dosis of ATB prophylaxis is given:**

- a) after operation

- b) 1 day after operation
- c) until 1 hour before operation
- d) before the end of operation

**238. ATB prophylaxis should last:**

- a) min. 5 days
- b) min. 2 weeks
- c) max. 24 hours
- d) max. 3 days

**239. ATB prophylaxis is given:**

- a) subcutaneous (s.c.)
- b) per os
- c) intramuscular (i.m.)
- d) intravenously (i.v.)

**240. ATB prophylaxis is used for prevention of:**

- a) bronchopneumonia
- b) infection of urinary tract
- c) infection of surgical site
- d) myocardial infarction

**241. Which of the following is not sign of inflammation:**

- a) rubor
- b) calor
- c) tremor
- d) dolor

**242. Which of the following is not sign of sepsis:**

- a) tachycardia
- b) thrombocytosis
- c) tachycardia
- d) leucopenia

**243. One of the SIRS (Systemic Inflammatory Response Syndrome) criteria is:**

- a) thrombocytopenia
- b) elevation of CRP
- c) tachycardia over 90/min
- d) bradycardia under 40/ min

**244. Which of the following does not belong to SIRS criteria:**

- a) body temperature under 36 C or over 38 C
- b) tachycardia over 90/ min
- c) tachypnoe over 20/ min
- d) INR over 2,5

**245. Which of the following does not belong to non-infectious causes of SIRS:**

- a) trauma
- b) pancreatitis
- c) burns
- d) bronchial asthma

**246. Which of the following is not complication of SIRS:**

- a) acute renal insufficiency
- b) acute respiratory insufficiency
- c) chronic venous insufficiency
- d) multiple organ dysfunction syndrome

**247. Among SIRS criteria belong:**

- a) tachypnoe over 20/min
- b) hemoglobin under 80 g/l
- c) hour diuresis under 40 ml/hour
- d) bradycardia under 50/ min

**248. Which of the following is not surgical site infection:**

- a) superficial wound infection
- b) furunculus
- c) deep wound infection (subfascial)
- d) organ infection

**249. Infection originating from hair follicle is:**

- a) flegmona
- b) ateroma
- c) panaricium
- d) folliculitis

**250. Of following, to infectious causes of SIRS doesn't belong:**

- a) surgical site infection
- b) bronchopneumonia
- c) trauma
- d) uroinfection

**251. Desinfection is:**

- a) Destruction of most of microorganisms
- b) Destruction of all microorganisms
- c) Destruction of most of microorganisms and rodents
- d) Destruction of all microorganisms and rodents

**252. Asepsis is:**

- a) Group of measures, that should prevent microbila contamination of sterile environment of tissues, matarials, medicaments etc.
- b) Group of measures, that should prevent development of sepsis int multiorgan dysfunction
- c) Process of destruction of microorganisms
- d) Manner of desterilizing operation field

**253. Vulnus scissum is**

- a) chopping wound
- b) laceration wound
- c) biting wound
- d) cutting wound

**254. Vulnus morsum is:**

- a) stabbing wound
- b) biting wound
- c) contusion
- d) gunshot wound

**255. Vulnus sclopetarium is**

- a) chopping wound
- b) stabbing wound
- c) gunshot wound
- d) biting wound

**256. Vulnus sectum is:**

- a) cutting wound
- b) lacareation wound
- c) chopping wound
- d) gunshot wound

**257. Vulnus punctum is:**

- a) biting wound
- b) chopping wound
- c) stabbing wound
- d) gunshot wound

**258. Vulnus lacerum is:**

- a) contusion wound
- b) laceration wound
- c) cutting wound
- d) biting wound

**259. Vulnus punctum has:**

- a) inlet, canal and, eventually, outlet
- b) outlet is always bigger than inlet
- c) is caused by animal
- d) shape of outlet has equal margins

**260. Phlegmona is:**

- a) borderless infection
- b) bordered infection
- c) pus is localized inside phlegmona
- d) painless affection

**261. Abscessus:**

- a) doesnot contain pus
- b) is a cavity filled with pus
- c) is caused solely ba parasites
- d) never perforates

**262. Lymphangoitis:**

- a) is inflammation of lymphatic nodes
- b) is inflammation of arteria lymphatica superior
- c) is inflammation of lymphatic vessels
- d) is treated with antivirotics

**263. Furunculus, furunculosis:**

- a) is solitary a multiple inflammatory affection of hair follicule
- b) is of staphylococcus etiology
- c) is dangerous in specific localizations sucha s upper lip of eye corner
- d) all from above

**264. The „5P“:**

- a) we use in anamnesis
- b) we use in physical examination of the patient
- c) we use only in examinatin of the patient to rule out acute abdomen
- d) nothing from above is correct

**265. Staplers:**

- a) are used only in laparotomy
- b) are used only in laparoscopy
- c) are tool for creation of anastomosis
- d) are notu sed in surgery

**266. Removal of a specific body part (for example breast, nail, ..) is:**

- a) discision
- b) amputation
- c) ablation
- d) anastomosis

**267. Removal of whole pathological focus is:**

- a) incision
- b) excision
- c) extirpation
- d) exarticulation

**268. Laparotomy:**

- a) is not used in surgery
- b) is used in thoracic surgery
- c) is synonym for laparoscopy
- d) is surgical entry into abdominal cavity

**269. In laparoscopy or thoracoscopy we use:**

- a) troacars
- b) Veress needle
- c) camera
- d) all from above

**270. Mininvasive entry into thorax is:**

- a) laparoscopy
- b) thoracoscopy
- c) arthroscopy
- d) colonoscopy

**271. Atraumatic sutures:**

- a) do not need needles
- b) we put a new string on a needle in every suture
- c) string is incorporated into the needle
- d) is not used in surgery

**272. Typical sign in acute appendicitis is**

- a) Blumberg sign
- b) Homans sign
- c) Payr sign
- d) all from above

**273. Typical signs in phlebothrombosis is:**

- a) Blumberg sign
- b) Rovsing sign
- c) Homans sign
- d) all from above

**274. Phlebothrombosis is:**

- a) inflammation of wall of the vein with thrombus formation
- b) thrombus of deep venous system without inflammation
- c) thrombus of superficial venous system without inflammation
- d) doesnot cause embolism

**275. In phlebothrombosis:**

- a) limb is painless
- b) limb is without oedema
- c) can be prevented with hormonal contraception
- d) smokers are affected more frequently

**276. Embolism can be caused by:**

- a) thrombus
- b) air

- c) fat
- d) all from above

**277. We know ileus:**

- a) paralytic
- b) obstructive
- c) paralytic or obstructive
- d) nothing from above

**278. Ileus:**

- a) is acute abdomen condition
- b) is impassibility through gut
- c) we know obstructive and paralytic
- d) all from above

**279. Wound infection is most common after:**

- a) cutting wound
- b) chopping wound
- c) biting wound
- d) stab wound

**280. Nosocomial infection is:**

- a) every infected surgical wound
- b) term used for intrahospital infection
- c) therapeutically easily manageable
- d) infection of biting wound

**281. Dehiscence:**

- a) is wound infection
- b) is division of the wound edges
- c) heals per primam intentionem
- d) nothing from above

**282. Erythrocyte mass transfusion can be administered by:**

- a) nurse
- b) always doctor
- c) may be administered also by nurse
- d) orderly

**283. Bedside blood group check before transfusion is performed by:**

- a) doctor at the bedside
- b) doctor from the department of hematology-transfusiology
- c) nurse at the bedside
- d) nowadays it is not being done

**284. Dislocation of the joint is called:**

- a) distorsio
- b) luxatio
- c) contusio
- d) abruptio

**285. Comminutive fracture is:**

- a) crosswise
- b) sideward
- c) with multiple pieces
- d) splinted

**286. Fractures are sorted by:**

- a) mechanism of cause
- b) by characteristics of the break line
- c) by position of the fragments
- d) all from above

**287. Therapy of non-dislocated fractures:**

- a) fractures are not put in the cast
- b) cast immobilization is used
- c) we do reposition and cast fixation
- d) is operative

**288. When cast fixating:**

- a) we immobilize only the nearest joint
- b) we immobilize the nearest proximal joint
- c) we immobilize the nearest distal joint
- d) we immobilize the nearest proximal and distal joints

**289. In fracture rotation dislocation of fracture is**

- a) dislocatio ad longitudinem
- b) dislocatio ad peripheriam
- c) dislocatio ad latum
- d) dislocatio ad axim

**290. In fractures axle dislocation of the fracture is:**

- a) dislocatio ad axim
- b) dislocatio ad longitudinem cum contractione
- c) dislocatio ad longitudinem cum distractione
- d) dislocatio ad latum

**291. The following doesnot belong to clear signs of the fracture:**

- a) haematoma
- b) deformity
- c) physiological movement
- d) oedema

**292. Most common fracture in children is fracture:**

- a) crosswise
- b) of the diaphysis
- c) of the epiphysis
- d) of the metaphysis

**293. Epiphyseolysis is:**

- a) fracture of the metaphysis
- b) fracture on the diaphysis
- c) fracture, which is not seen in the children
- d) is classified based to Salter-Harris classification

**294. Stella dorsi is used in treatment of:**

- a) femur fracture
- b) humerus fracture
- c) clavicle fracture
- d) scapula fracture

**295. Dessault is used in:**

- a) humerus fracture
- b) femor fracture
- c) fracture of the antebrachium
- d) fracture of the crus

**296. Therapy of the fractures in the children is mainly:**

- a) open
- b) closed
- c) with use of osteosynthetic material
- d) percutaneous osteosynthesis

**297. Gilchrist bandage:**

- a) has the same function as Desault
- b) has same function as spica
- c) is use for thigh fixation
- d) is not used any more

**298. Spica is used for:**

- a) femor immobilization
- b) fingers immobilization
- c) humerus immobilization
- d) clavicle immobilization

**299. For bandage of the neurocranium we use „cap by“**

- a) Avicenna
- b) Galen
- c) Hippocrates
- d) Asklepios

**300. Child age is:**

- a) 0-10 years
- b) 0-15 years
- c) 0-18 years
- d) 0-14 years

**301. Age categories in children are based on:**

- a) changes of the weight and height
- b) anatomical differences
- c) physiological differences
- d) anatomical and physiological differences

**302. New-borns are children:**

- a) up to 1 week of life
- b) up to 28th day of life
- c) up to 3 months
- d) up to 1 year

**303. Anamnesis is children age is:**

- a) direct
- b) indirect
- c) direct and indirect
- d) none

**304. Personal anamnesis in children:**

- a) has the same data as in adults
- b) changes depending on age categories
- c) includes vaccinations
- d) doesnot include working anamnesis

**305. Preoperative preparation in children:**

- a) is same as in adults

- b) has only slight differences
- c) respects differences of the child age
- d) respects child age, basal and affiliated conditions

**306. Consent with the operation in children is acquired from:**

- a) child up to 10th year of age
- b) from the patient up to 15th year of age
- c) from the parent
- d) from the parent or legal representative

**307. Consent with the operation in children is acquired from parent or legal representative:**

- a) in every diagnostic and therapeutic approach
- b) only in case of operation
- c) only in case of planned operation
- d) only in case of acute operation

**308. Consent with the operation in children is not needed:**

- a) in case of endangerment of life of the child
- b) in operations from vital indication
- c) is always needed
- d) is signed after the operation

**309. As part of preoperative preparation for minor surgery in small children:**

- a) preop pediatric checkup and complete laboratory screening with ECG and chest Xray is needed
- b) only pediatric checkup without laboratory screening
- c) pediatric checkup and blood count
- d) ECG and chest Xray are not usually needed

**310. In small children we prefer:**

- a) general anesthesia
- b) local anesthesia
- c) regional blocks
- d) all

**311. Perioperative hypothermia endangers mainly:**

- a) newborn
- b) premature children
- c) children of all ages
- d) premature children and newborns

**312. Thermoneutral environment in operative treatment of newborn and premature is secured with:**

- a) special heating of the operating field
- b) warming cushions
- c) incubators
- d) warming beds

**313. Anaemia is physiological in:**

- a) newborn
- b) infants
- c) preschool age children
- d) school age children

**314. Polyglobulia is characteristic for:**

- a) 5 year child
- b) newborn
- c) 15 years old child
- d) infant

**315. Fasting before elective operation in small children/newborn should be:**

- a) from evening
- b) 8 hours before operation
- c) 6 hours before operation
- d) 3 or max. 4 hours before operation then get fluids

**316. Children are put into operation program:**

- a) as first
- b) depending on operation procedure
- c) as last
- d) how it works out

**317. Premedication in children:**

- a) is not indicated
- b) is indicated
- c) depends on disease
- d) is done before every diagnostic and therapeutic action

**318. Nutrition of children after small surgical procedure:**

- a) we start immediately after wake up
- b) we give normal food 4 hours after wake up
- c) we start 4 hours after wake up with fluids, than we continue with regular food
- d) we start intravenously

**319. After abdominal surgery in children we start feeding:**

- a) on the day of operation
- b) second day after operation
- c) after initialization of peristaltics
- d) depends on type of the operation

**320. Alternative nutrition in vomiting children is:**

- a) tube feeding
- b) enteral nutrition
- c) intravenous nutrition
- d) parenteral nutrition from the start

**321. Parenteral nutrition in children is started:**

- a) if per os administration is not possible and GIT is functional
- b) if per os administration is not possible and GIT is not functional
- c) after every major surgery
- d) depends on the type of surgery

**322. Enteral nutrition in children after surgery is:**

- a) indicated after every operation
- b) has special indications
- c) contraindicated
- d) indicated only in thoracic surgery

**323. Enteral nutrition is given to children after surgery via:**

- a) stoma
- b) nasogastric and nasojejunal tube
- c) intravenously
- d) per rectum

**324. Enteral nutrition is:**

- a) mixed food
- b) special mixtures for enteral nutrition
- c) mixed food and special supplements
- d) nutrition given to the stomach

**325. Parenteral nutrition is:**

- a) per os given nutrition
- b) per rectum given nutrition
- c) intravascularly given nutrition
- d) nutrition given into central venous catheter

**326. Mixtures for total parenteral nutrition in children:**

- a) are same as in adults
- b) differ with ingredients
- c) are prepared for different age groups
- d) are prepared for different diseases

**327. Total parenteral nutrition in children is administered:**

- a) into central venous system (jugular vein, subclavian vein, femoral vein)
- d) into peripheral venous system
- c) both into peripheral and central venous system
- d) into nasogastric tube

**328. Gastrostomy in children is made:**

- a) endoscopically
- b) surgically
- c) both surgically and endoscopically
- d) never

**329. Gastrostomy in children with impassable oesophagus is made:**

- a) endoscopically
- b) surgically
- c) both surgically and endoscopically
- d) never

**330. Hypovolemic shock in children:**

- a) occurs quicker than in adults
- b) there is no difference
- c) occurs slower
- d) does not occur

**331. Blood loss during operation is supplemented:**

- a) with colloids
- b) with crystalloids
- c) with colloids and crystalloids
- d) with full blood

**332. Hypovolemic shock in children with burns is caused by loss of:**

- a) blood
- b) water
- c) plasma
- d) water and plasma

**333. Assessment of burnt area in children is follows:**

- a) rule of 9
- b) has no rules
- c) rule of 10
- d) rule of 5

**334. Fluid therapy in children in hypovolemic shock is initiated with:**

- a) crystalloids
- b) colloids
- c) both colloids and crystalloids
- d) blood derivatives

**335. Main energetic source for newborn is:**

- a) glucose
- b) aminoacids
- c) lipids
- d) glucose, lipids, aminoacids

**336. In cardiopulmonary resuscitation in children:**

- a) we go by age categories
- b) age categories are not important
- c) age categories under and over 1 year are valid
- d) age categories under and over 8 years are valid

**337. Most common reason for initiation of cardiopulmonary resuscitation in children is:**

- a) arrest of breathing
- b) poisonings
- c) temperature disturbances
- d) arrest of the circulation

**338. Distension of abdomen and high level of diaphragmas endangers children with respiratory failure:**

- a) in first week of life
- b) in first month of life
- c) 2 years
- d) 5 years

**339. In cardiopulmonary resuscitation in children:**

- a) we start with artificial breathing
- b) we start with thorax compression
- c) we start with blow into area of apex of the heart
- d) we start with artifical ventilation together with chest compressions

**340. Resuscitaions in children is initiated after freeing the airways:**

- a) with 5 inbreaths and continued with chest compressions
- b) with compressions of the chest
- c) with two inbreaths and continued with chest compressions
- d) with blow into area of apex of the heart

**341. Number of chest compression in children during cardiopulmonary resuscitation is:**

- a) 120/ min
- b) 100/min
- c) 70/min
- d) 80/min

**342. Resuscitation of the circulation in children is initiated if heart rate is:**

- a) 20/ min
- b) 60/min
- c) 0/min.
- d) 100/min

**343. Proportion of inbreaths and ches compressions in one rescuer in KPR in children is:**

- a) 2:15
- b) 2:30
- c) 1:3
- d) 1:15

**344. Defibrillation in children as part of advanced KPR is:**

- a) indicated
- b) contraindicated
- c) reserved for certain clinical states
- d) used only in ECG monitoring

**345. Heimlich maneuver in children is used:**

- a) in all ages
- b) in children older than 1 year
- c) in older children
- d) is not used

**346. The most narrow part of the airway in endotracheal intubation is:**

- a) oral cavity
- b) area of vocal cords
- c) subglottic area
- d) bifurcation of the trachea

**347. Oedema in subglottic area endangers child:**

- a) doesnot endanger child
- b) with cardial failure
- c) with respiratory failure
- d) with cardiorespiratory failure

**348. Children up to two years of age durin general anaestheisa are endangered:**

- a) by cramps
- b) by respiratory failure
- c) by cardial failure

d) with hypothermia

**349. Child after general anesthesia is transferred to the ward:**

- a) if it is fully conscious
- b) in no complications happened during anaesthesia and operation
- c) if it is fully conscious and no complications occurred during anaesthesia and operation
- d) after every anaesthesia

**350. Postoperative analgezy is ordered by:**

- a) ward doctor
- b) anaesthesiologist
- c) algesiologist
- d) anaesthesiologist together with ward doctor

**351. Anaesthesiological checkup has to be done:**

- a) before every general and local anaesthesia
- b) only before planned operations
- c) is not needed in children
- d) only before acute operations

**352. Most common cause of death in patients with blunt abdominal trauma is:**

- a) injury of the abdominal wall
- b) intraabdominal bleeding
- c) injury of the spinal chord
- d) vagus reflex

**353. Intraperitoneal bleeding in patients with negative clinical finding is seen approximately in:**

- a) 5% of patients
- b) 10% of patients
- c) 20% of patients
- d) 30% of patients

**354. Standard course of getting diagnosis in patient with abdominal trauma is (in this order):**

- a) anamnesis, clinical examination, paraclinical examinations and imaging techniques
- b) anamnesis, spiral CT, clinical examination
- c) FAST (Focused Assessment with Sonography for Trauma), anamnesis, clinical examination
- d) anamnesis, sonography, clinical examination

**355. Which of the following about use of sonography is true:**

- a) FAST (Focused Assessment with Sonography for Trauma) is simplified method of use of sonography for assessment of fluid collections in four quadrants
- b) ultrasound has limits in assessment of trauma of the hollow organs
- c) ultrasound can be complicated to perform if patient has subcutaneous emphysema
- d) all from above

**356. Patient with blunt abdominal trauma, with shock index over 1, with USG finding of fluid collection in abdominal cavity, the next step is:**

- a) urgent CT of the abdomen
- b) diagnostic laparotomy
- c) repeated USG after some time
- d) conservative therapy

**357. Which of the following about injury of the diaphragm is not true:**

- a) incidence of injury is 3%, associated injuries (spleen, liver, pelvis) are common
- b) clinical findings can comprise of defense musculature, pain in rib injury, altered breathing in hemothorax and pneumothorax
- c) injuries of the diaphragm are satisfactorily confirmed with abdominal USG and CT
- d) all above are correct

**358. Most commonly injured organ in blunt and penetrating abdominal injuries is:**

- a) spleen
- b) liver
- c) pancreas
- d) small intestine

**359. Golden standard of the therapy of most of blunt abdominal traumas is:**

- a) conservative treatment
- b) laparotomy with subsequent hemihepatectomy e.g. resection of the injured segment
- c) diagnostic laparoscopy with subsequent action according to findings
- d) transplantation of the injured liver

**360. Pringle maneuver is:**

- a) release of duodenum from retroperitoneum
- b) mobilisation of liver by cutting triangular ligaments and falciforme hepatis ligament
- c) cutting lig. teres hepatis
- d) compression of the portal triad with fingers or clamps

**361. SATE (Selective Angiography and Transcatheter Embolization) is indicated:**

- a) together with ERCP for treatment of cause of bileaemia
- b) confirmation of hemobilia and treatment
- c) recanalisation of embolized hepatic artery
- d) recanalisation of embolized portal vein

**362. Most common reason of injuries of duodenum and pancreas are:**

- a) penetrating injuries into epigastrium
- b) blunt injuries to the right hypogastrium
- c) deceleration injuries with blunt trauma against spine
- d) penetrating injuries into mesogastrium and right hypochondrium

**363. Which of the following about injuries of duodenum is not true:**

- a) perforation of the duodenum is easily perioperatively diagnosed
- b) usual symptoms of the injury is disturbance of stomach emptying
- c) conservative treatment even of bigger perforations are tried
- d) none from the above

**364. About incidence of injuries of small and large intestine the following is true:**

- a) incidence is rare in blunt injuries, 2-5% in penetrating injuries
- b) incidence is 1-5 % in blunt injuries, 10-50 % in penetrating injuries
- c) incidence is 10-20 % in blunt injuries, 60-70% in penetrating injuries
- d) incidence is 20-30% in blunt injuries, almost all penetrating abdominal injuries have injury of the small or large intestine

**365. In diagnostics of small and large intestine we use:**

- a) sonography, where pathological collections can mean blood or enteral content
- b) skiagraphy where pneumoperitoneum means perforation of the GIT
- c) CT where pneumoperitoneum and/or finding of extraluminal leak of contrast from the gut means bowel injury
- d) all from above

**366. Basis of the management of penetrating injuries of the small bowel is:**

- a) intensive care and conservative approach
- b) daily CT showing progression or regression
- c) introduction of nasogastric, nasojejunal and rectal tube for lowering risk of extraluminal leak
- d) surgical revision with suturing or resection of the injured segment

**367. Basis of the management of penetrating injuries of the large intestine is:**

- a) intensive care and conservative approach
- b) daily CT showing progression or regression
- c) introduction of nasogastric, nasojejunal and rectal tube for lowering risk of extraluminal leak
- d) surgical revision with suturing or resection of the injured segment

**368. In extensive injuries of the anus:**

- a) use of rectoscope is contraindicated since it can cause further damage
- b) colostomy is needed
- c) treatment of extraperitoneal injury can be done also transrectally
- d) drainage is contraindicated to lower the incidence of possible fistulas

**369. Injuries of the spleen happen:**

- a) by deceleration
- b) penetrating trauma

- c) blunt trauma into the abdomen
- d) all from above

**370. In diagnostics of injury of the spleen we can use:**

- a) sonography
- b) CT
- c) CT angiography
- d) all from above

**371. Two stroke spleen rupture means:**

- a) Rupture of the spleen on two and more sites
- b) rupture of two and more arteries going into spleen
- c) rupture of the spleen capsule and subsequent bleeding into abdominal cavity
- d) creation of subcapsular rupture and haematoma and latter rupture

**372. Indications for surgical treatment of the spleen are:**

- a) high need for fluid intake for hemodynamic stability and need for transfusion for stabil levels of hemoglobin/hematocrit
- b) enlargement of hemoperitoneum with signs of hemodynamic instability
- c) signs of peritoneal irritation
- d) all from above

**373. For surgical management of injuries of the spleen:**

- a) splenectomy is always indicated
- b) splenectomy is indicated when multiple injury is present and partial resection is not possible
- c) splenectomy is indicated in lower grades of injury (grade 1-2)
- d) performing surgeon should try to save spleen in terms of splenorhaphia, only in cases of high grade injury (grade 4-5) and impossibility of hemostasis splenectomy is indicated

**374. About injuries of kidneys and ureter:**

- a) are usually caused by blunt mechanism (80-90%)
- b) are present only in 8-10 % of traumatic patients
- c) in 80% of cases are part of multiple organ injury
- d) all from above

**375. Abdominal compartment syndrome (ACS) is:**

- a) creation of closed compartments in abdominal cavity
- b) state, that came as a consequence of diseases, that are presenting also with intraabdominal hypertension (IAH) or elevated intraabdominal pressure (IAP)
- c) creation of fluid collection in preformed compartment
- d) syndrome characterized by sticking of one of the bowel loops into preformed space, for example in cavum Douglasi or Morrison space

**376. Which of the intraabdominal pressure is true (IAP)?**

- a) normal intraabdominal pressure is 10 mm Hg (13,6 cm H<sub>2</sub>O)
- b) elevated IAP leads to lowered venous return and thus to lowering cardiac output
- c) for elevated IAP respiratory insufficiency is characteristic, with high inspiration pressures, hypoxia, hypercapnia and pulmonary compliance reduction present
- d) all from above

**377. How do we measure intraabdominal pressure:**

- a) Dopplerometric sonography
- b) measuring abdominal diameter
- c) physical examination of the tension of abdominal wall
- d) measuring intravesical pressure through urinary catheter

**378. For treatment of abdominal compartment syndrome:**

- a) surgical therapy is indicated in all cases
- b) surgical laparotomy and subsequent closure of abdomen is done
- c) surgical therapy is indicated in patient with IAP over 25 cm H<sub>2</sub>O
- d) no conservative treatment exists for ACS

**379. Surgical method of choice in abdominal compartment syndrome is:**

- a) laparoscopic exploration of abdominal cavity
- b) laparotomy and closure of abdominal cavity

- c) laparotomy without closure, covering open laparostomy with temporary abdominal closure
- d) laparoscopic evacuation of the foreign material from abdominal cavity

**380. Diagnosis of hypovolemic shock is based on:**

- a) anamnesis of trauma
- b) Allgower, or shock index
- c) peritoneal bounding present
- d) finding of lowered hemoglobin/hematocrit values

**381. Basic part of therapy of hypovolemic shock is:**

- a) substitution of circulating volume
- b) treatment of underlying disease
- c) strict following of the hemodynamical, oxygenation and renal parameters
- d) all from above

**382. Basis for volume replenishment in hypovolemic shock are:**

- a) crystalloids
- b) colloids
- c) transfusions of blood derivatives
- d) all from above

**383. Indication for use of transfusion of blood derivatives:**

- a) erythrocyte mass is indicated in patients with seral hemoglobin level under 80 g/l (in patients with cardiovascular comorbidities under 100 (g/l)
- b) fresh frozen plasma is indicated as a substitute of coagulation factor in hypocoagulative state or for coverage of multiple erythrocyte masses
- c) fresh frozen plasma is not indicated as volume replenishment only
- d) all from above

**384. Introduction of central venous catheter is indicated:**

- a) if monitoring of central venous pressure is needed
- b) if there is need for high volume substitution or patient will need venous access for longer period
- c) insufficient peripheral venous access
- d) all from above

**385. Basic parts of treatment of septic state of the patient is:**

- a) „source control“ – sanitation of the origin of infection
- b) fluid resuscitation
- c) systemic antibioticotherapy
- d) all from above

**386. Enteral nutrition in patients after abdominal trauma:**

- a) is contraindicated
- b) is indicated after thorough restitution of the organism
- c) is indicated as soon as possible
- d) it is not necessary to consider traumatic injury when indicating enteral nutrition

**387. About parenteral nutrition:**

- a) even longer lasting therapy consists of „multi bottle system“
- b) in longer lasting therapy „all in one“ sacks are used
- c) hyperalimentation is indicated for patients after abdominal trauma
- d) it is not needed except for perioperative period

**388. Stress gastritis:**

- a) is very uncommon in patients with abdominal trauma
- b) in every patient with abdominal trauma prophylaxy with proton pump inhibitors (PPI) or H2 blocker should be used
- c) risk of the stress gastritis is in late complication such as pylorostenosis
- d) stress gastritis prevention is not necessary, after appearing of first signs therapy is initiated

**389. For acute renal failure:**

- a) mortality rate is over 50% and if dialysis is needed, it reaches 60-90 %
- b) first signs is oliguria (production of under 0,5 ml/kg/hour or under 400 ml of urine /24 hours)
- c) most common cause of oliguria in surgical patient is hypovolemia
- d) all from above

**390. Urology deals with diagnostics and therapy of diseases of:**

- a) gastrointestinal tract
- b) uropoietic system of males and females and reproductive system of males
- c) glomerulonephritis
- d) gynaecological

**391. Main exocrine function of the kidneys:**

- a) regulation of water and mineral metabolism
- b) excretion of metabolic products of proteins and foreign substances
- c) retaining acid-base balance
- d) all from above

**392. Main endocrine function of the kidneys:**

- a) regulation of blood flow (renin-angiotensin-aldosterone mechanism)
- b) regulation of erythropoiesis (erythropoietin)
- c) metabolism of vitamin D (creation of 1,25-OH cholecalciferol)
- d) all from above

**393. Urine production is influenced by:**

- a) melatonin
- b) serotonin
- a) adiuretin
- d) somatotropin

**394. Capacity of the urinary bladder is:**

- a) 100 – 200 ml
- b) 200 – 300 ml
- c) 300 – 500 ml
- d) 500 – 800 ml

**395. Kidneys are localized:**

- a) retroperitoneally
- b) intraperitoneally
- c) in small pelvis
- d) in thorax

**396. Indications for dialysis are:**

- a) acute or chronic renal failure with creatinin over 500  $\mu\text{mol/l}$
- b) hypercalemy over 6,5  $\text{mmol/l}$
- c) uremic state with coma and oedemas
- d) all from above

**397. Indication for dialysis is not:**

- a) subvesicval obstruction
- b) subrenal obstruction
- c) hydronefrosis of solitary kidney
- d) all from above

**398. Congenital diseases of the kidneys:**

- a) are very rare
- b) are present in less than 1% of newborn
- c) are present in 3-4% of newborn
- d) are present in over 5 % of newborn

**399. Among congenital diseases of the kidneys belong:**

- a) kidney agenesis
- b) horse shoe kidney
- c) cystic kidneys
- d) all from above

**400. Splinted right urether is called:**

- a) ureter duplex l. dx
- b) ren duplex l. dx
- c) ureter fissus l. sin
- d) ureter fissus l. dx

**401. Normal daily diuresis is:**

- a) 1000-2000 ml
- b) under 500 ml
- c) 500-1000 ml
- d) over 2000 ml

**402. Diuresis under 100 ml/24 hours is called:**

- a) oliguria
- b) polyuria
- c) anuria
- d) nothing from above

**403. Normal findings in urinary sediment is:**

- a) 20 – 30 ery, 0 Le
- b) 0 Ery, 20 – 30 Le
- c) 30 – 50 Ery, 0 Le, scarcely epithelia
- d) 0 – 2 Ery, 0 – 5 Le

**404. Urine sample for examination:**

- a) we take first part of miction
- b) we take middle part of miction
- c) we take last part of miction
- d) there is no difference

**405. Cultivation of the uriane takes:**

- a) 1 hour
- b) one day
- c) 2-3 days
- d) week

**406. Family anamnesis is important in:**

- a) prostate cancer
- b) polycystic kidneys
- c) urolithiasis
- d) all from above

**407. Among urological symptomatology the following do not belong:**

- a) uretherorrhagy
- b) hematemesis
- c) pyuria
- d) hematuria

**408. Among symptoms of diseases of lower urinary tract are:**

- a) urine retention
- b) polakisuria
- c) stranguria
- d) all from above

**409. Among symptoms of the diseases of lower urinary tract do not belong:**

- a) urine incontinency
- b) nycturia
- c) melaena
- d) dysuria

**410. Stranguria means:**

- a) impossible urination
- b) burning sensation during urination
- c) bloody urine
- d) incontinency of urine

**411. Enuresis nocturna is most common in:**

- a) children
- b) patients older than 70 years
- c) patient older tha 80 years

d) in women

**412. Urosepsis is most commonly caused by:**

- a) gram positive bacteria
- b) mycobacterium tuberculosis
- c) gram negative bacteria
- d) chlamydia

**413. Cystoscopy is investigation of:**

- a) gallbladder
- b) kidney
- c) ureters
- d) urinary bladder

**414. Ureterscopy is investigation of:**

- a) ureter and calices
- b) urinary bladder
- c) duodenum
- d) gallbladder

**415. Hydronephrosis is:**

- a) concrement in kidney
- b) tumor of the kidney
- c) widening of the hollow system of the kidney
- d) widening of the ureter

**416. Cause of congenital hydronephrosis might be:**

- a) stenosis of pyelourethral junction
- b) aberrant pole artery
- c) high outlet of ureter from calices
- d) all from above

**417. Per rectum examination:**

- a) is painful
- b) is useless
- c) is important for assessment of prostate
- d) is needed only in prostate cancer

**418. Inserting the permanent catheter into urinary bladder in males:**

- a) should be done by a doctor after disinfection and with lubricant use
- b) severe complications can happen
- c) infection and bleeding can happen
- d) all from above

**419. Finding of hard node on prostate during per rectum examination:**

- a) is suggestive of prostate cancer
- b) is suggestive of BHP
- c) is suggestive of acute prostatitis
- d) is not important

**420. Epicystostomy is:**

- a) taking out the ureter on the abdominal wall
- b) drainage of urinary bladder with catheter introduced suprapubically
- c) percutaneous drainage of kidney
- d) nasogastric tube in the stomach

**421. Vesicorenal reflux is:**

- a) difficult urination
- b) pain in urination
- c) reflux of food from stomach to oesophagus
- d) return of urine into upper urinary tract while urinating

**422. Extrophy of the urinary bladder is:**

- a) introduction of drain into urinary bladder
- b) congenital disease – urethral opening on the ventral side of the penis in the area of anterior urethra

- c) congenital disease – urethral opening on the dorsal side of the penis in the area of anterior urethra
- d) congenital disease with musculature and skin defect of the lower half of the abdominal wall with splitting of urinary bladder and urethra

**423. Hypospady is:**

- a) congenital disease – urethral opening on the ventral side of the penis in the area of anterior urethra
- b) congenital disease – urethral opening on the dorsal side of the penis in the area of anterior urethra
- c) depression of the urinary bladder
- d) depression of the urinary bladder together with incontinency

**424. Hypospady is:**

- a) very rare
- b) most common anomaly of lower urinary tract in boys with occurrence of 1 every 500 newborn
- c) rare with occurrence less than 1 every 1 000 000 newborn
- d) quite frequent with occurrence 1 in 1 000 000 newborn

**425. Hydrocaela is:**

- a) inguinal hernia
- b) torquation of the testes
- c) accumulation of fluid in testes sheets
- d) inflammation of testes

**426. Varicoceles is:**

- a) widening of veins on the calf
- b) widening of veins on the thigh
- c) widening of plexus pampiniformis
- d) widening of oesophageal veins

**427. We can differentiate hydrocaela from tumor of the testes by:**

- a) aspexy
- b) touch
- c) sonography
- d) X ray

**428. Acute pyelonephritis is presented with:**

- a) septic febrilities
- b) pain in lumbal region
- c) pathological urinary findings
- d) all from above

**429. Injuries of the urinary tract:**

- a) are rare, kidneys are protected by their localization in retroperitoneum
- b) compose approximately 10 % of all injuries and can afflict every part of the system
- c) comprise less than 1% of all injuries
- d) are very frequent, present in more than 30% of all injuries because kidneys are uncompressible and in small injury fissures occur

**430. Injuries of the kidney presents with:**

- a) pain in the lumbal area
- b) microhematuria in contusion
- c) macroscopic hematuria in rupture of hollow system
- d) may be all from above

**431. In diagnostics in kidney injuries we might need:**

- a) anamnesis with mechanism of trauma
- b) urine sample
- c) sonography of kidneys
- d) all from above

**432. Shooting wound is called:**

- a) vulnus lacerum
- b) vulnus scissum
- c) vulnus sontusum
- d) vulnus sclopetarium

**433. Burn is defined as:**

- a) injury of the skin with thermal or electrical insult
- b) local reaction of a tissue as a consequence of scalding of skin with hot water
- c) local reaction of a tissue, with or without generalized response of the organism, as a response to energy transfer by thermal or chemical source
- d) local reaction of a tissue, with subsequent septic response from the organism as a response to energy transfer by thermal or chemical source

**434. Protein denaturation and cell death in burn trauma happen:**

- a) in temperatures over 55 C
- b) in temperatures over 50 C
- c) in temperatures over 45 C
- d) in temperatures over 43 C

**435. Proportion of the burn can be assessed by:**

- a) Wallace-Pulaski rule of 7
- b) 3% - shade of patient's hand
- c) Lund-Browder equation
- d) none from the above

**436. Burn shock is caused by:**

- a) massive fluid loss through urinary catheter
- b) massive fluid loss from blood stream into intersticium through defective capillary walls
- c) massive blood loss through burn trauma
- d) inadequate fluid substitution in the time from injury to time of hospitalization of the patient

**437. Into periods of burn disease the following do not belong:**

- a) urgent period
- b) acute period
- c) resuscitating period
- d) period of restitution and rehabilitation

**438. The following is not characteristic for burn shock:**

- a) extremely escalated stress reation
- b) generalized pathological capillary permeability
- c) generalized inflammatory reaction
- d) extremely escalated exudation from the wound

**439. First step in first aid to patient with burn trauma on the injury site is:**

- a) call for qualified medical help
- b) freeing of, extinguishing and locally cooling the patient
- c) getting personal information and patient's insurance company
- d) primary assessment of the extent of the burn

**440. As risk group for burn trauma we consider:**

- a) age 0 to 6 years
- b) puberty
- c) age to 2 years and over 60 years
- d) age to 4 years and over 50 years

**441. Among criteria, with which we assess the egravity of the burn these belong not:**

- a) extent of the burns
- b) deepness of the burns
- c) insurance company of the patient
- d) age of the patient

**442. Lund Browder charts are used for assessment of extent of burns in:**

- a) adults and children
- b) males and females
- c) superficial and deep burns
- d) ligh and sever burns

**443. In substituting the patient with fluids we give, according to Parkland scheme, in first 24 hours:**

- a) 4 ml x weight of the patient in kg x BSAP in %
- b) 40 ml x weight of the patient in kg x BSAP in %

- c) 400 ml x weight of the patient in kg x BSAP in %
- d) independently of burn extent patient has to get 3 l of fluids in 24 hours

**444. Light burns are treated:**

- a) ambulatory
- b) by hospitalization on the surgical ward
- c) by hospitalization on traumatological department
- d) by hospitalization in burns center always

**445. Burn syndrome is:**

- a) local reaction of a tissue on thermal insult
- b) general response of an organism to burn injury
- c) syndrome of systemic inflammatory response in burnt patient
- d) syndrome of local inflammatory response in area of burn wound

**446. Among requirements of immediate transport of the burnt patient the following belong not:**

- a) information and agreement with admitting ward
- b) information and agreement with family of the patient
- c) securing 1-2 reliable i.v. lines, initiation of substitution therapy and its continuing during transport
- d) ability to monitor basic vital functions during transport

**447. Parkland formula in burnt patients is used for:**

- a) calculation of energetic substitution
- b) calculation of protein substitution
- c) calculation of fluid substitution
- d) calculation of dosage of analgesia

**448. The biggest threat to patient in acute phase of burn disease is:**

- a) possibility of serious complications, that result from extensive burn trauma
- b) possibility of serious complications, that result from personal anamnesis of a patient
- c) possibility of serious complications, that are influenced by length of transport of the patient
- d) neither one of the answers is correct

**449. Inhalation injury is defined as:**

- a) acute injury of the respiratory tract caused by oxygen deficiency in the burn trauma site
- b) acute injury of the respiratory tract caused by hot gases, vapors, or toxic products originating in burning
- c) acute injury of the cardiovascular system, caused by inadequate amount of oxygen at the site of burn trauma
- d) acute injury of the cardiovascular system caused by hot gases, vapors, or toxic products originating in burning

**450. Most serious infectious complication in burnt patient is:**

- a) sepsis from burn wound
- b) invasive catheter sepsis
- c) translocation of the bacteria from GIT into blood stream
- d) colonization of burn wound

**451. We consider local infection of burn wound if:**

- a) amount of microorganisms is up to  $10^3$  for 1 g of tissue in necrotic wound
- b) amount of microorganisms is up to  $10^5$  for 1 g of tissue in necrotic wound
- c) amount of microorganisms is more than  $10^5$  for 1 g of tissue in necrotic wound
- d) amount of microorganisms is more than  $10^5$  for 1 g of tissue in necrotic wound and surrounding vital tissues

**452. Heavy hypermetabolism and hypercatabolism is caused by burns over:**

- a) 5 % BSAB
- b) 10 % BSAB
- c) 15 % BSAB
- d) 30 % BSAB

**453. Among most frequent disturbances of hematopoietic system after burn trauma belong not:**

- a) erythrocytosis
- b) disorders of platelets
- c) disorders of white blood cells
- d) hemocoagulation disorders

**454. Key part of pathogenesis of sepsis, which is the most frequent trigger for MOF, is:**

- a) respiratory system

- b) cardiovascular system
- c) gastrointestinal system
- d) none from above

**455. In burn patients we need for pressure ulcer prevention and prevention of maceration caused by wound secretion of extensive open wounds we use:**

- a) air of sand fluidizing beds
- b) special antidecubital mattresses
- c) regular positioning of patients
- d) early mobilization initiated up to 24 hours from injury

**456. Every patient threatened by burn shock should be from the start:**

- a) treated ambulatory
- b) hospitalized on the surgical ward
- c) hospitalized on the burn center ward
- d) hospitalized on ICU

**457. Among clinical signs of multiple organ dysfunction in burn patient the following belong not:**

- a) hyperkinetic circulation
- b) hypercatabolism
- c) hyperanabolism
- d) hyperventilation with subsequent respiratory failure

**458. In patient with burn trauma ideal early enteral nutrition is considered if started:**

- a) up to 2 hours from injury
- b) up to 6 hours from injury
- c) up to 24 hours from injury
- d) over 48 hours from injury

**459. Burn of IIa degree is characterized:**

- a) epidermis injury
- b) complete necrosis of epidermis together with basal membrane
- c) complete necrosis of epidermis and deeper parts of dermis
- d) necrosis of skin in its full thickness

**460. For grade III burns is typical:**

- a) are healed up to 14 days ad integrum
- b) are very painful
- c) always leave scars
- d) are not recommended to be treated surgically

**461. In occurrence of many injuries of any type, one of the most important tasks is:**

- a) assessment of material damages
- b) sorting of the wounded
- c) quick transport of all wounded
- d) immediate treatment of most critically wounded

**462. Patients with extensive and deep burns require subsequent increased care:**

- a) only during hospitalization
- b) first 7 day after release from hospital
- c) first 7 weeks after release from hospital
- d) until the end of the life

**463. First and second degree burns are:**

- a) treated conservatively
- b) are treated surgically
- c) are deep
- d) never get healed spontaneously

**464. Phenomena of pale**

- a) is positive in clear capillary system and is a sign of superficial damage
- b) is negative in superficial burns
- c) is clinically not important
- d) means presence of blood clots in capillaries

**465. When treating superficial injuries:**

- a) there is no need to treat them sterile
- b) blisters should never be evacuated
- c) blisters should be disposed of together with epidermis
- d) after skin disinfection wound site should be covered with moist tulle and sterile bandage

**466. In IIb degree burns:**

- a) topical antibacterial agents should be used in their treatment
- b) conversion to IIIrd degree is not possible
- c) healing time in proper treatment is up to 14 days
- d) ideal frequency of redresses is 5-7 days

**467. Aim of local therapy in superficial burns is not:**

- a) securing optimal environment for epithelisation
- b) prevention or treatment of wound infection
- c) lowering the pain and wound secretion
- d) excision of necrosis from the wound

**468. Closed approach to treatment of burns:**

- a) means closing the wound with bandage
- b) is unwanted because it slows healing
- c) is the only possibility of treatment of burn wound
- d) does not elevate infection risk so the wound is not needed to be followed

**469. Classical redress of the burn wound:**

- a) has ideally only one layer
- b) consist of contact, sucking, absorptive, converging, and fixating layer
- c) should not contain any ointments or creams
- d) does not have to be sterile

**470. Definite substitute for destroyed skin:**

- a) is only skin from the same patient from the body part, that was not injured
- b) allotransplants from another person can be used
- c) might be for example Biobrane, Apligraf or Integra
- d) are porcine xenotransplants

**471. Dermoepidermal transplants:**

- a) consist of whole epidermis and approximate 1/3 of dermis
- b) have to be taken out from the wound after some time
- c) are skin transplants collected usually from dead bodies
- d) cannot be expanded by netting

**472. Skin allotransplants:**

- a) are the first choice of treatment for definite closure of the burn wounds
- b) are not used anymore
- c) do not show antigenicity
- d) are barrier for infection, fluid and protein loss, and stimulate epithelization

**473. Xenotransplants:**

- a) are used for temporary coverage of wound of less than full skin thickness as a biological coverage
- b) are not used on excised areas in deep burns or as temporary skin substitute
- c) belong to synthetic skin replacements
- d) heal to the wound definitely

**474. Skin autotransplantation:**

- a) is still the only possibility of definite skin substitute
- b) when gathering the full thickness transplant the donor site is left to spontaneous healing without need for its suturing or coverage by dermoepidermal transplant
- c) full thickness transplants are used widely in extensive skin losses because of their great cosmetic effect
- d) repeated transplant gatherings are not possible (not event from donor sites)

**475. As indication for hospitalization for burnt children the following belong not:**

- a) burns with suspicion for inhalation injury
- b) burns in children up to age of 3 years in extent of 7% or more, in case of deep burns even of smaller extent

- c) burns by electricity
- d) unstoppable crying

**476. Burns in children:**

- a) do not require alternative approach to therapy compared to adults
- b) we assess their extent with palm of the hand of a doctor, which represents 1% of the surface of a child
- c) most common are caused by burning at home with hot fluids
- d) do not have high risk of dehydration as opposed to adults

**477. In burns caused by electricity:**

- a) of high voltage, the areas of the changes on the skin do not correlate with deeper tissues
- b) of low voltage, there is no risk of disturbance of heart rhythm or breathing
- c) by lightning, there is no point in resuscitation
- d) tissue necrosis do not occur, only functional lesions of the nerves are present

**478. In chemical burns:**

- a) there is no threat of general intoxication with chemical substance
- b) destruction of tissues continue as long, as chemical compound is not inactivated with water or neutralized
- c) we don't do necrectomy and autotransplantation with skin graft even in deep defects
- d) cleaning with water shouldn't take longer than couple minutes

**479. In frost burns:**

- a) dry frost causes bigger tissue destruction than moist frost
- b) mechanism is the same as in thermal injury i.e. protein denaturation
- c) like burns, they are divided into three degrees: 1. congelation erytematosa, 2. congelation bulosa, 3. congelation necrotisans
- d) first aid consist of movement of frozen limbs

**480. Healing of superficial burns:**

- a) is *ad integrum* (no scars)
- b) at first surface is red, sensitive, after few years it will adapt to surrounding skin
- c) it is recommended to expose the site to UV for better effect
- d) there is no way of prevention of hypertrophic scars

**481. Difference between hypertrophic scar and keloid:**

- a) is that hypertrophic scars create after severe injuries (e.g. burns) and they are limited on injured area, while keloids create on predilection places after mild stimuli and usually relapse after excision
- b) is not, those words are synonyms
- c) is in growth – keloid regress in time, while hypertrophic scar do not
- d) keloids usually do not relapse after surgical therapy

**482. Contractures:**

- a) create on places where skin is a little moveable
- b) are scar strips which limit motility of joints and mutilate affected areas
- c) there is no prevention
- d) create approximately in same range in every patient

**483. American Society of Anaesthesiologists (ASA) created system for assessing the risk of anaesthetic morbidity and mortality. How many categories we know?**

- a) 2 main categories
- b) 3
- c) 5
- d) 4

**484. What are complications of central venous catheter implantation?**

- a) heart arrhythmias
- b) pneumothorax
- c) haemothorax
- d) all above

**485. Epidural anaesthesia reduce risk of post-operative complication:**

- a) reduce risk of post-operative pulmonary complications.
- b) reduce risk of venous thrombosis because of sooner mobilization
- c) both answers are correct

d) epidural anaesthesia only affects acute post-operative pain

**486. Post-operative temperature increase:**

- a) we find a specific cause of mild temperature increase in less than 20% of cases
- b) we always look for infection
- c) aseptic thrombophlebitis in place where infusions are given is very rare cause
- d) occurred by wound infection is common and easy to diagnose in first post-operative days

**487. Thyroid storm (crisis) is characterized by:**

- a) hyperpyrexia, tachycardia, arrhythmia, hypotension and sweating
- b) often occurs after total thyroidectomy
- c) propranolol blocks synthesis of thyroid hormones
- d) tachyarrhythmia is rare sign

**488. Atelectasis:**

- a) is most common post-operative complication after general anaesthesia
- b) often auscultatory diagnosed but x-ray signs of atelectasis are not present
- c) first step of therapy is aimed on re-expansion of alveoli, second step is cleaning of bronchial system
- d) post-operative analgesia does not force the atelectasis creation

**489. Aspiration pneumonitis:**

- a) fasting 6 hours before surgery is prevention, in case of urgent surgery there is an indication for nasogastric probe
- b) bronchial lavage is not used as a therapy method in these days
- c) left lung is more often affected because left bronchus is in line with trachea more than right one
- d) syndrome was first time described in 19<sup>th</sup> century by Mendelson

**490. Aspiration pneumonia:**

- a) and aspiration pneumonitis are synonyms
- b) important is its sudden formation
- c) creates by inhalations of oral contents which has normal pH but includes bacteria (especially anaerobes)
- d) always causes pulmonary abscess

**491. Pulmonary oedema:**

- a) forms by right heart failure
- b) massive crystalloid infusions can increase oncotic pressure what improves patient's condition
- c) typical clinical signs are orthopnea and basal crepitus in lungs
- d) one of general principle of therapy is increase of intravenous fluid intake

**492. Pulmonary embolism:**

- a) classic triad: respiratory insufficiency + neurologic signs + petechial rash
- b) occurs mainly after ankle fractures - trimalleolar fracture
- c) forms by clustering of fat particles from impaired venules
- d) hypoxia correction is necessary after stabilization of patient

**493. Deep vein thrombosis:**

- a) as prevention we give small doses of low weight molecule heparins to risk patients before surgery
- b) compressive bandage is contraindicated for risk of thrombus release when extremity is pressed
- c) surgical therapy is most common method for treating DVT
- d) Quick's test in percentage is one of DVT signs in clinical examination

**494. Disseminated intravascular coagulation:**

- a) runs in 3 stages: hypercoagulation, hypocoagulation and subsequently fibrinolysis with formation of circulating antithrombin-like inhibitors
- b) clinically DIC forms gradually
- c) EACA – epsilonaminocaproic acid and PAMBA – paraaminomethylbenzoic acid are not fibrinolysis inhibitors
- d) is rarely lethal

**495. Stress erosions and ulcers in gastroduodenal area:**

- a) relates with surgery which is a stress situation, most common complication is perforation
- b) are very dangerous in post-operative period, mainly because of bleeding risk
- c) we make post-operative gastroscopy to all risk patients
- d) medicamentous therapy is given until complaints appears

**496. Ogilvie's syndrome is:**

- a) acute colon pseudoobstruction, paralytic ileus, mainly in proximal part of colon
- b) treated with urgent surgery
- c) always treated medicamentously
- d) when there is a risk of caecal perforation from extreme distension, caecostomy is more appropriate than colonoscopic decompression

**497. Singultus:**

- a) represents repeating clonic spasms of diaphragma and there is no medicamentous therapy
- b) therapy consists of finding cause, giving chlorpromazine and breathing into a bag for 3 to 6 minutes
- c) has always central origin by irritation of cerebral center or by inflammation (meningitis)
- d) phrenic nerve is paralyzed

**498. Miction after surgery:**

- a) diuresis restores in 24 hours after surgery
- b) if diuresis will not restore, we quickly **coil** patient
- c) if diuresis will not restore in 12 hours, we force diuresis by warmth, sound impulses, verticalization and after failure of conservative therapy we coil patient
- d) patient is always coiled by nurse

**499. Virchow's triad:**

- a) is triad of signs when biliary ileus occurs
- b) is triad of signs when pulmonary embolism occurs
- c) is triad of predisposing factors of thrombosis
- d) tells about 3 stages of DIC

**500. Best answer that describe local risk factors of wound dehiscence:**

- a) imperfect closure of operation wound – stitching near fascial edge, sloppy stitching
- b) imperfect closure of operation wound and rising of intraabdominal pressure
- c) type of section – transversal vs. longitudinal section
- d) combination: imperfect closure + increased intraabdominal pressure + healing per secundam intentionem

**501. When wound dehiscence occurs?**

- a) already during first post-operative day – usually when patient stands up
- b) usually 5<sup>th</sup> to 8<sup>th</sup> post-operative day
- c) usually after extraction of stitches
- d) approximately month after surgery

**502. Post-operative parotitis – which answer is not correct:**

- a) Once common post-operative complication
- b) it is rare staphylococcal infection, happens mostly in 2<sup>nd</sup> post-operative week, especially when patient has nasogastric tube
- c) mouth hygiene is not primary issue
- d) when antibiotic lavage will not help, surgery is necessary – small incision parallel with n. facialis above gland

**503. Clostridium post-operative colitis – stool cultivation shows as aetiologic agents:**

- a) Clostridium tetani
- b) Clostridium difficile
- c) Clostridium perfringens
- d) Clostridium botulinum

**504. What is normal urinary bladder capacity – the limit that can create post-operative urine retention when exceeded:**

- a) normal capacity is 500 ml – urine retention forms when bladder is outstretched and neural mechanisms are suppressed
- b) normal capacity is 2000 ml
- c) we never coil patient before operation because of infection risk
- d) probability of urine retention is lower after spinal anaesthesia

**505. Post-operative signs of hypoglycaemia:**

- a) distractibility, tremor, occasional laughter
- b) high temperature, operation wound pain
- c) anxiety, tremor, profuse sweating without high temperature
- d) we can use urine glucose values to decide size of insulin doses

**506. In post-operative electrolyte disbalance we usually find:**

- a) hypernatraemia and hyperkalaemia

- b) hypokalaemia, alkalosis, hyponatraemia
- c) hypercalcaemia
- d) hypochloraemia

**507. What we use for neutralization of heparine effect?**

- a) protamine sulfate
- b) vitamine K
- c) usually fresh frozen plasma
- d) usually full blood

**508. Giving blood transfusions and blood substitutes in post-operative care depends on:**

- a) blood loss, age, haemoglobin value, cardio-pulmonary state of patient
- b) is indicated by haematologist, not by surgeon
- c) one transfusion unit rises haemoglobin by 3% and haematocrit by 1g/dL
- d) transfusion speed is not more than 1000 ml per hour

**509. Prevention of decubiti in post-operative care of geriatric population is focused in:**

- a) positioning patient, at least once a day turn him on other side
- b) effort to leave patient on back to avoid pressure on trochanter maius
- c) applying ointments to avoid skin drying
- d) positionning patient few times during night, using antidecubital mattresses, rehabilitation

**510. Indications for applying central vein cathetre is:**

- a) using solutions more concetrated than 850 mOsmol/L
- b) planning of nutritive support longer than 5 days
- c) combination of both previous factors
- d) there is always an effort to have central vein access, because it is safer

**511. Post-operative laryngotracheitis is defined as:**

- a) irritation of mucosa of pharynx and trachea with endotracheal cannula, needs antibiotic treatment
- b) irritation of mucosa of trachea with endotracheal cannula, treatment consists of throat poultice, inhalation eventually corticoid therapy
- c) irritation of mucosa of trachea after repeated intubation effort, usually tracheostomy is needed
- d) very rare post-operative complication, treatment should be consulted with ENT specialist

**512. Amputation in Lisfranc's joint is:**

- a) exarticulation of tarsometatarsal joint
- b) tarsal amputation
- c) metatarsal amputation
- d) exarticulation of foot digits

**513. Amputation in Chopart's joint is:**

- a) disarticulation of talonavicular and calcaneocuboid joint
- b) exarticulation of tarsometatarsal joint
- c) amputation of transmetatarsal bones
- d) exarticulation of foot digits

**514. Exarticulation is:**

- a) removal of whole extremity or its part in joint
- b) removal of part of extremity
- c) removal of part of arm
- d) removal of part tissue or whole organ

**515. Minimal lenght of tibia in crural amputaion should be:**

- a) 7 cm
- b) 6 cm
- c) 5 cm
- d) 4 cm

**516. Transmetatarsal amputation is in level of:**

- a) metatarsals
- b) metacarpals
- c) phalanges
- d) ankle

**517. When exarticulation of phalanx is made, important is removal of:**

- a) cartilage
- b) head of phalanx
- c) tendon
- d) muscle

**518. Metacarpal amputation is in level of:**

- a) metacarpals
- b) wrist
- c) digiti
- d) metatarsals

**519. Main indication for amputation of diabetics is:**

- a) gangrene
- b) infection
- c) embolism
- d) trauma

**520. Which group is usually affected with fractures of proximal femur (fracture of femoral neck, pertrochanteric fractures and subtrochanteric fractures):**

- a) children
- b) mature men
- c) women after 60 years
- d) young women (to 40 years)

**521. Symptoms of proximal femur fracture is:**

- a) pain
- b) motility defect
- c) walk impossibility
- d) all above

**522. In case of femoral neck fracture (intracapsular fracture) with larger dislocation (Garden III and more):**

- a) osteosynthesis with screws
- b) osteosynthesis DHS (gliding screw on splint)
- c) total endoprosthesis implantation
- d) hemiprosthesis implantation (cervicocapital endoprosthesis)

**523. Transversal femoral fractures are treated with:**

- a) intramedullar osteosynthesis (secured nailing)
- b) cerclage
- c) splint
- d) conservative (balanced extension)

**524. Hoff's fracture is:**

- a) supracondylar femoral fracture
- b) fracture of patella
- c) transversal fracture of femoral condyli
- d) fracture of femur and tibia

**525. When we puncture in knee area in case of intraarticular fracture we get:**

- a) pus
- b) synovial exudate
- c) pure blood
- d) blood with fat

**526. Transversal patella fractures are usually treated with:**

- a) stable osteosynthesis with screws
- b) conservative therapy (plaster or orthosis)
- c) cerclage
- d) external fixator

**527. Most common long-term result of intraarticular fractures in knee joint is:**

- a) angular deformity
- b) prolonged pain as result of post-traumatic arthrosis of knee joint

- c) limited motility
- d) all above

**528. Thanks to technological progress, it is possible intramedullarily treat tibial diaphysis fracture (intramedullar nailing) in range:**

- a) 1/5 of bone length
- b) 2/5 of bone length
- c) 3/5 of bone length
- d) 4/5 of bone length

**529. As treatment of transversal crural fractures we use:**

- a) cerclage
- b) conservative treatment (plaster and immobilisation or orthosis)
- c) stable osteosynthesis with splint
- d) intramedullar secured nailing

**530. In case of open unstable crural fracture, classified as contaminated (Gustilo and Anderson III. degree) with sufficient blood-bed, the treatment method is:**

- a) closed reposition and plaster fixation
- b) amputation
- c) debridement and external fixation
- d) stable osteosynthesis with splint

**531. Most common mechanism of fracture in ankle area is excessive:**

- a) inversion
- b) eversion
- c) flexion
- d) extension

**532. We can say about fractures of calcaneus:**

- a) it has most complicated classification
- b) it has doubtful prognosis even after surgery
- c) all above
- d) ???

**533. Most common metatarsal fracture is fracture of:**

- a) I. metatarsal
- b) II. metatarsal
- c) IV. metatarsal
- d) V. metatarsal

**534. Periprotthetic fractures are special type of fractures. They usually occur near implanted endoprosthesis. Classification is called according to city where it was accepted. It is:**

- a) Vancouver
- b) Paris
- c) Montreal
- d) Hamburg

**535. Transskeletal extension on lower extremity is applied through:**

- a) greater trochanter
- b) condyli femori
- c) tuberositas tibiae
- d) all above

**536. Muscular contusion occurs mainly by:**

- a) indirect force
- b) direct force
- c) spontaneous
- d) when muschle fascia disrupts

**537. Muscular rupture sign is not:**

- a) sudden pain
- b) limited motility

- c) palpatory pain and haematoma
- d) skin defect

**538. Hernia muscularis occurs as a result of damaged:**

- a) muscular fascia
- b) tendon
- c) muscular fibres
- d) supply vessels

**539. Luxatio tendinis occurs as a result of:**

- a) disruption of tendon vagina
- b) disruption of muscular fascia
- c) muscular rupture
- d) only tendon rupture

**540. in case of partial tendon rupture, the muscle function is:**

- a) always impaired
- b) is not impaired or only little
- c) never impaired
- d) every answer is false

**541. Where is the common place of tendon rupture:**

- a) in muscle-tendon junction and in tendon insertion
- b) approximately in the middle of tendon
- c) only in tendon insertion
- d) only in muscle-tendon junction

**542. Rupture affecting larger part of muscle or whole muscle is treated by:**

- a) only conservative
- b) suture and immobilisation
- c) only suture
- d) only immobilisation

**543. Insertion of m. flexor digitorum superficialis is on:**

- a) proximal phalanx
- b) basis of intermediate phalanx in form *chiasma tendinum*
- c) distal phalanx
- d) head of metacarpal

**544. Main function of m. flexor digitorum profundus is:**

- a) flexion of distal intraphalangeal joints
- b) flexion of proximal intraphalangeal joints
- c) extension of proximal intraphalangeal joints
- d) extension of distal intraphalangeal joints

**545. Which calf muscles have insertion on tuber calcanei in form as Achilles tendon:**

- a) m. gastrocnemius and m. soleus
- b) m. gastrocnemius and m. popliteus
- c) m. soleus and m. tibialis posterior
- d) m. tibialis posterior and m. soleus

**546. Which movement is not patient able to do when he has injured Achilles tendon?**

- a) dorsal flexion in ankle
- b) plantar flexion in ankle
- c) eversion in ankle
- d) flexion of digiti

**547. Transscissio tendinis means:**

- a) tendon rupture
- b) light tendon rupture
- c) tendon contusion
- d) tendon intersection

**548. Crush syndrome is result of:**

- a) simple fractures
- b) tendon ruptures
- c) massive contusions and long-term pressure of soft tissues
- d) direct explosion injury

**549. Pelvic fractures with breach of pelvic ring are mainly result of:**

- a) osteoporosis
- b) „high energy“ trauma
- c) oncological disease
- d) iatrogenic damage

**550. The most life threatening pelvic fracture is:**

- a) fractures of pubic bone rami
- b) acetabulum fractures
- c) fracture of pelvic ring
- d) symphyseolysis

**551. Most common complication of fracture of acetabulum's posterior edge is:**

- a) damage of a. iliaca
- b) damage of n. femoralis
- c) damage of urinary bladder
- d) damage of n. ischiadicus

**552. Late complication of acetabulum fracture is:**

- a) post-traumatic coxarthrosis
- b) urinary bladder occlusion
- c) incontinence
- d) dyspareunia

**553. Pelvic fractures are life-threatening injury because of:**

- a) fragment shift
- b) bleeding
- c) urinary bladder damage
- d) nerve plexi damage

**554. First aid of „open book“ pelvic fracture is:**

- a) transcondylar traction
- b) embolism of injured vessels
- c) giving volumexpanders
- d) applying of pelvic clip

**555. Usual source of bleeding in pelvic fractures is:**

- a) a. iliaca externa
- b) v. iliaca externa
- c) presacral venous plexi
- d) corona mortis

**556. Corona mortis is:**

- a) anastomosis of a. obturatoria and a. iliaca externa
- b) circular haematoma in urinary bladder area
- c) clinical name for infaust prognosis of pelvic injury
- d) every answer above is false

**557. Traumatic symphyseolysis:**

- a) is adaptation of pelvic ring of pregnant woman
- b) is clinically silent, does not need a treatment
- c) usually associated with injury of urinary tract
- d) worsen with abdominal press

**558. Pelvic ring fractures as a part of polytrauma:**

- a) they need treatment on Intensive Care Unit
- b) marked with high mortality
- c) we use principles of „damage control“
- d) all above

**559. „Packing“ of lesser pelvis means:**

- a) compression of presacral venous plexi with bandages
- b) ligation of bleeding vessels
- c) intensive therapy with haemostiptics
- d) icing the hypogastrium

**560. Source of bleeding, when pelvic fracture occurs, can be identified by:**

- a) MRI
- b) angiography
- c) explorative laparotomy
- d) laparoscopy

**561. Final classification of pelvic fracture allows:**

- a) native X-ray
- b) skeletal gamagraphy
- c) CT
- d) sonography

**562. How many vertebrae has cervical spine?:**

- a) 5
- b) 6
- c) 7
- d) 8

**563. How many spinal nerves has cervical spine?**

- a) 5
- b) 6
- c) 7
- d) 8

**564. Which cervical vertebra does not have body?**

- a) C1
- b) C2
- c) C3
- d) C4

**565. Which cervical vertebra has *dens* ?**

- a) C1
- b) C2
- c) C3
- d) C4

**566. Which artery goes through processus transversus of cervical vertebrae?**

- a) a. cephalica
- b) a. vertebralis
- c) a. facialis
- d) a. mesenterica superior

**567. Which spinal nerve comes out neuroforamen C5-C6?**

- a) C4
- b) C5
- c) C6
- d) C7

**568. Which vertebra a. vertebralis does not go through?**

- a) C5
- b) C6
- c) C7
- d) C4

**569. Which special projection is used for visualization of C2 dens?**

- a) oblique projection
- b) transoral projection
- c) Ferguson's projection
- d) tangential projection

**570. What is pentaplegia?**

- a) paralysis of diaphragm and all extremities
- b) paralysis of extremities
- c) paralysis of ipsilateral extremities
- d) paralysis of extremities with incontinence

**571. What is the most common cause of cervical spine trauma?**

- a) car accidents and jumps in water
- b) fall from height
- c) collective sports
- d) work accidents

**572. What is whiplash injury?**

- a) X-ray verified fracture in cervical spine area
- b) discoligamentous damage of cervical spine
- c) shift of cervical vertebrae
- d) spinal cord damage without X-ray verification

**573. The best imaging method for discoligamentous damage of cervical spine is:**

- a) X-ray
- b) CT
- c) MRI
- d) PMG

**574. The best imaging method for skeletal trauma of cervical spine is:**

- a) X-ray
- b) CT
- c) MRI
- d) PMG

**575. Fracture made by hyperextension mechanism is fracture of:**

- a) vertebral body
- b) articular processi
- c) processus spinosus
- d) processus transversus

**576. Fracture made by hyperflexion mechanism is fracture of:**

- a) vertebral body
- b) articular processi
- c) processus spinosus
- d) processus transversus

**577. Fracture of vertebra caused by adequate external force (e.g. fall from height) is called:**

- a) osteoporotic
- b) traumatic
- c) pathological
- d) stress

**578. Uncertain signs of lumbar spine fracture is:**

- a) positive X-ray
- b) crepitus
- c) pain and swelling
- d) all above

**579. Indication for conservative therapy of thoracic and lumbar spine fracture is:**

- a) stable fracture with minimal compression of vertebral body height
- b) unstable vertebral fracture
- c) cluster fracture of vertebra with large compression of vertebral body
- d) fracture with neurologic deficit caused by spinal cord compression

**580. Certain sign of L1 fracture is:**

- a) palpatory tenderness of Th-L spine
- b) haematoma of L spine
- c) positive X-ray
- d) muscle spasm in L spine area

**581. Thoracic and lumbar spine fractures are diagnosed by:**

- a) physical examination
- b) native X-ray
- c) CT and MRI
- d) all above

**582. Which answer does not belong to signs of L3 vertebral cluster fracture with spinal canal stenosis?**

- a) palpatory tenderness of L spine
- b) pain radiation to upper extremities
- c) pain radiation to lower extremities
- d) paralysis of lower extremities

**583. Rehabilitation goal of spine fractures is not:**

- a) speeding fracture healing
- b) strengthening muscles
- c) training coordination
- d) reaching the right movement stereotypes

**584. To principles of treating spinal fractures belongs:**

- a) reposition
- b) fixation
- c) rehabilitation
- d) all above

**585. When surgery of spine fracture is not indicated? If it is:**

- a) stable
- b) associated with spinal nerve compression
- c) without splinter in spinal canal
- d) inveterated

**586. Fracture of vertebra without adequate external force (e.g. bending forward) because of osteoporosis is called:**

- a) traumatic fracture
- b) stress fracture
- c) pathological fracture
- d) all above

**587. Unstable thoracic spine fracture is indication for:**

- a) symptomatic analgesia
- b) corset therapy
- c) osteosynthesis

d) rehabilitation

**588. Thoracic or lumbar spine fracture without adequate external force (e.g. bending forward), can be caused by:**

- a) osteoporosis
- b) tumor
- c) plasmacytoma
- d) all above

**589. Incidence of clavicular fractures is:**

- a) 7%
- b) 17%
- c) 27%
- d) 37%

**590. Among signs of scapular fracture does not belong:**

- a) sudden pain
- b) limited motility
- c) palpable tenderness and haematoma
- d) paresis of radial nerve

**591. Among humerus fractures of upper end does not belong:**

- a) fractura colli anatomici humeri
- b) fractura colli chirurgici humeri
- c) fractura tuberculi maioris
- d) fractura tranchanteri minoris

**592. Humerus x-ray in two projections can help us to specify:**

- a) only course of fracture line
- b) only position of fragments
- c) position of fragments and course of fracture line
- d) place of fracture in humeral area

**593. Fractures of humeral diaphysis are typically:**

- a) created by direct mechanism (direct hit)
- b) associated with ulnar nerve injury
- c) difficult to diagnose
- d) without dislocation

**594. Fracture of medial humeral epicondyle occurs:**

- a) when falling on straight upper extremity
- b) when falling on bent upper extremity
- c) when falling on straight upper extremity with shift of antebrachium to varosity
- d) when falling on straight upper extremity with shift of antebrachium to valgosity

**595. Fracture of lateral humeral epicondyle occurs:**

- a) when falling on straight upper extremity
- b) when falling on bent upper extremity
- c) when falling on straight upper extremity with shift of antebrachium to varosity
- d) when falling on straight upper extremity with shift of antebrachium to valgosity

**596. Fractures of distal radius loco typico:**

- a) are not common injuries
- b) they occur with direct mechanism
- c) dislocation is ventral (volar)
- d) are „old age“ fractures

**597. Conservative plaster immobilisation of fr. radii dist. loco typico lasts:**

- a) 3 weeks
- b) 4 weeks
- c) 5 weeks
- d) 5 to 6 weeks

**598. Dislocated upper extremity fractures are:**

- a) fixated with plaster immobilisation

- b) reposed
- c) treated with surgery
- d) reposed, fixated, if they're unstable, they need surgery

**599. Upper extremity fractures without dislocation are:**

- a) fixated with triangular scarf
- b) reposed
- c) treated with surgery
- d) fixated with plaster immobilisation

**600. Fracture of navicular bone (os naviculare manus):**

- a) usual fracture of carpal area
- b) diagnosis is easy
- c) two x-ray projection are enough to diagnose
- d) supply vessels of bone are not damaged

**601. Metacarpal fractures:**

- a) mostly occur with direct hit or fall
- b) are treated only with conservative therapy
- c) are treated only with surgery
- d) occur with indirect mechanism

**602. Bennett's fracture is:**

- a) fracture of I. metacarpal
- b) fracture of II. metacarpal
- c) fracture of III. metacarpal
- d) fracture of IV. metacarpal

**603. Fractures of phalanges:**

- a) mostly occur by indirect mechanism
- b) joint surface is mostly not affected
- c) therapy is simple
- d) are typically associated with injury of extensors' insertion on phalanx basis

**604. Distorsion manifests with changes in joint area:**

- a) only anatomical
- b) only functional
- c) anatomical and functional
- d) every answer above is false

**605. Sign of distorsion is not:**

- a) oedema
- b) tenderness, limited motility
- c) tension feeling in joint
- d) repeating attacks of pain and swelling in joint

**606. Damage of ligaments and joint capsule when distorted can evoke:**

- a) joint instability
- b) repeating joint distorsions
- c) haemarthros
- d) all above

**607. Haemarthros is:**

- a) haematoma in soft tissue around joint
- b) purulent content of joint
- c) haemorrhagic content of joint
- d) not a result of distorsion with damaged joint ligaments and joint capsule

**608. Joint luxation means:**

- a) complete separation of joint surfaces, without loss of congruence
- b) complete separation of joint surfaces, with complete loss of congruence

- c) partial separation
- d) congruence impairment when intraarticular fracture happens

**609. Luxatio inveterata is:**

- a) fresh joint luxation
- b) repeating joint luxation
- c) few days lasting joint luxation
- d) luxation associated with joint fracture

**610. Congenital luxation is mostly in area of:**

- a) shoulder joint
- b) hip joint
- c) acromio-clavicular joint
- d) knee joint

**611. What we need for verifying joint luxation?**

- a) only history
- b) only physical examination
- c) only X-ray in AP projection
- d) history, physical examination and X-ray in two projections

**612. Pathological luxation has its cause in:**

- a) congenital anatomical and functional deficiency of joint structures
- b) acquired anatomical and functional deficiency of joint structures
- c) pathological fractures
- d) intraarticular fractures

**613. To complication of closed luxation does not belong:**

- a) damage of vessels
- b) damage of peripheral nerves
- c) intraarticular intrusion of surrounding tissues and their interposition when reposed
- d) joint infection

**614. Primary luxation therapy is:**

- a) closed reposition and immobilisation
- b) open reposition with reconstructive operation of soft tissues
- c) closed reposition without immobilisation
- d) every answer above is false

**615. When diagnosing ankle distorsion we need to focus on:**

- a) damage of vascular and neural structures
- b) fracture in ankle area
- c) damage of ligamentous apparatus causing instability
- d) all above

**616. Labrum glenoidale is:**

- a) bony edge of facies lunata acetabuli
- b) bony joint edge of fossa glenoidale in articulatio humeri
- c) cartilaginous joint edge of fossa glenoidale in articulatio humeri
- d) joint capsule of articulatio humeri hardened by ligaments

**617. What can be damaged when ankle distorsion in inversion occurs?**

- a) ligamentum calcaneofibulare and lig. talofibulare (anterior et posterior)
- b) ligamentum deltoideum (lig. collaterale mediale)
- c) medial meniscus of knee
- d) every answer above is false

**618. Range of joint socket in articulatio humeri:**

- a) is 1/3 to 1/4 of articular surface of humeral head
- b) is same as joint surface of humeral head
- c) is double as joint surface of humeral head
- d) is not larger by cartilage edge (labrum)

**619. Vulnus sectum is:**

- a) incision wound
- b) puncture wound
- c) chopping wound
- d) gunshot wound

**620. Chopping wound occurs by:**

- a) penetration of sharp or blunt narrow object into the depth of body
- b) pressure and thrust of sharp object on the skin
- c) vertical or oblique impact of sharp object on surface of body
- d) splitting of the skin due to tension

**621. Chopping wound:**

- a) is deepest in the middle, towards both ends the depth decreases
- b) has same depth throughout the course
- c) usually is not deep
- d) is often associated with lacerations

**622. External shape of chopping wound can remind:**

- a) gunshot wound
- b) puncture wound
- c) laceration wound
- d) incised wound

**623. Edges of chopping wound:**

- a) are smooth and sharp
- b) are bruised with excoriations and haematomas
- c) describe a shape of jaw
- d) are not straight

**624. Chopping wound:**

- a) depth of wound narrows in wedge shape
- b) part of skin and deeper tissues may be missing
- c) is differentiated in projectile wound and shrapnel wounds
- d) may have contusion wound features

**625. For chopping wound stands:**

- a) it has wide in-shot point
- b) with heavy force pointing across longitudinal axis of extremity, amputation can occur
- c) its edges are not straight
- d) part of skin and subcutaneous tissue can be missing

**626. Chopping wound:**

- a) occurs by splitting of skin due to tension
- b) outlet is rare, it usually has smaller diameter than inlet
- c) may be contusion-nature
- d) when oblique impact of sharp object happens, it may have curved or lobar shape

**627. Properties of chopping wound:**

- a) depend on the force spent using a cutting tool, shape, sharpness and angle of the blade which acts on the skin
- b) depend on the type of intersecting object, force and direction of impact of intersecting object
- c) depend on the spent force, type of stabbing tool and angle under which the tool enters the body
- d) not associated with applied force applied

**628. Chopping wound:**

- a) is projectile injury
- b) often belongs to penetrating wounds

- c) is wound with irregular jagged edges
- d) it bleeds a little less than incision wound, because there is more bruised tissue

**629. Vulnus scissum is:**

- a) chopping wound
- b) incised wound
- c) puncture wound
- d) gunshot wound

**630. Incised wound occurs:**

- a) penetration of sharp or blunt narrow object into the depth of body
- b) pressure and thrust of sharp object on the skin
- c) vertical or oblique impact of sharp object on surface of body
- d) splitting of the skin due to tension

**631. Special case of cuts are wounds caused by shearing:**

- a) with knife
- b) with pair of scissors
- c) with razor blade
- d) with shotgun

**632. Cutting wound:**

- a) depth of wound narrows in wedge shape
- b) part of skin and deeper tissues may be missing
- c) is usually straight or slightly curved
- d) may have contusion wound features

**633. Properties of cutting wound:**

- a) depend on the force spent using a cutting tool, shape, sharpness and angle of the blade which acts on the skin
- b) depend on the type of intersecting object, force and direction of impact of intersecting object
- c) depend on the spent force, type of stabbing tool and angle under which the tool enters the body
- d) not associated with applied force applied

**634. Edges of incised wounds:**

- a) are smooth and sharp
- b) are not straight
- c) describe the shape of the jaw
- d) are bruised with excoriation and haematomas

**635. Cutting wound:**

- a) occurs by splitting of skin due to tension
- b) is often longer than broad
- c) may have contusion wound features
- d) the oblique impact of sharp object it may have a curved or lobar shape

**636. Cutting wound:**

- a) is a projectile injury
- b) bones are usually not damaged, but periosteum has often cut marks
- c) is wound with irregular jagged edges
- d) it bleeds a little less than chopping wound, because there is more bruised tissue

**637. Cutting wound:**

- a) is deepest in the middle, towards both ends the depth decreases
- b) has same depth throughout the course
- c) usually is not deep
- d) is often associated with lacerations

**638. Cutting wound:**

- a) it has wide in-shot point
- b) with heavy force pointing across longitudinal axis of extremity, amputation can occur
- c) in case of intersecting vessels and neural structures, the wound is bleeding and patient feels burning pain
- d) part of skin and subcutaneous tissue can be missing

**639. Vulnus punctum is:**

- a) laceration wound

- b) stabbing wound
- c) gunshot wound
- d) incised wound

**640. Stabbing wound:**

- a) depth of wound narrows in wedge shape
- b) part of skin and deeper tissues may be missing
- c) wound channel may be straight
- d) may have contusion wound features

**641. Stabbing wound:**

- a) is projectile injury
- b) often belongs to penetrating wounds
- c) is wound with irregular jagged edges
- d) edges are smooth and often are close to each other

**642. Stabbing wound occurs by:**

- a) penetration of sharp or blunt narrow object into the depth of body
- b) pressure and thrust of sharp object on the skin
- c) vertical or oblique impact of sharp object on surface of body
- d) splitting of the skin due to tension

**643. Properties of stabbing wound:**

- a) depend on the force spent using a cutting tool, shape, sharpness and angle of the blade which acts on the skin
- b) depend on the type of intersecting object, force and direction of impact of intersecting object
- c) depend on the spent force, type of stabbing tool and angle under which the tool enters the body
- d) not associated with applied force applied

**644. Stabbing wound:**

- a) is deepest in the middle, towards both ends the depth decreases
- b) has same depth throughout the course
- c) usually is not deep
- d) is often associated with lacerations

**645. Puncture wound:**

- a) it has wide in-shot point
- b) with heavy force pointing across longitudinal axis of extremity, amputation can occur
- c) has inlet, canal and outlet
- d) part of skin and subcutaneous tissue can be missing

**646. Stabbing wound:**

- a) is projectile injury
- b) bones are usually not damaged, but periosteum has often cut marks
- c) we usually do not find any changes on skin near „in thrust“ ???
- d) it bleeds a little less than chopping wound, because there is more bruised tissue

**647. Edges of stabbing wound:**

- a) are smooth and sharp and narrows in wedge shape
- b) are bruised with excoriations and haematomas
- c) describe a shape of jaw
- d) sharp object leaves sharp edges, blunt object leaves jagged edges

**648. Stabbing wound:**

- a) splitting of the skin occurs due to tensile
- b) outlet is rare, it usually has smaller diameter than inlet
- c) may be in the contusion
- d) is curved or lobar

**649. Before lower extremity amputation, which examination is necessary?**

- a) angiographic examination
- b) phlebography
- c) ergometry
- d) scintigraphy

**650. Guillotine amputation is:**

- a) intersection of tissues and bones in one plane
- b) intersection with guillotine
- c) intersection of soft tissue in one plane
- d) amputation at the ankle

**651. ABI index is:**

- a) brachiofemoral index
- b) ankle-femoral index
- c) ankle-brachial index
- d) brachiomalleolar index

**652. Value of ABI index is in a healthy person:**

- a) 0.7-0.8
- b) 0.9-1.0
- c) more than 1.3
- d) less than 0.5

**653. Value of ABI for critical ischemia is:**

- a) 0.7-0.9
- b) 0.6-0.8
- c) more than 1.0
- d) less than 0.5

**654. What is measured at a. brachialis and a. dorsalis pedis when we set the ABI:**

- a) diastolic blood pressure
- b) systolic blood pressure
- c) systolic and diastolic blood pressure
- d) temperature

**655. We know Fontaine's:**

- a) criteria
- b) stages
- c) phases
- d) indices

**656. Fontaine's stages are divided into:**

- a) 2 stages
- b) 5 criteria
- c) 4 stages
- d) 3 indices

**657. We determine with oxymetric examination:**

- a) ABI index
- b) transcutaneous pressure of CO<sub>2</sub>
- c) transcutaneous oxygen pressure
- d) radioactivity

**658. Angiographic examination is:**

- a) examination of bone marrow
- b) examination of lymph vessels
- c) examination of venous system
- d) examination of arterial system by giving contrast medium into the artery

**659. Thermography is measuring:**

- a) of skin temperature with scintiscanner
- b) of skin temperature with thermograph
- c) by scintiscanner
- d) of air temperature

**660. Scintigraphic examination for thrombosis of lower extremities is:**

- a) <sup>125</sup>I-fibrinogen accumulation test
- b) marked leukocytes
- c) marked stem cells
- d) marked fibrin

**661. Dopplerometric examination is:**

- a) invasive vascular examination
- b) non-invasive vascular examination
- c) examination using radioisotopes
- d) puncture examination

**662. Lymphography is:**

- a) examination of veins
- b) examination of arteries
- c) examination of lymphatic system after giving contrast medium
- d) examination of visceral arteries

**663. Pirogov's amputation is:**

- a) resection of ossis cuboideum
- b) resection in level of talus
- c) resection in calcaneal level
- d) exarticulation in the ankle joint

**664. Amputation of the thigh may be:**

- a) small
- b) supracondylar
- c) in the level of tuberositas tibiae
- d) subcondylar

**665. Supracondylar amputation of the thigh is:**

- a) above femoral condyli
- b) in the middle of femur
- c) under femoral condyli
- d) in the femoral trochanters' level

**666. The term „exarticulation of coxa“ means:**

- a) removal of coxa
- b) removal of the femur with cartilage
- c) high thigh amputation
- d) amputation in the middle of the thigh

**667. When we amputate, we never catch into tweezers:**

- a) vessels
- b) bone
- c) soft tissue
- d) cartilage

**668. For suturing skin during amputation for gangrene in we don't use:**

- a) tweezers
- b) needleholder
- c) scissors
- d) suture material

**669. What is undesirable complication after crural amputation?**

- a) cough
- b) flexion contracture
- c) pyuria
- d) urinary incontinence

**670. Flexion contracture occurs after:**

- a) femoral exarticulation
- b) amputation of thigh
- c) amputation in crural area
- d) transmetatarsal amputation

**671. Flexion contracture means:**

- a) flexion of the joint that is fixated
- b) extension of the joint
- c) muscle spasm
- d) uterine contractions

**672. Indication for exarticulation of coxa is:**

- a) femoral abscess
- b) femoral phlegmon
- c) malignancies under small trochanter, malignancies of soft tissue in the middle and distal part of femur, non-healing stump after high amputation
- d) benign tumors of the thigh

**673. Phantom pain is often after:**

- a) cuts
- b) amputation
- c) nail ablation
- d) contusion

**674. Prevention of phantom pain is:**

- a) application of anesthetic into nerve area
- b) nerve suture
- c) use of analgetics
- d) use of antibiotics

**675. Phantom pain after amputation occurs in:**

- a) 40%
- b) 30%
- c) 20%
- d) 80%

**676. Complications after amputation are divided into:**

- a) they are not divided
- b) delayed
- c) early and late
- d) only early

**677. Phlebography is an examination of:**

- a) arterial system with applying contrast medium into a vein
- b) venous system with applying contrast medium into a vein
- c) arterial system with applying contrast medium into an artery
- d) lymphatic system with applying contrast medium into a vein

**678. The presence of pulsation near amputation is:**

- a) a good prognostic factor for healing of the stump
- b) a bad prognostic factor for healing of the stump
- c) does not affect the healing of the stump
- d) we do not examine the pulsation

**679. Rest interval is in stage of:**

- a) rest pain
- b) claudication
- c) in asymptomatic stage
- d) gangrene

**680. Fontaine's stage I is called:**

- a) high-stage
- b) symptomatic stage
- c) moderate stage
- d) asymptomatic stage

**681. Fontaine's stage II is called:**

- a) claudication stage
- b) stage of rest pain
- c) stage of gangrene
- d) asymptomatic stage

**682. Fontaine's stage III is called:**

- a) claudication stage
- b) asymptomatic stage

- c) stage of gangrene
- d) stage of rest pain

**683. Patient in Fontaine's stage III has pain from the beginning:**

- a) at lunch
- b) at day
- c) at night
- d) in the morning

**684. Sitting patient with pendent legs or walking at night is in Fontaine's:**

- a) stage III
- b) stage II
- c) stage IV
- d) stage I

**685. Fontaine's stage IV is:**

- a) rest interval
- b) stage of gangrene
- c) asymptomatic stage
- d) claudication stage

**686. Gangrene in patients with diabetes mellitus is the most common:**

- a) dry gangrene
- b) wet gangrene
- c) limited gangrene
- d) unlimited gangrene

**687. Dry gangrene in patients with:**

- a) diabetes insipidus
- b) diabetes mellitus
- c) PAD (atherosclerotic aetiology)
- d) viraemia

**688. Fontaine's stage II is divided into:**

- a) II a, b, c
- b) II a, b
- c) II c
- d) II a

**689. Fontaine's stage IIa claudications are after distance of :**

- a) 500 m
- b) 100 m
- c) 50 m
- d) 200 m

**690. Fontaine's stage IIb claudications are below distance of :**

- a) 100 m
- b) 200 m
- c) 50 m
- d) 500 m

**691. Fontaine's stage IIc claudications are below distance of :**

- a) 50 m
- b) 70 m
- c) 60 m
- d) 100 m

**692. Critical limb ischemia is characterized by:**

- a) pressure on a. dorsalis pedis above 70 torr
- b) pressure on a. dorsalis pedis above 50 torr and toe pressure above 30 torr
- c) pressure on a. dorsalis pedis below 50 torr and toe pressure below 30 torr
- d) pressure on a. poplitea above 120 torr

**693. What kind of examination should be preformed before each amputation?**

- a) lymphography

- b) thermography
- c) Dopplerometric examination
- d) angiographic examination

**694. Reconstructive operation of lower extremity arteries can:**

- a) extend level of amputation
- b) does not affect level of amputation
- c) reduce level of amputation
- d) worse healing

**695. The value of transcutaneous oxygen for the planned amputation, at which the amputation stump will heal at 90%:**

- a) under 20 torr
- b) less than 25 torr
- c) over 25 torr
- d) under 15 torr

**696. ABI value below 0.5 means:**

- a) critical limb ischemia
- b) a good blood supply of legs
- c) mediocalcinosis
- d) artery stenosis

**697. Indication for surgery is Fontaine's stage:**

- a) I and II
- b) IIb, c, III, IV
- c) III only
- d) I only

**698. Large amputation of lower extremities is most common in:**

- a) intravenous anaesthesia
- b) local anaesthesia
- c) without anaesthesia
- d) spinal anaesthesia or nerve block

**699. After crural amputation patient must exercise:**

- a) extension and flexion at the thigh joint
- b) knee flexion and extension
- c) exercise their hands
- d) aerobic exercise

**700. Löwenberg's sign is performed by:**

- a) pressing planta pedis
- b) pressing calf by hand
- c) pressing calf by blood pressure cuff
- d) dorsal flexion in ankle

**701. Löwenberg's sign is positive if values are:**

- a) 80-100 torr
- b) 120 to 140 torr
- c) above 150 torr
- d) 180 torr

**702. Homans' sign is positive if:**

- a) calf tenderness after pressure on the planta pedis
- b) calf tenderness after dorsal flexion of foot in talocrural joint, while knee joint is extended
- c) calf tenderness after flexion of knee
- d) percussion calf tenderness

**703. Calf tenderness after dorsal flexion in ankle when the knee is extended:**

- a) Payer's sign
- b) Homans' sign
- c) Murphy's sign
- d) Plennies' sign

**704. Perthes' test is used to determine:**

- a) passability of lymphatic system
- b) passability of arterial system
- c) passability of deep venous system
- d) arteriovenular communications

**705. Linton's test is used to determine:**

- a) arteriovenular communications
- b) passability of arterial system
- c) passability of lymphatic system
- d) passability of deep venous system

**706. Phlebography is imaging of:**

- a) venous system
- b) visceral vessels
- c) lymphatic vessels
- d) arterial system

**707. Lymphography is imaging of:**

- a) visceral vessels
- b) venous system
- c) lymphatic system
- d) arterial system

**708. Where is contrast agent injected into when retrograde descending phlebography is performed:**

- a) v. poplitea
- b) femoral artery
- c) v. femoralis
- d) a. dorsalis pedis

**709. Where is contrast agent injected into when ascending phlebography is performed:**

- a) arteria dorsalis pedis
- b) v. dorsalis pedis
- c) vena femoralis
- d) arteria femoralis

**710. Massive pulmonary embolism is obstruction of pulmonary blood-bed more than:**

- a) 40%
- b) 50%
- c) 20%
- d) 5%

**711. Angiopulmography is used to diagnose:**

- a) peripheral vascular disorders
- b) central venous pressure
- c) defects in gas exchange of O<sub>2</sub> and CO<sub>2</sub>
- d) pulmonary embolism

**712. Gold standard for diagnosing pulmonary embolism is:**

- a) plethysmography
- b) Doppler examination
- c) angiopulmography
- d) ECG

**713. The most common ECG change in massive pulmonary embolism is:**

- a) T wave inversion in chest leads
- b) normal T wave
- c) wider QRS complex
- d) P wave

**714. In Fontaine's stage IIIa, the ankle pressure is greater than:**

- a) 20 torr
- b) 40 torr
- c) 50 torr
- d) 10 Torr

**715. In Fontaine's stage IIIb, the ankle pressure is lower than:**

- a) 50 torr
- b) 70 torr
- c) 90 torr
- d) 110 torr

**716. In Fontaine's stage IV is necrosis:**

- a) spreading of gangrene of necrosis
- b) limited
- c) is not present gangrene
- d) are present inflammatory changes

**717. Fontaine's stage IVb is the stage of:**

- a) limited gangrene
- b) spreading necrosis or gangrene
- c) gangrene is not present
- d) inflammatory changes are present

**718. The ABI in mediocalcinosis is:**

- a) under 0.3
- b) 0.9-1.0
- c) 05-0.7
- d) more than 1.3

**719. Fontaine's stage I patient has:**

- a) no pain in legs
- b) claudication pain after 200 m
- c) night pain in lower extremities
- d) resting pain