

1. After an operation a patient's sensitivity of front and lateral surface of neck has reduced. What nerve is damaged?

- a. Nn.supraclaviculares
- b. N.auricularis magnus
- c. N.transversus colli**
- d. N.occipitalis minor
- e. N.phrenicus

2. Inside a human cell the informational RNA containing both exons and introns was delivered to the granular endoplasmic reticulum to the ribosomes. What process does not take place?

- a. Processing**
- b. Transcription
- c. Prolongation
- d. Translation
- e. Replication

3. A patient arrived to the oral surgery department with dislocation of temporomandibular joint and injury of its main ligament. Name this ligament:

- a. Pterygoid-mandibular
- b. Medial
- c. Mandibular
- d. Styloid-mandibular
- e. Lateral**

4. During the examination of patient's oral cavity a dentist noticed a slight overbite of mandibular teeth by maxillary incisors. What occlusion belongs to such position of teeth?

- a. Closed occlusion
- b. Orthognathic occlusion**
- c. Biprognathic occlusion
- d. Prognathism
- e. Orthogenic occlusion

5. A patient complains of having urination disorder. He is diagnosed the hypertrophy of prostate gland. What part of gland is damaged?

- a. Left lobe
- b. Base
- c. Apex
- d. Median lobe**
- e. Right lobe

6. In order to make a functional complete denture the left superior canine of a patient should be extracted. After the infraorbital anesthesia the patient got a rapidly growing hematoma in the front part of face. It was found that the injured artery is a branch of:

- a. A.temporalis superficialis
- b. A.alveolaris inferior
- c. A.maxillaris**
- d. A.ophtalmica
- e. A.labialis superior

7. A patient consulted with dental surgeon about an injury of submandibular triangle. During the wound cleansing the surgeon found that the artery leading to the soft palate is damaged. What artery is damaged?

- a. A.facialis
- b. A.palatina ascendens**
- c. A.sphenopalatina
- d. A.palatina descendens
- e. A.pharyngea ascendens

8. A 28 year old man with cut wound of frontal skin was admitted to the hospital. A vessel that supplies blood to the frontal part of head was ligated in order to stop bleeding. What vessel was ligated?

- a. A.dorsalis nasi
- b. A.temporalis superficialis
- c. A.infraorbitalis
- d. A.angularis

e. A.supraorbitalis

9. During ablation of the nose wing lypoma a dentist injured a vessel, that caused a saphenous hematoma. What vessel was damaged?

- a. A.infraorbitalis
- b. A.angularis
- c. A.maxillaris
- d. A.supraorbitalis

e. A.facialis

10. A patient has an injury in right lateral area of belly. What part of large intestine is most likely injured?

a. Ascending colon

- b. Descending colon
- c. Rectum
- d. Sigmoid colon
- e. Transverse colon

11. A patient complains of headache, heavy breathing. X-ray examination confirmed the diagnosis - frontitis. What nasal meatus may contain purulent discharge?

a. Middle

- b. Inferior
- c. Above the superior nasal concha
- d. Common
- e. Superior

12. An eye trauma caused soft tissues infection of eye-socket. Through what anatomical formation can the infection penetrate into the middle cranial fossa?

a. Through the zygomatic orbital foramen

b. Through the superior orbital fissure

- c. Through the posterior ethmoidal foramen
- d. Through the anterior ethmoidal foramen
- e. Through the inferior orbital fissure

13. A three year old child was admitted to the hospital with a foreign body in bronches. What bronchus contains most likely a foreign body?

- a. Left primary
- b. Left segmental
- c. Lobular

d. Right primary

e. Right segmental

14. When a patient puts his tongue out the tip of it deflects to the left. Motor innervation of what cranial nerve is disturbed in this case?

- a. N.trigeminus sinister
- b. N.facialis sinister
- c. N.glossopharyngeus dexter
- d. N.vagus dexter

e. N.hypoglossus dexter

15. A mother consulted the doctor about her one year old child, who has got six teeth come out. How

many teeth should the child of such age have?

- a. 10
- b. 12
- c. 6
- d. 8**
- e. 7

16. Chronic rhinitis was complicated by inflammation of frontal sinus. What nasal meatus did the infection get into this sinus through?

- a. Nasopharyngeal
- b. Median**
- c. Common
- d. Inferior
- e. Superior

17. Trauma of occipital region of head resulted in crack fracture in the region of transverse sinus. What part of occipital bone is damaged?

- a. Right lateral
- b. Left lateral
- c. Squama**
- d. Proximal
- e. Condyle

18. A victim of a road accident has an abruption of a part of mandibular angle, displacement of fragment backwards and upwards. What ligament is responsible for this displacement?

- a. Intraarticular
- b. Sphenoid-mandibular
- c. Pterygoid-mandibular
- d. Styloid-mandibular**
- e. Lateral

19. A 69 year old patient has got an abscess of frontal lobe as a result of purulent infection in nasal cavity. What anatomical formation did the infection penetrate through?

- a. Foramen ovale
- b. Foramen sphenopalatinum
- c. Foramen rotundum
- d. Foraminae cribrosae**
- e. Foramen ethmoidalae posterior

20. A patient displays abnormal retrodeviation of his lower jaw as a result of trauma in the region of mandibular coronal process. What muscle is most likely to be damaged?

- a. M.temporalis**
- b. M.pterygoideus lateralis
- c. M.levator anguli oris
- d. M.pterygoideus medialis
- e. M.masseter

21. X-ray examination revealed an accumulation of suppuration in maxillary sinus. Into what nasal meatus excretes the suppuration?

- a. Inferior nasal
- b. Nasopharyngeal
- c. Median nasal**
- d. Superior nasal
- e. Common nasal

22. A patient has assymetric face, it is especially noticeable during active muscle contraction. What nerve may be damaged?

- a. Trigeminal, II branch

b. Trigeminal, I branch

c. Facial (motor unit)

d. Trigeminal, III branch

e. Sublingual

23. A 5 year old child was admitted to the ENT-department with suppurative inflammation of middle ear (tympanitis). It began with the inflammation of nasopharynx. What canal of temporal bone did the infection get into tympanic cavity through?

a. Musculotubal canal

b. Caroticotympanic foramina

c. Carotid canal

d. Small tympanic canal

e. Small canal of chorda tympani

24. A 58 year old woman had her uterus and all appendages completely removed. It resulted in stoppage of urine excretion. Cystoscopy results: bladder doesn't contain any urine, urine doesn't come also from ureteric orifices. What part of urinary excretion system was damaged during the operation?

a. Pelvis renalis

b. Ren

c. Uretra

d. Vesica urinaria

e. Ureter

25. Examination of a 32 year old patient revealed disproportional skeleton size, enlargement of superciliary arches, nose, lips, tongue, jaw bones, feet. What glands function was disturbed?

a. Hypophysis

b. Pancreas

c. Suprarenal

d. Thyroid

e. Epiphysis

26. A patient has lost ability to recognize the objects by the typical for them sounds (clock, bell, music). What part of brain is most likely damaged?

a. Lobus frontalis

b. Lobus occipitalis

c. Lobus temporalis

d. Lobus parietalis

e. Insula

27. A patient suffers from middle ear inflammation (otitis). He complains also of disordered taste sensation in the anterior tongue part. What nerve is damaged?

a. N.vestibulo-cochlearis

b. N.trigeminus

c. N.facialis

d. N.vagus

e. N.glossopharyngeus

28. A surgeon should reach the omental bursa to perform an operation on abdominal cavity. How can he reach this part of peritoneal cavity without affecting the integrity of lesser omentum?

a. Through the epiploic foramen

b. Through the left paracolic sulcus

c. Through the left mesenteric sinus

d. Through the right mesenteric sinus

e. Through the right paracolic sulcus

29. A patient complains of aching gums and maxillary teeth. What nerve is inflamed?

a. III branch of the V pair

b. Sublingual

c. Accessory

d. II branch of the V pair

e. I branch of the V pair

30. A 5 year old child suffers from the neck deformity. Clinical examination revealed such symptoms: apparent flexion of head to the left, his face is turned right, passive movements of the head to the right are restricted. What muscles development was disturbed in this case?

a. Sternosublingual

b. Long muscle of head

c. Trapezius

d. Splenius muscle of head

e. Sternocleidomastoid

31. A patient has difficulties with jaw joining when he is chewing. There is partial atrophy of masticatory muscles situated below the zygomatic arch. What nerve branches do these muscles innervate?

a. Nn.alveolares superiores

b. N.infraorbitalis

c. N.maxillaris

d. N.alveolaris inferior

e. N.mandibularis

32. A boxer who got a punch in the region of temporomandibular joint has a traumatic dislocation of mandible. Displacement of what articular surfaces will overstep the limits of physiological norm?

a. Coronoid process and pterygoid fossa

b. Head of mandible and submandibular fossa

c. Neck of mandible and submandibular fossa

d. Head of mandible and mandibular fossa

e. Coronoid process and submandibular fossa

33. A patients middle ear inflammation was complicated by mastoiditis. There was a threat of purulent thrombosis of the nearest venous sinus. What sinus was under the threat?

a. Transverse

b. Rectus

c. Inferior petrosal

d. Superior sagittal

e. Sigmoid

34. On examination of a road accident victim a doctor revealed left clavicle fracture and disturbed blood circulation in an extremity (no pulsing of radial artery). What cause of blood circulation disturbance is the most probable?

a. Compression of subclavian vein

b. Compression of axillary artery

c. Compression of subclavian artery

d. Compression of vertebral artery

e. Compression of axillary vein

35. A 60 year old patient has problems with formation and moving of food mass, it disturbs eating process. His tongue is stiff, speaking is impossible. What nerve is damaged?

a. VII

b. XII

c. IX

d. V

e. XI

36. A patient has urolithiasis that was complicated by a renal calculus passage. At what level of ureter is it most likely to stop?

a. Between abdominal and pelvic part

- b. In the middle abdominal part
- c. 5 cm above pelvic part
- d. 2 cm above flowing into urinary bladder
- e. In pelvis

37. During the examination of patients oral cavity a dentist found a carious cavity on the crown surface of the second premolar tooth that was turned to the first molar tooth. Name the damaged crown surface:

- a. Facies distalis
- b. Facies occlusalis
- c. Facies vestibularis
- d. Facies lingualis

e. Facies mesialis

38. A woman in grave condition was admitted to a hospital with the diagnosis of the hemorrhagic stroke in the region of frontal part of the right cerebral hemisphere. The damage of what artery most likely caused this condition?

- a. A.communicans posterior
- b. A.cerebri anterior**
- c. A.communicans anterior
- d. A.cerebri posterior
- e. A.cerebri media

39. A patient with cancer of the back of tongue had an intensive bleeding as a result of tumor spread to the dorsal artery of tongue. What vessel should be ligated in order to stop bleeding?

- a. Lingual artery**
- b. Deep artery of tongue
- c. Ascending pharyngeal artery
- d. Facial artery
- e. Dorsal artery of tongue

40. A patient has an exudative pleurisy. At what level should the pleural puncture along the posterior axillary line be taken?

- a. VIII intercostal space
- b. XI intercostal space
- c. VI intercostal space
- d. IX intercostal space**
- e. VII intercostal space

41. A 17 year old student pressed out a pustule in the medial angle of eye. In 2 days she was taken to the institute of neurosurgery with thrombosis of cavernous sinus. Through what vein did the infection get into this sinus?

- a. V.maxillaris
- b. V.transversa faciei
- c. V.diploicae frontalis
- d. V.angularis**
- e. V.profunda faciei

42. A 35 year old patient came to the admission department with complaints of pain and edema in the region of floor of oral cavity. After examination he was diagnosed with inflammation in the region of excretory duct of submandibular gland. Where does this duct open into?

- a. Plica fimbriata
- b. Recessus gingivalis
- c. Vestibulum oris
- d. Foramen caecum linguae
- e. Caruncula sublingualis**

43. Histological examination in the area of cervix of a fundic gland reveals small cells that have high

nuclear-cytoplasmatic ratio and basophilic cytoplasm. What is the function of these cells?

a. Pepsinogen secretion

b. Regeneration of glandular epithelium

c. Endocrinal

d. Protective

e. Secretion of chlorine ions

44. Underdevelopment of which parts of facial skeleton in the embryonal period is the reason for such a malformation as cleft palate?

a. Frontal and maxillary processes

b. Frontal processes

c. Palatine processes

d. Mandibular processes

e. Mandibular and palatine processes

45. Influence of unfavourable factors upon the organism causes change of thymus accompanied by mass loss of thymocytes, their displacement to the peripheral organs, proliferation of epithelioreticulocytes. What phenomenon is it?

a. Accidental thymus involution

b. Thymus hypotrophy

c. Thymus atrophy

d. Thymus dystrophy

e. Age thymus involution

46. Examination of a patient revealed abnormal development of enamel. This is caused by damage of the following structural elements of dental germ:

a. Cervix of enamel organ

b. Internal enamel epithelium of enamel organ

c. Intermediate layer of enamel organ

d. External enamel epithelium of enamel organ

e. Pulp of enamel organ

47. Recovery of an organism from an infectious disease is accompanied by neutralization of antigens by specific antibodies. What cells produce them?

a. Fibroblasts

b. Eosinophils

c. T-lymphocytes

d. Plasmocytes

e. Tissue basophils

48. A 70-year-old patient is diagnosed with brainstem haemorrhage. Examination revealed increased tonus of flexor muscles accompanied by decreased tonus of extensor muscles. Such changes in muscle tonus can be explained by the irritation of the following brain structures:

a. Quadrigeminal plate

b. Vestibular nuclei

c. Red nuclei

d. Black substance

e. Reticular formation

49. Examination of a patient revealed that he had a strong, balanced, inert type of higher nervous activity according to Pavlov's classification. What temperament has this patient according to Hippocrates?

a. Melancholic

b. -

c. Sanguine

d. Choleric

e. Phlegmatic

50. It was determined that basal metabolic rate of a patient under study increased due value by 8%. This means that the intensity of energetic metabolism processes in this patient is:

- a. Essentially increased
- b. Normal**
- c. Moderately inhibited
- d. Moderately increased
- e. Essentially inhibited

51. Estimation of heat expenditures of a mans organism by means of inderect calomitery had the following results: the organism consumed 1000 ml of oxygen and emitted 800 ml of carbonic acid per minute. What is the respiratory quotient of a man under examination?

- a. 0,84
- b. 1,0
- c. 1,25
- d. 0,9
- e. 0,8**

52. A patient diagnosed with malignant carcinoid has extremely high concentration of serotonin in blood. This biogenic amine can be formed from the following amino acid:

- a. Methionine
- b. Tryptophan**
- c. Leucine
- d. Alanine
- e. Threonine

53. Parodontosis is treated by means of antioxidants. Which of the following natural compounds is used as an antioxidant:

- a. Tocopherol**
- b. Gluconate
- c. Choline
- d. Pyridoxine
- e. Thiamine

54. Examination of a patient 24 hours after appendectomy revealed neutrophilic leukocytosis with regenerative shift. What is the most probable mechanism of development of absolute leukocytosis in peripheral blood?

- a. Redistribution of leukocytes in the organism
- b. Slower emigration of leukocytes to the tissues
- c. Immunity activation
- d. Intensification of leukopoiesis**
- e. Reduction of leukolysis

55. A patient suffering from chronic myeloleukemia has got the following symptoms of anemia: decreased number of erythrocytes and low haemoglobin concentration, oxyphilic and polychromatophilic normocytes, microcytes. What is the leading pathogenetic mechanism of anemia development?

- a. Substitution of haemoblast**
- b. Deficiency of vitamin B12
- c. Chronic haemorrhage
- d. Reduced synthesis of erythropoietin
- e. Intravascular hemolysis of erythrocytes

56. Autopsy of a dead patient revealed that pia mater was dull, there were greenish-yellow overlays covering almost all convexital surface of cerebral hemispheres. Histological examination revealed extreme hyperemia of maters along with diffuse leukocytic infiltration. What is the most probable diagnosis?

- a. Anthrax
- b. Measles**

c. Meningococcal infection

- d. Tuberculosis
- e. Influenza

57. Autopsy of a 34 y.o. man who died from rheumatism revealed that epicardium surface was villous and covered with grey films that can be easily removed. After their removal the surface is edematous and plethoric. What is the most probable diagnosis?

a. Fibrinous pericarditis

- b. Hemorrhagic pericarditis
- c. Catarrhal pericarditis
- d. Proliferative pericarditis
- e. Purulent pericarditis

58. A 14-year-old patient was diagnosed with Hutchinson's triad: barrel-shaped incisors, parenchymatous keratitis and deafness. The revealed presentations are consistent with the following disease:

- a. Toxoplasmosis
- b. Tuberculosis
- c. Opisthorchiasis

d. Syphilis

- e. Leprosy

59. A 5 y.o. girl has high temperature and sore throat. Objectively: soft palate edema, tonsils are covered with grey films that can be hardly removed and leave deep bleeding tissue injuries. What disease is the most probable?

- a. Infectious mononucleosis
- b. Necrotic angina
- c. Vincent's angina
- d. Lacunar angina

e. Pharyngeal diphtheria

60. Soft palate arches were taken for histopathological examination because of suspected tumour (macroscopical examination revealed an ulcer with dense floor). Biopsy revealed necrosis of mucous membrane along with infiltration of submucous layer by lymphocytes, epithelioid cells, plasmatic cells, single neutrophils. There is also evident endo- and perivascularitis. What disease are the described changes typical for?

- a. Pharyngeal diphtheria

b. Primary syphilis

- c. Ulcerative stomatitis
- d. Aphthous stomatitis
- e. Ulcerative necrotic stomatitis (Vincent's stomatitis)

61. Macroscopic examination of lung tissue revealed areas of high airiness with small bubbles. Histological examination revealed thinning and rupture of alveolar septa accompanied by formation of large cystic cavities. What disease was revealed in a lung?

- a. Fibrosing alveolitis

b. Pulmonary emphysema

- c. Cavernous tuberculosis
- d. Multiple bronchiectasis
- e. Chronic bronchitis

62. Autopsy of a man, who died from typhoid fever on the 5th day of disease, revealed the following changes: aggregated follicles of ileum were enlarged and plethoric; they protruded over the mucous membrane, and multiple sulci and convolutions could be seen on their surface. Histological examination revealed plethority and edema of tissues, presence of granulomas composed of big cells with light cytoplasm and containing typhoid bacilli. These local changes are compliant with the following period of typhoid fever:

a. Stage of medullary swelling

- b. Stage of ulcer healing
- c. Stage of ulceration
- d. Stage of clean ulcers
- e. Stage of necrosis

63. Autopsy of a 68 year old man who died from chronic cardiac insufficiency revealed deformed, thickened, conjoined cusps of mitral valve. Along the edge of joining there were small (1-2 mm) thrombs. What form of endocarditis caused development of chronic cardiac insufficiency?

- a. Acute verrucous
- b. Diffuse
- c. Recurrent verrucous**
- d. Fibroplastic
- e. Polypoulcerous

64. A 42 year old patient who had been suffering from chronic granulomatous periodontitis and chronic purulent osteomyelitis of his lower jaw for 8 years died from chronic renal insufficiency. What complication of purulent osteomyelitis has developed in kidneys?

- a. Amyloidosis**
- b. Adipose degeneration
- c. Necrosis of epithelium of convoluted tubules
- d. Atrophy
- e. Hyalinosis

65. A 5 y.o. child had a temperature rise up to 40°C, acute headache, vomiting, anxiety, chill. 4 days later there appeared hemorrhagic skin eruption, oliguria and adrenal insufficiency that caused death. Bacteriological examination of smears from the child's pharynx revealed meningococcus. What disease form was revealed?

- a. Meningococcal nasopharyngitis
- b. -
- c. Meningococcal meningitis
- d. Meningoencephalitis
- e. Meningococemia**

66. Autopsy of a man, who died from acute posthaemorrhagic anaemia resulting from pulmonary haemorrhage, revealed the following: macroscopically - lung apexes were deformed, their section showed multiple whitish-grey foci 10-15 mm in diameter and multiple pathological cavities up to 15 mm in diameter with dense walls. Microscopically: the cavity walls presented proliferation of the connective tissue infiltrated by epithelioid cells, multicellular giant cells and lymphocytes. What is the most likely diagnosis?

- a. Hematogenic disseminated pulmonary tuberculosis
- b. Hematogenic miliary pulmonary tuberculosis
- c. Primary tuberculosis without signs of progress
- d. Progressing tuberculosis complex
- e. Secondary fibrocavernous tuberculosis**

67. Autopsy of a man who had been suffering from hypertension revealed in his brain a cavity with rubiginous walls. What event preceded development of these changes?

- a. Plasmorrhagias
- b. Abscess
- c. Diapedetic haemorrhages
- d. Ischemic infarction
- e. Haematoma**

68. A 7 y.o. girl was admitted to the infectious diseases hospital with fever, sore throat, common weakness. A doctor suspected diphtheria. What would be crucial for diagnosis confirmation after pure culture of causative agent had been singled out?

- a. Detection of volutine granules
- b. Hemolytic ability of a causative agent

c. Phagolysability

d. Toxigenity test

e. Cystinase test

69. Immune-enzyme assay of blood serum revealed presence of HBs-antigen. What disease is signalized by this antigen?

a. Viral hepatitis A

b. Tuberculosis

c. Syphilis

d. Viral hepatitis B

e. AIDS

70. On a certain territory mass death of rodents was registered. It was suspected that their death might have been caused by plague. What serological reaction should be applied for quick identification of antigen of the causative agent of this epizooty?

a. Precipitation

b. Passive hemagglutination

c. Neutralization

d. Complement binding

e. Agglutination

71. A 30 y.o. patient who was diagnosed with acute glomerulonephritis has proteinuria. What disturbance is the cause of this phenomenon?

a. Low oncotic pressure of blood plasma

b. Delayed excretion of products of nitrogen metabolism

c. Increased permeability of renal filter

d. High hydrostatic pressure of blood in capillaries

e. Decreased quantity of functioning nephrons

72. While of oral cavity examination the dentist revealed the formation of the first big cheekteeth on the lower jaw of a child. How old is this child?

a. 10-11 years old

b. 12-13 years old

c. 4-5 years old

d. 8-9 years old

e. 6-7 years old

73. A patient has an acute painfullness of face skin. What nerve is damaged?

a. Facial

b. Vagus

c. Glossopharyngeal

d. Trifacial

e. Oculomotor

74. A 3 year old child was admitted to the hospital with otitis. Pus is probable to spread from the tympanic cavity. Where can the pus get into?

a. Into internal ear

b. Into external acoustic duct

c. Into posterior cranial fossa

d. Into mastoid antrum

e. Into auditory tube

75. A patient had his tooth extracted. The lingual surface of this tooth was smaller than the buccal one. Masticatory surface has oval form. Deep transverse sulcus separates buccal and lingual tubercles. The root is strongly compressed in mesio-distal direction and has longitudinal sulci on its apical surfaces, it is bifurcated. What tooth was extracted?

a. Second upper premolar

b. First upper premolar

- c. Lower canine
- d. Upper canine
- e. First lower premolar

76. A newborn didn't take his first breath. Autopsy revealed that in spite of unobstructed respiratory tracts the baby's lungs didn't expand. What might be the cause of it?

- a. Apical cap of lung
- b. Alveole enlargement
- c. Bronchostenosis
- d. Bronchi rupture
- e. Surfactant absence**

77. A patient is found to have increased permeability of blood vessel walls accompanied by increased gingival haemorrhage, petechial skin haemorrhages, dedentition. What pathology is observed in this patient?

- a. Hypovitaminosis C**
- b. Hypervitaminosis C
- c. Hypovitaminosis A
- d. Hypovitaminosis D
- e. Hypervitaminosis D

78. Examination of a 40 y.o. man ill with stenosing (without metastases) esophageal carcinoma revealed the following changes: atrophy of skeletal muscles and fatty tissue. His skin is sallow, epidermis is attenuated, heart has grown smaller. Myocardium and liver are brown. What is the most probable diagnosis?

- a. Myasthenia
- b. Brown atrophy
- c. Addison's disease
- d. Alimentary cachexia**
- e. Cancerous cachexia

79. A 2 y.o. child has catarrhal effects and skin eruption. A doctor suspected scarlet fever. The child was injected intracutaneously with some serum to the erythrogenic streptococcus toxin, on the spot of injection the eruption disappeared. What do the reaction results mean?

- a. The disease was caused by nonhemolytic streptococcus
- b. The child has hypersensitivity to the erythrogenic toxin
- c. They confirm the clinical diagnosis**
- d. The complete dose of serum could be introduced intravenously
- e. The child's immune system is very weakened

80. A child is presumably ill with diphtheria. A specimen of affected mucous membrane of his pharynx was taken for analysis. The smear was stained and microscopical examination revealed yellow rods with dark blue thickenings on their ends. What structural element of a germ cell was revealed in the detected microorganisms?

- a. Flagella
- b. Volutin granules**
- c. Capsule
- d. Plasmids
- e. Spores

81. Bacteriological analysis of purulent discharges from urethra revealed presence of gram-negative bacteria resembling of coffee beans, which were able to decompose glucose and maltose into acid. They were found in the leukocytes. These bacteria are causative agents of the following disease:

- a. Gonorrhoea**
- b. Venereal lymphogranulomatosis
- c. Melioidosis
- d. Ulcer molle
- e. Syphilis

82. A 34 year old male patient consulted a doctor about face carbuncle. Objectively: a loose, painless edema of hypodermic tissue; black crust in the centre of carbuncle, vesicular rash around it. Microbiological examination revealed static streptobacilli capable of capsule building. What microorganisms are the causative agents of this disease?

- a. *Bacillus anthracoides*
- b. *Staphylococcus aureus*
- c. ***Bacillus anthracis***
- d. *Bacillus subtilis*
- e. *Bacillus megaterium*

83. It was reported an outbreak of food poisoning connected with consumption of pastry that had been stored at a room temperature and had duck eggs as one of the ingredients. What microorganisms might have caused this disease?

- a. *Legionella*
- b. *Comma bacilli*
- c. *Colon bacilli*
- d. *Staphylococci*
- e. ***Salmonella***

84. A patient with convulsive contractions of facial muscles was admitted to the infectious disease ward. From a scratch on his lower right extremity analysts isolated bacteria with terminal endospores that gave them drumstick appearance. What bacteria are compliant with given description?

- a. *Bacillus anthracis*
- b. *Bacillus cereus*
- c. *Clostridium botulinum*
- d. *Clostridium perfringens*
- e. ***Clostridium tetani***

85. A patient complained about a carbuncle on his face. Examination results: neither dense nor painful edema of subcutaneous cellular tissue, there is black crust in the middle of the carbuncle and peripheral vesicular rash around it. Bacteriological examination revealed presence of immobile streptobacilli able of capsulation. What microorganisms are causative agents of this disease?

- a. *Bacillus subtilis*
- b. ***Bacillus anthracis***
- c. *Bacillus anthracoides*
- d. *Staphylococcus aureus*
- e. *Bacillus megaterium*

86. A patient complained about ear noise and pain sensations. Objectively: the patient has acute respiratory disease, rhinitis. The infection penetrated into the tympanic cavity through the following opening of the pharynx:

- a. Aperture of larynx
- b. **Pharyngeal opening of auditory tube**
- c. Choanae
- d. Tympanic opening of auditory tube
- e. Fauces

87. A 3 month old infant has got a white deposition on the mucous membrane of his mouth, tongue and lips. The doctor suspected candidosis. What nutrient medium should be used for inoculation of the material under examination in order to confirm this diagnosis?

- a. *Clauberg*
- b. ***Sabouraud***
- c. *Loewenstein-Jensen*
- d. *Endo*
- e. *Roux*

88. During tooth development periodontium preserves remains of embryonal *coelothiza* (Hertwigs epithelial root sheath) that are called *Malassez's* epithelial rests. They can be source of cyst or tumour

development in the area of tooth radix. What cells form Hertwigs epithelial root sheath?

- a. Cementoblasts
- b. Cells of enamel organ**

- c. Pulpocytes
- d. Mesenchymal cells
- e. Odontoblasts

89. Antigens of Sonne shigella placed on the objects of outdoor environment and foodstuffs can be revealed by means of a certain test with application of a diagnostic test system that includes a polystyrene tray with adsorbed specific antibodies. What reaction is it?

- a. Immunofluorescence test
- b. Direct hemagglutination test
- c. Immuno-electrophoresis test
- d. Immune-enzyme assay**
- e. Passive inverse hemagglutination test

90. Isonitol triphosphates are produced in the organism tissues as a result of phosphatidyl inositol diphosphate hydrolysis. In the mechanism of hormone activity they perform the function of secondary mediators (messengers). What is their activity in the cell aimed at?

- a. Inhibition of phosphodiesterase
- b. Inhibition of protein kinase C
- c. Activation of adenylate cyclase
- d. Activation of protein kinase A
- e. Release of calcium ions from the cell depots**

91. After restoration of blood circulation in damaged tissue accumulation of lactate coming stops and speed of glucose consumption slows down. These metabolic changes are caused by activation of the following process:

- a. Lipolysis
- b. Anaerobic glycolysis
- c. Aerobic glycolysis**
- d. Gluconeogenesis
- e. Glycogen biosynthesis

92. A patient has an allergic reaction accompanied by itching, edemata and reddening of skin. What biogenic amine has an increased concentration in the tissues?

- a. Gamma-aminobutyric acid
- b. Histamine**
- c. Tryptamine
- d. Serotonin
- e. Dopamine

93. In hemotransfusions it is recommended to transfuse only phenotype-matched blood. According to the AB0 system, blood group is determined by:

- a. Carbohydrate determinants of leukocyte membranes
- b. Carbohydrate determinants of erythrocyte membranes**
- c. Protein determinants of erythrocyte membranes
- d. Proteins of blood serum
- e. Protein-polysaccharide components of leukocytes

94. A patient being treated in the burns department has suppurative complication. The pus is of bluish-green colour that is indicative of infection caused by *Pseudomonas aeruginosa*. What factor is typical for this causative agent?

- a. Mycelium formation
- b. Gram-negative stain**
- c. Coccal form
- d. Presense of spores
- e. Cell pairing

95. Specimen of a patient's sputum was stained with the following dyes and reagents: Ziehl's solution, methylene blue solution, 5% solution of sulfuric acid. What staining method was applied?

a. Ziehl-Neelsen

- b. Grams
- c. Neissers
- d. Peshkovs
- e. Burris

96. A patient has recently had staphylococcal infection that led to anasarca; laboratory urine analysis revealed massive proteinuria. Results of blood analysis: hypoproteinemia, hyperlipemia. What pathology can be suspected?

a. Nephrotic syndrome

- b. Pyelonephritis
- c. Chronic renal insufficiency
- d. Urolithiasis
- e. Glomerulonephritis

97. A new-born child has hyperemia, edema of the oral mucous membrane, small erosions with viscous mucopus. Smears from the mucopus contain a lot of leukocytes with Gram-negative diplococci. The same microorganisms can be found also beyond the leukocytes. What is the most probable diagnosis?

a. Gonococcal stomatitis

- b. Congenital syphilis
- c. Blennorrhea
- d. Staphylococcal stomatitis
- e. Toxoplasmosis

98. Microscopical study of discharges from urethra of a patient suffering from acute urethritis revealed bean-shaped microorganisms up to 1 micrometer in diameter arranged in pairs and placed inside the leukocytes. What microorganisms are these?

- a. Streptococci
- b. Staphylococci
- c. Meningococci
- d. Tetracocci

e. Gonococci

99. In order to prevent gum inflammation and to improve regeneration of epithelial periodontium cells manufacturers add to the tooth pastes one of the following vitamins:

- a. Calciferol
- b. Biotin
- c. Phyloquinone

d. Retinol

- e. Thiamine

100. After anlage of primary teeth at the beginning of the fifth month of embryogenesis some factors disturbed growth ability of dental plate behind the mentioned anlagen. What serious consequence is possible?

- a. Cervix of enamel organ won't disintegrate
- b. Formation of Hertwig's epithelial root sheath will be disturbed

c. Permanent teeth won't be anlagen

- d. Formation of mouth vestibule will be disturbed
- e. Dentin of primary teeth won't be formed

101. In the surgical department of a dental clinic cases of hospital-acquired staphylococcal infection were registered which was caused by strains with multiple drug resistance. Such feature can be identified by presence of:

- a. Exotoxins
- b. Virulent bacteriophages

- c. F-plasmids
- d. Temperate bacteriophages

e. R-plasmids

102. Histological examination of periapical tissue taken from a patient who has been suffering from chronic periodontitis for a long time revealed a granulation tissue interlaced by taeniae of squamous cell epithelium and encircled within a fibrous capsule. What is the most probable diagnosis?

- a. Simple granuloma
- b. Cystic granuloma
- c. Abscessing periodontitis
- d. Granulating periodontitis

e. Composite granuloma

103. What method should be applied for sterilization of heatproof and moistureproof stomatological instruments in order to ensure total destruction of viruses, vegetative and spore forms of microorganisms?

- a. Boiling
- b. Tyndallization
- c. Burning in the flame of gas burner

d. Autoclaving

e. Pasteurization

104. Examination of a bronchial tissue sample revealed atrophy of mucous membrane, cystic degeneration of glands, focal metaplastic changes of lining prismatic epithelial cells into multilayer squamous cells; increase in goblet cell number; in some parts of bronchial wall and especially in the mucous membrane there was marked cellular inflammatory infiltration and growth of granulation tissue bulging into the bronchial lumen in form of a polyp. What is the most likely diagnosis?

- a. Acute bronchitis
- b. Lobar pneumonia

c. Chronic bronchitis

- d. Bronchopneumonia
- e. Interstitial pneumonia

105. A 10 month old child has high excitability, sleep disturbance, amyotonia, retarded dentition, teeth erupt with inadequate enamel calcification. These changes are caused by deficiency of the following vitamin:

- a. Riboflavin
- b. Retinol
- c. Nicotinamide

d. Cholecalciferol

e. Thiamine

106. In the process of tooth tissue histogenesis dentin wasn't formed in time for some reasons. What process of further histogenesis will be delayed or will not take place at all?

a. Enamel formation

- b. Predentinal space formation
- c. Acellular cement formation
- d. Cellular cement formation
- e. Pulp formation

107. A 70-year-old man has developed prosthodontic stomatitis. Apart of this he was found to have an evident lesion of mouth corners. Microscopical examination revealed large ovoid gram-positive cells. What microorganisms are most likely to be the leading etiological agent of such a lesion?

a. Candida fungi

- b. Staphylococci
- c. Corynebacteria
- d. Neisseria
- e. Streptococci

108. Enamel is characterized by high resistance to the influence of various mechanical and chemical factors. What components synthesis provideds such resistance?

- a. Collagen
- b. Carbonate apatite
- c. Hydroxyapatite
- d. Chlorapatite
- e. Phtorapatite**

109. Examination of a kidney tissue sampling revealed leukocyte infiltration of interstitial tissue; miliary abscesses; dystrophic tubules filled with desquamated epithelium and leukocytes. What is the most likely diagnosis?

- a. Pyelonephritis**
- b. Pyelitis
- c. Nephrolithiasis
- d. Necrotic nephrosis
- e. Glomerulonephritis

110. A 23 year old man got perforation of hard palate. There was also a solid well-defined formation. Post-operative microscopical examination of this formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis and cellular infiltrate consisting mainly of plasmocytes but also of lymphocytes and epithelioid cells. What is the most probable diagnosis?

- a. Syphilis**
- b. Scleroma
- c. Lepra
- d. Sarcoma
- e. Tuberculosis

111. A 7 year old child has angina. A smear from the tonsil surface was inoculated on blood agar. 24 hours later there had grown colonies of streptococci. Nutrient medium turned transparent around them. This study revealed presence of the following pathogenous factor:

- a. Hemolysin**
- b. Neuraminidase
- c. Leukocidin
- d. Beta-lactamase
- e. Endotoxin

112. Autopsy revealed that the upper lobe of the right lung was enlarged, grey, airless; surface of incision was dripping with turbid liquid; pleura had a lot of fibrinous plicae. Microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocyttes and fibrin fibres. Bronchus wall was intact. What is the most probable diagnosis?

- a. Focal pneumonia
- b. Influenzal pneumonia
- c. Interstitial pneumonia
- d. Pulmonary abscess
- e. Croupous pneumonia**

113. A 25-year-old patient with clinical presentations of nephrotic syndrome underwent puncture biopsy of a kidney. Microscopical examination revealed expansion of the epithelium cells of proximal nephron tubules, vacuoles containing transparent liquid in the cytoplasm, peripheral deviation of the nucleus. What degeneration was revealed in the tubule epithelium?

- a. Granular
- b. Keratinization
- c. Hyaline drop
- d. Hydropic**
- e. Adipose

114. A 60 year old patient complains of tongue burning, excessive salivation and glossalgia effects that came 5 days after he started using a metal dental bridge. Objectively: mucous membrane of oral

cavity is edematic and hyperemic. What form of stomatitis is it?

- a. Purulent
- b. Gangrenous
- c. Fibrinous
- d. Catarrhal**
- e. Ulcerous

115. Pathological material taken from a patient suffering from pulpitis was inoculated onto Kitt-Tarozzi cultural medium. It is planned to find the following microorganisms:

- a. Anaerobic**
- b. Acidophilic
- c. Aerobic
- d. Haemolytic
- e. Acid-resistant

116. Histological examination of myocardium of a 47-year-old patient with rheumatic heart disease (section material) revealed some big visually empty vacuoles within the cardiomyocytes. They turn black when stained with osmic acid, and yellow-red when stained with sudan III. What pathological process is it?

- a. Carbohydrate degeneration
- b. Dysproteinosis
- c. Hyaline drop degeneration
- d. Hydropic degeneration
- e. Adipose degeneration**

117. In spring a patient experiences petechial haemorrhages, loosening of teeth, high liability to colds. A doctor supposes hypovitaminosis C. In this respect loosening of teeth can be explained by:

- a. Structural change of glycosaminoglycan
- b. Mechanical damage of teeth
- c. Disturbed oxidation-reduction process in the periodont
- d. Structural failure of collagen in the periodontal ligaments**
- e. Increased permeability of periodont membranes

118. Examination of a patient revealed that dental hypoplasia was caused by hypovitaminosis of vitamins A and D. These vitamins were administered perorally but they didnt have any medicinal effect. What is the probable cause of disturbed vitamin assimilation?

- a. Hypochlorhydria
- b. Achylia
- c. Achlorhydria
- d. Bile acid deficiency**
- e. Hyperchlorhydria

119. A patient consulted a dentist about pains, reddening and swelling of gums. The dentist assumed herpetic gingivostomatitis. What virus might have caused this disease?

- a. Herpes simplex virus type 1**
- b. Herpes zoster
- c. Epstein-Barr virus
- d. Cytomegalic virus
- e. Herpes simplex virus type 2

120. Examination of a 60 y.o. mans oral cavity revealed the following changes: the 26th and 27th tooth are covered with metallic crowns that plunge deep into the gums. There is a parodontal pouch 0,7 cm deep between them containing some pus. Gingival papillae of these teeth are hyperemic, edematic, cyanotic, bleed as a reaction to touching by a dental explorer. X-ray picture shows resorption of interdental septa of $\frac{1}{2}$ of tooth root. What is the most probable diagnosis?

- a. Hypertrophic gingivitis
- b. Generalized parodontitis
- c. -

d. Local parodontitis

e. Chronic catarrhal gingivitis

121. After an operation a patient's sensitivity of front and lateral surface of neck has reduced. What nerve is damaged?

- a. N.occipitalis minor
- b. N.phrenicus
- c. N.auricularis magnus
- d. Nn.supraclaviculares

e. N.transversus colli

122. Inside a human cell the informational RNA containing both exons and introns was delivered to the granular endoplasmic reticulum to the ribosomes. What process does NOT take place?

- a. Replication
- b. Translation
- c. Prolongation

d. Processing

e. Transcription

123. A patient arrived to the oral surgery department with dislocation of temporomandibular joint and injury of its main ligament. Name this ligament:

a. Medial

b. Lateral

- c. Styloid-mandibular
- d. Mandibular
- e. Pterygoid-mandibular

124. A patient complains of having urination disorder. He is diagnosed the hypertrophy of prostate gland. What part of gland is damaged?

a. Median lobe

- b. Right lobe
- c. Apex
- d. Base
- e. Left lobe

125. In order to make a functional complete denture the left superior canine of a patient should be extracted. After the infraorbital anesthesia the patient got a rapidly growing hematoma in the front part of face. It was found that the injured artery is a branch of:

- a. A.ophthalmica
- b. A.labialis superior
- c. A.alveolaris inferior
- d. A.temporalis superficialis

e. A.maxillaris

126. A patient consulted dental surgeon about an injury of submandibular triangle. During the wound cleansing the surgeon found that the artery leading to the soft palate is damaged. What artery is damaged?

- a. A.pharyngea ascendens
- b. A.facialis
- c. A.palatina descendens
- d. A.sphenopalatina

e. A.palatina ascendens

127. A 28 year old man with cut wound of frontal skin was admitted to the hospital. A vessel that supplies blood to the frontal part of head was ligated in order to stop bleeding. What vessel was ligated?

- a. A.infraorbitalis
- b. A.dorsalis nasi

c. A.temporalis superficialis

d. A.supraorbitalis

e. A.angularis

128. During ablation of the nose wing lypoma a dentist injured a vessel, that caused a saphenous hematoma. What vessel was damaged?

a. A.supraorbitalis

b. A.maxillaris

c. A.facialis

d. A.infraorbitalis

e. A.angularis

129. The operative dentistry department admitted a newborn girl who choked during sucking. Examination revealed cleft palate arising from non-union of the middle frontal process and maxillary process of the I-st branchial arch. The cleft was located in the palate between:

a. Processus palatinus maxillae dextrae et sinistrae

b. Processus palatinus maxillae et lamina horizontalis os palatinum

c. In the region of canalis incisivus

d. Os incisivum et processus palatinus maxillae

e. Lamina horizontalis os palatinum dextrum et sinistrum

130. A patient has an injury in right lateral area of belly. What part of large intestine is most likely injured?

a. Rectum

b. Ascending colon

c. Descending colon

d. Transverse colon

e. Sigmoid colon

131. A patient complains of headache, heavy breathing. X-ray examination confirmed the diagnosis - frontitis. What nasal meatus may contain purulent discharge?

a. Superior

b. Common

c. Above the superior nasal concha

d. Middle

e. Inferior

132. An eye trauma caused soft tissues infection of eye-socket. Through what anatomical formation can the infection penetrate into the middle cranial fossa?

a. Through the superior orbital fissure

b. Through the posterior ethmoidal foramen

c. Through the zygomatic orbital foramen

d. Through the inferior orbital fissure

e. Through the anterior ethmoidal foramen

133. A three year old child was admitted to the hospital with a foreign body in bronches. What bronchus contains most likely a foreign body?

a. Lobular

b. Right primary

c. Right segmental

d. Left primary

e. Left segmental

134. When a patient puts his tongue out the tip of it deflects to the left. Motor innervation of what cranial nerve is disturbed in this case?

a. N.hypoglossus dexter

b. N.vagus dexter

c. N.facialis sinister

- d. N.trigeminus sinister
- e. N.glossopharyngeus dexter

135. A patient has air embolism as a result of a skin injury in the middle portion of the sternocleidomastoid muscle. Which cervical vein was injured?

- a. External jugular vein
- b. Internal jugular vein
- c. Transverse cervical vein
- d. Posterior auricular vein
- e. Anterior jugular vein

136. Chronic rhinitis was complicated by inflammation of frontal sinus. What nasal meatus did the infection get into this sinus through?

- a. Inferior
- b. Superior
- c. Nasopharyngeal
- d. Median
- e. Common

137. A victim of a road accident has an abruption of a part of mandibular angle, displacement of fragment backwards and upwards. What ligament is responsible for this displacement?

- a. Styloid-mandibular
- b. Lateral
- c. Pterygoid-mandibular
- d. Sphenoid-mandibular
- e. Intraarticular

138. A patient consulted a doctor about the inflammation of the ethmoid bone cells (ethmoiditis). Examination revealed the disorder of blood supply to the bone. The ethmoidal cells are normally supplied with blood by the branches of the following artery:

- a. A. cerebri anterior
- b. A. transversa faciei
- c. A. infraorbitalis
- d. A. facialis
- e. A. ophthalmica

139. A 69 year old patient has got an abscess of frontal lobe as a result of purulent infection in nasal cavity. What anatomical formation did the infection penetrate through?

- a. Foramen sphenopalatinum
- b. Foramen rotundum
- c. Foramen ovale
- d. Foramen ethmoidalae posterior
- e. Foraminae cribrosae

140. A patient displays abnormal retrodeviation of his lower jaw as a result of trauma in the region of mandibular coronal process. What muscle is most likely to be damaged?

- a. M.pterygoideus lateralis
- b. M.masseter
- c. M.temporalis
- d. M.pterygoideus medialis
- e. M.levator anguli oris

141. A patient has assymetric face, it is especially noticeable during active muscle contraction. What nerve may be damaged?

- a. Sublingual
- b. Facial (motor unit)
- c. Trigeminal, II branch
- d. Trigeminal, I branch

e. Trigeminal, III branch

142. A 5 year old child was admitted to the ENT-department with suppurative inflammation of middle ear (tympanitis). It began with the inflammation of nasopharynx. What canal of temporal bone did the infection get into tympanic cavity through?

a. Carotid canal

b. Musculotubal canal

c. Caroticotympanic foramina

d. Small canal of chorda tympani

e. Small tympanic canal

143. A 58 year old woman had her uterus and all appendages completely removed. It resulted in stoppage of urine excretion. Cystoscopy results: bladder doesn't contain any urine, urine doesn't come also from ureteric orifices. What part of urinary excretion system was damaged during the operation?

a. Ren

b. Ureter

c. Vesica urinaria

d. Uretra

e. Pelvis renalis

144. A patient has lost ability to recognize the objects by the typical for them sounds (clock, bell, music). What part of brain is most likely damaged?

a. Lobus parietalis

b. Insula

c. Lobus occipitalis

d. Lobus frontalis

e. Lobus temporalis

145. A patient suffers from middle ear inflammation (otitis). He complains also of disordered taste sensation in the anterior tongue part. What nerve is damaged?

a. N.glossopharyngeus

b. N.facialis

c. N.vestibulo-cochlearis

d. N.trigeminus

e. N.vagus

146. A surgeon should reach the omental bursa to perform an operation on abdominal cavity. How can he reach this part of peritoneal cavity without affecting the integrity of lesser omentum?

a. Through the right paracolic sulcus

b. Through the right mesenteric sinus

c. Through the left mesenteric sinus

d. Through the epiploic foramen

e. Through the left paracolic sulcus

147. A patient complains of aching gums and maxillary teeth. What nerve is inflamed?

a. Accessory

b. II branch of the V pair

c. I branch of the V pair

d. III branch of the V pair

e. Sublingual

148. A 5 year old child suffers from the neck deformity. Clinical examination revealed such symptoms: apparent flexion of head to the left, his face is turned right, passive movements of the head to the right are restricted. What muscles development was disturbed in this case?

a. Long muscle of head

b. Sternocleidomastoid

c. Splenius muscle of head

d. Trapezius

e. Sternosublingual

149. A boxer who got a punch in the region of temporomandibular joint has a traumatic dislocation of mandible. Displacement of what articular surfaces will overstep the limits of physiological norm?

- a. Coronoid process and submandibular fossa
- b. Coronoid process and pterygoid fossa
- c. Head of mandible and mandibular fossa**
- d. Head of mandible and submandibular fossa
- e. Neck of mandible and submandibular fossa

150. On examination of a road accident victim a doctor revealed left clavicle fracture and disturbed blood circulation in an extremity (no pulsing of radial artery). What cause of blood circulation disturbance is the most probable?

- a. Compression of axillary vein
- b. Compression of subclavian artery**
- c. Compression of subclavian vein
- d. Compression of axillary artery
- e. Compression of vertebral artery

151. A 60 year old patient has problems with formation and moving of food mass, it disturbs eating process. His tongue is stiff, speaking is impossible. What nerve is damaged?

- a. IX
- b. V
- c. XII**
- d. XI
- e. VII

152. A patient has urolithiasis that was complicated by a renal calculus passage. At what level of ureter is it most likely to stop?

- a. In the middle abdominal part
- b. In pelvis
- c. Between abdominal and pelvic part**
- d. 2 cm above flowing into urinary bladder
- e. 5 cm above pelvic part

153. A woman consulted a doctor about swelling and tenderness of the lower extremity, swollen veins and nodes on the medial surface of thigh. Which vein was affected?

- a. Great saphenous**
- b. Femoral
- c. Tibial
- d. Popliteal
- e. Small saphenous

154. During the examination of patients oral cavity a dentist found a carious cavity on the crown surface of the second premolar tooth that was turned to the first molar tooth. Name the damaged crown surface:

- a. Facies lingualis
- b. Facies vestibularis
- c. Facies mesialis**
- d. Facies distalis
- e. Facies occlusalis

155. A patient with cancer of the back of tongue had an intensive bleeding as a result of tumor spread to the dorsal artery of tongue. What vessel should be ligated in order to stop bleeding?

- a. Facial artery
- b. Ascending pharyngeal artery
- c. Dorsal artery of tongue
- d. Deep artery of tongue

e. Lingual artery

156. A patient has an exudative pleurisy. At what level should the pleural puncture along the posterior axillary line be taken?

- a. VII intercostal space
- b. VIII intercostal space

c. IX intercostal space

- d. XI intercostal space
- e. VI intercostal space

157. At the recruiting office US examination of a 19-year-old man revealed nephroptosis. Normally the kidneys should be located at the following vertebral level:

- a. XII thoracic and I lumbar
- b. IX-XII thoracic
- c. IX-X thoracic
- d. IV-V lumbar

e. XI thoracic and III lumbar

158. A 17 year old student pressed out a pustule in the medial angle of eye. In 2 days she was taken to the institute of neurosurgery with thrombosis of cavernous sinus. Through what vein did the infection get into this sinus?

a. V.angularis

- b. V.profunda faciei
- c. V.diploicae frontalis
- d. V.transversa faciei
- e. V.maxillaris

159. A 35 year old patient came to the admission department with complaints of pain and edema in the region of floor of oral cavity. After examination he was diagnosed with inflammation in the region of excretory duct of submandibular gland. Where does this duct open into?

a. Caruncula sublingualis

- b. Foramen caecum linguae
- c. Recessus gingivalis
- d. Plica fimbriata
- e. Vestibulum oris

160. Histological examination in the area of cervix of a fundic gland reveals small cells that have high nuclear-cytoplasmatic ratio and basophilic cytoplasm. What is the function of these cells?

- a. Secretion of chlorine ions
- b. Pepsinogen secretion
- c. Protective
- d. Endocrinal

e. Regeneration of glandular epithelium

161. Examination of a 2-year-old child revealed physical developmental lag, the child often has pneumonias. The child was diagnosed with nonclosure of ductus arteriosus. Haemodynamics disorder was caused by the intercommunication of the following vessels:

- a. Superior cava and pulmonary trunk
- b. Aorta and pulmonary veins
- c. Pulmonary trunk and pulmonary veins
- d. Superior cava and aorta

e. Aorta and pulmonary trunk

162. Underdevelopment of which parts of facial skeleton in the embryonal period is the reason for such a malformation as cleft palate?

- a. Frontal processes
- b. Mandibular processes
- c. Mandibular and palatine processes

d. Palatine processes

e. Frontal and maxillary processes

163. Influence of unfavourable factors upon the organism causes change of thymus accompanied by mass loss of thymocytes, their displacement to the peripheral organs, proliferation of epithelioreticulocytes. What phenomenon is it?

- a. Age thymus involution
- b. Thymus dystrophy
- c. Thymus atrophy

d. Accidental thymus involution

e. Thymus hypotrophy

164. Examination of a patient revealed abnormal development of enamel. This is caused by damage of the following structural elements of dental germ:

- a. Pulp of enamel organ
- b. Cervix of enamel organ
- c. External enamel epithelium of enamel organ
- d. Intermediate layer of enamel organ

e. Internal enamel epithelium of enamel organ

165. Recovery of an organism from an infectious disease is accompanied by neutralization of antigens by specific antibodies. What cells produce them?

a. T-lymphocytes

b. Plasmocytes

- c. Tissue basophils
- d. Fibroblasts
- e. Eosinophils

166. A 70-year-old patient is diagnosed with brainstem haemorrhage. Examination revealed increased tonus of flexor muscles accompanied by decreased tonus of extensor muscles. Such changes in muscle tonus can be explained by the irritation of the following brain structures:

- a. Black substance
- b. Reticular formation
- c. Vestibular nuclei
- d. Quadrigeminal plate

e. Red nuclei

167. It is necessary to take the cerebrospinal fluid from a patient with suspected inflammation of brain tunics. Diagnostic puncture was performed between the arches of the lumbar vertebrae. During the puncture the needle went through the following ligament:

a. Yellow (flaval)

- b. Anterior longitudinal
- c. Intertransverse
- d. Posterior longitudinal
- e. Iliolumbar

168. Examination of a patient revealed that he had a strong, balanced, inert type of higher nervous activity according to Pavlov's classification. What temperament has this patient according to Hippocrates?

- a. Sanguine
- b. Melancholic
- c. -

d. Phlegmatic

e. Choleric

169. It was determined that basal metabolic rate of a patient under study increased due value by 8%. This means that the intensity of energetic metabolism processes in this patient is:

- a. Moderately inhibited

b. Moderately increased

c. Normal

d. Essentially inhibited

e. Essentially increased

170. Estimation of heat expenditures of a mans organism by means of inderect calomitery had the following results: the organism consumed 1000 ml of oxygen and emitted 800 ml of carbonic acid per minute. What is the respiratory quotient of a man under examination?

a. 1,0

b. 0,8

c. 0,9

d. 1,25

e. 0,84

171. A patient diagnosed with malignant carcinoid has extremely high concentration of serotonin in blood. This biogenic amine can be formed from the following amino acid:

a. Tryptophan

b. Leucine

c. Methionine

d. Threonine

e. Alanine

172. Parodontosis is treated by means of antioxidants. Which of the following natural compounds is used as an antioxidant:

a. Choline

b. Tocopherol

c. Gluconate

d. Thiamine

e. Pyridoxine

173. Examination of a patient 24 hours after appendectomy revealed neutrophilic leukocytosis with regenerative shift. What is the most probable mechanism of development of absolute leukocytosis in peripheral blood?

a. Redistribution of leukocytes in the organism

b. Slower emigration of leukocytes to the tissues

c. Immunity activation

d. Intensification of leukopoiesis

e. Reduction of leukolysis

174. A patient suffering from chronic myeloleukemia has got the following symptoms of anemia: decreased number of erythrocytes and low haemoglobin concentration, oxyphilic and polychromatophilic normocytes, microcytes. What is the leading pathogenetic mechanism of anemia development?

a. Chronic haemorrhage

b. Substitution of haemoblast

c. Deficiency of vitamin B12

d. Intravascular hemolysis of erythrocytes

e. Reduced synthesis of erythropoietin

175. Autopsy of a dead patient revealed that pia mater was dull, there were greenish-yellow overlays covering almost all convexital surface of cerebral hemispheres. Histological examination revealed extreme hyperemia of maters along with diffuse leukocytic infiltration. What is the most probable diagnosis?

a. Tuberculosis

b. Influenza

c. Measles

d. Anthrax

e. Meningococcal infection

176. A 14-year-old patient was diagnosed with Hutchinsons triad: barrel-shaped incisors, parenchymatous keratitis and deafness. The revealed presentations are consistent with the following disease:

- a. Lepra
- b. Toxoplasmosis
- c. Syphilis**
- d. Tuberculosis
- e. Opisthorchiasis

177. A 5 y.o. girl has high temperature and sore throat. Objectively: soft palate edema, tonsils are covered with grey films that can be hardly removed and leave deep bleeding tissue injuries. What disease is the most probable?

- a. Necrotic angina
- b. Pharyngeal diphtheria**
- c. Lacunar angina
- d. Vincents angina
- e. Infectious mononucleosis

178. Soft palate arches were taken for bioptic examination because of suspected tumour (macroscopical examination revealed an ulcer with dense floor). Biopsy revealed necrosis of mucous membrane along with infiltration of submucous layer by lymphocytes, epithelioid cells, plasmatic cells, single neutrophils. There is also evident endo- and perivascularitis. What disease are the described changes typical for?

- a. Ulcerative necrotic stomatitis (Vincents stomatitis)
- b. Pharyngeal diphtheria
- c. Aphthous stomatitis
- d. Ulcerative stomatitis
- e. Primary syphilis**

179. Macroscopic examination of lung tissue revealed areas of high airiness with small bubbles. histological examination revealed thinning and rupture of alveolar septa accompanied by formation of large diversiform cavities. What disease was revealed in a lung?

- a. Cavernous tuberculosis
- b. Multiple bronchiectasis
- c. Pulmonary emphysema**
- d. Chronic bronchitis
- e. Fibrosing alveolitis

180. Autopsy of a man, who died from typhoid fever on the 5th day of disease, revealed the following changes: aggregated follicles of ileum were enlarged and plethoric; they protruded over the mucous membrane, and multiple sulci and convolutions could be seen on their surface. Histological examination revealed plethority and edema of tissues, presense of granulomas composed of big cells with light cytoplasm and containing typhoid bacilli. These local changes are compliant with the following period of typhoid fever:

- a. Stage of ulcer healing
- b. Stage of necrosis
- c. Stage of medullary swelling**
- d. Stage of clean ulcers
- e. Stage of ulceration

181. Autopsy of a 68 year old man who died from chronic cardiac insufficiency revealed deformed, thickened, conjoined cusps of mitral valve. Along the edge of joining there were small (1-2 mm) thrombs. What form of endocarditis caused development of chronic cardiac insufficiency?

- a. Diffuse
- b. Fibroplastic
- c. Polypoulcerous
- d. Recurrent verrucous**

e. Acute verrucous

182. A 42 year old patient who had been suffering from chronic granulomatous periodontitis and chronic purulent osteomyelitis of his lower jaw for 8 years died from chronic renal insufficiency. What complication of purulent osteomyelitis has developed in kidneys?

a. Necrosis of epithelium of convoluted tubules

b. Amyloidosis

c. Adipose degeneration

d. Hyalinosis

e. Atrophy

183. A 5 y.o. child had a temperature rise up to 40°C, acute headache, vomiting, anxiety, chill. 4 days later there appeared hemorrhagic skin eruption, oliguria and adrenal insufficiency that caused death. Bacteriological examination of smears from the child's pharynx revealed meningococcus. What disease form was revealed?

a. Meningoencephalitis

b. Meningococcal meningitis

c. Meningococemia

d. Meningococcal nasopharyngitis

e. -

184. Autopsy of a man, who died from acute posthaemorrhagic anaemia resulting from pulmonary haemorrhage, revealed the following: macroscopically - lung apices were deformed, their section showed multiple whitish-grey foci 10-15 mm in diameter and multiple pathological cavities up to 15 mm in diameter with dense walls. Microscopically: the cavity walls presented proliferation of the connective tissue infiltrated by epithelioid cells, multicellular giant cells and lymphocytes. What is the most likely diagnosis?

a. Primary tuberculosis without signs of progress

b. Hematogenic disseminated pulmonary tuberculosis

c. Hematogenic miliary pulmonary tuberculosis

d. Secondary fibrocavernous tuberculosis

e. Progressing tuberculosis complex

185. Autopsy of a man who had been suffering from hypertension revealed in his brain a cavity with rubiginous walls. What event preceded development of these changes?

a. Ischemic infarction

b. Diapedetic haemorrhages

c. Haematoma

d. Plasmorrhagias

e. Abscess

186. A 7 y.o. girl was admitted to the infectious diseases hospital with fever, sore throat, common weakness. A doctor suspected diphtheria. What would be crucial for diagnosis confirmation after pure culture of causative agent had been singled out?

a. Cystinase test

b. Detection of volutine granules

c. Toxigenity test

d. Hemolytic ability of a causative agent

e. Phagolysability

187. Immune-enzyme assay of blood serum revealed presence of HBs-antigen. What disease is signaled by this antigen?

a. Tuberculosis

b. Syphilis

c. Viral hepatitis A

d. AIDS

e. Viral hepatitis B

188. On a certain territory mass death of rodents was registered. It was suspected that their death might have been caused by plague. What serological reaction should be applied for quick identification of antigen of the causative agent of this epizooty?

- a. Neutralization
- b. Precipitation**
- c. Passive hemagglutination
- d. Agglutination
- e. Complement binding

189. A 30 y.o. patient who was diagnosed with acute glomerulonephritis has proteinuria. What disturbance is the cause of this phenomenon?

- a. Delayed excretion of products of nitrogen metabolism
- b. High hydrostatic pressure of blood in capillaries
- c. Decreased quantity of functioning nephrons
- d. Increased permeability of renal filter**
- e. Low oncotic pressure of blood plasma

190. While of oral cavity examination the dentist revealed the formation of the first big cheekteeth on the lower jaw of a child. How old is this child?

- a. 4-5 years old
- b. 10-11 years old
- c. 12-13 years old
- d. 6-7 years old**
- e. 8-9 years old

191. A patient has an acute painfulness of face skin. What nerve is damaged?

- a. Vagus
- b. Glossopharyngeal
- c. Facial
- d. Oculomotor
- e. Trifacial**

192. A 3 year old child was admitted to the hospital with otitis. Pus is probable to spread from the tympanic cavity. Where can the pus get into?

- a. Into external acoustic duct
- b. Into posterior cranial fossa
- c. Into internal ear
- d. Into auditory tube
- e. Into mastoid antrum**

193. A patient had his tooth extracted. The lingual surface of this tooth was smaller than the buccal one. Masticatory surface has oval form. Deep transverse sulcus separates buccal and lingual tubercles. The root is strongly compressed in mesio-distal direction and has longitudinal sulci on its approximal surfaces, it is bifurcated. What tooth was extracted?

- a. Lower canine
- b. Upper canine
- c. First upper premolar**
- d. First lower premolar
- e. Second upper premolar

194. A newborn didn't take his first breath. Autopsy revealed that in spite of unobstructed respiratory tracts the baby's lungs didn't expand. What might be the cause of it?

- a. Bronchi rupture
- b. Bronchostenosis
- c. Surfactant absence**
- d. Apical cap of lung
- e. Alveole enlargement

195. A patient is found to have increased permeability of blood vessel walls accompanied by increased gingival haemorrhage, petechial skin haemorrhages, dedentition. What pathology is observed in this patient?

- a. Hypervitaminosis D
- b. Hypovitaminosis D
- c. Hypovitaminosis A
- d. Hypovitaminosis C**
- e. Hypervitaminosis C

196. Examination of a 40 y.o. man ill with stenosing (without metastases) esophageal carcinoma revealed the following changes: atrophy of skeletal muscles and fatty tissue. His skin is sallow, epidermis is attenuated, heart has grown smaller. Myocardium and liver are brown. What is the most probable diagnosis?

- a. Cancerous cachexia
- b. Myasthenia
- c. Alimentary cachexia**
- d. Brown atrophy
- e. Addisons disease

197. A 38-year-old patient came to a traumatology centre and complained about an injury of his right hand. Objectively: the patient has a cut wound in the region of the thenar eminence on the right hand; distal phalanx of the I finger cannot be flexed. What muscle was injured?

- a. Long flexor muscle of thumb**
- b. Short abductor muscle of thumb
- c. Abductor muscle of thumb
- d. Opposer muscle of thumb
- e. Short flexor muscle of thumb

198. Children often have laboured nasal breathing which is caused by overdevelopment of lymphoid tissue of the pharyngeal mucous membrane. This phenomenon may cause enlargement of the following tonsils:

- a. Tonsilla lingualis
- b. Tonsilla palatina
- c. Tonsilla pharyngea**
- d. Tonsilla tubaria
- e. All above-mentioned

199. A 26-year-old patient was found to have a big furuncle of soft tissues of face by the root of nose and inferior eyelid. This disease can be seriously complicated by the infection spreading along veins of this region to the sinuses of dura brain mater. What sinus is most likely to be affected?

- a. Superior sagittal
- b. Sigmoid
- c. Petrosal
- d. Cavernous**
- e. Occipital

200. Bacteriological analysis of purulent discharges from urethra revealed presence of gram-negative bacteria resembling of coffee beans, which were able to decompose glucose and maltose into acid. They were found in the leukocytes. These bacteria are causative agents of the following disease:

- a. Ulcul molle
- b. Melioidosis
- c. Syphilis
- d. Venereal lymphogranulomatosis
- e. Gonorrhoea**

201. A 34 year old male patient cosulted a doctor about face carbuncle. Objectively: a loose, painless edema of hypodermic tissue; black crust in the centre of carbuncle, vesicular rash around it. Microbiological examination revealed static streptobacilli capable of capsule building. What

microorganisms are the causative agents of this disease?

- a. Staphylococcus aureus
- b. Bacillus subtilis
- c. Bacillus megaterium
- d. Bacillus anthracis**
- e. Bacillus anthracoides

202. It was reported an outbreak of food poisoning connected with consumption of pastry that had been stored at a room temperature and had duck eggs as one of the ingredients. What microorganisms might have caused this disease?

- a. Salmonella**
- b. Staphylococci
- c. Comma bacilli
- d. Legionella
- e. Colon bacilli

203. A patient underwent lobectomy of the right middle lobe of a lung. What segments of the lung were affected?

- a. Apical posterior and anterior
- b. Lateral and medial**
- c. Basal medial and anterior
- d. Apical, anterior
- e. Basal posterior and lateral

204. A patient with convulsive contractions of facial muscles was admitted to the infectious disease ward. From a scratch on his lower right extremity analysts isolated bacteria with terminal endospores that gave them drumstick appearance. What bacteria are compliant with given description?

- a. Clostridium botulinum
- b. Bacillus anthracis
- c. Bacillus cereus
- d. Clostridium tetani**
- e. Clostridium perfringens

205. A patient complained about a carbuncle on his face. Examination results: neither dense nor painful edema of subcutaneous cellular tissue, there is black crust in the middle of the carbuncle and peripheral vesicular rash around it. Bacteriological examination revealed presence of immobile streptobacilli able of capsulation. What microorganisms are causative agents of this disease?

- a. Staphylococcus aureus
- b. Bacillus megaterium
- c. Bacillus subtilis
- d. Bacillus anthracis**
- e. Bacillus anthracoides

206. A 3 month old infant has got a white deposition on the mucous membrane of his mouth, tongue and lips. The doctor suspected candidosis. What nutrient medium should be used for inoculation of the material under examination in order to confirm this diagnosis?

- a. Loewenstein-Jensen
- b. Endo
- c. Sabouraud**
- d. Roux
- e. Clauberg

207. Antigens of Sonne shigella placed on the objects of outdoor environment and foodstuffs can be revealed by means of a certain test with application of a diagnostic test system that includes a polystyrene tray with adsorbed specific antibodies. What reaction is it?

- a. Immune-enzyme assay**
- b. Passive inverse hemagglutination test
- c. Immunoelectrophoresis test

- d. Direct hemagglutination test
- e. Immunofluorescence test

208. Isonitol triphosphates are produced in the organism tissues as a result of phosphatidyl inositol diphosphate hydrolysis. In the mechanism of hormone activity they perform the function of secondary mediators (messengers). What is their activity in the cell aimed at?

- a. Activation of protein kinase A
- b. Activation of adenylate cyclase
- c. Release of calcium ions from the cell depots
- d. Inhibition of phosphodiesterase
- e. Inhibition of protein kinase C

209. After restoration of blood circulation in damaged tissue accumulation of lactate comes to a stop and speed of glucose consumption slows down. These metabolic changes are caused by activation of the following process:

- a. Anaerobic glycolysis
- b. Gluconeogenesis
- c. Glycogen biosynthesis
- d. Aerobic glycolysis
- e. Lipolysis

210. A patient being treated in the burns department has suppurative complication. The pus is of bluish-green colour that is indicative of infection caused by *Pseudomonas aeruginosa*. What factor is typical for this causative agent?

- a. Presense of spores
- b. Cell pairing
- c. Mycelium formation
- d. Gram-negative stain
- e. Coccal form

211. Specimen of a patients sputum was stained with the following dyes and reagents: Ziehl's solution, methylene blue solution, 5% solution of sulfuric acid. What staining method was applied?

- a. Neissers
- b. Ziehl-Neelsen
- c. Grams
- d. Burris
- e. Peshkovs

212. Preventive examination of a patient revealed an enlarged lymph node of metastatic origin on the medial wall of the left axillary crease. Specify the most likely localization of the primary tumour:

- a. Stomach
- b. Thyroid gland
- c. Submandibular salivary gland
- d. Lung
- e. Mammary gland

213. A man suffering from osteochondrosis got acute pain in the abdominal muscles (lateral and anterior). During objective examination a physician diagnosed increased pain sensitivity of skin in the hypogastric region. This pain might be caused by affection of the following nerve:

- a. Obturator
- b. Sciatic
- c. Iliohypogastric
- d. Femoral
- e. Genitofemoral

214. A patient has recently had staphylococcal infection that led to anasarca; laboratory urine analysis revealed massive proteinuria. Results of blood analysis: hypoproteinemia, hyperlipemia. What pathology can be suspected?

a. Chronic renal insufficiency

b. Nephrotic syndrome

c. Pyelonephritis

d. Glomerulonephritis

e. Urolithiasis

215. During manipulations aimed at treatment of mandible dislocation a physician should pay particular attention to a muscle that pulls a capsule and interarticular disc of temporomandibular articulation exteriorly. What muscle is it?

a. M. mylohyoideus

b. M. pterygoideus lateralis

c. M. pterygoideus medialis

d. M. masseter

e. M. temporalis

216. In order to prevent gum inflammation and to improve regeneration of epithelial periodontium cells manufacturers add to the tooth pastes one of the following vitamins:

a. Phyloquinone

b. Retinol

c. Thiamine

d. Calciferol

e. Biotin

217. After anlage of primary teeth at the beginning of the fifth month of embryogenesis some factors disturbed growth ability of dental plate behind the mentioned anlagen. What serious consequence is possible?

a. Dentin of primary teeth wont be formed

b. Permanent teeth wont be anlagen

c. Cervix of enamel organ wont disintegrate

d. Formation of Hertwigs epithelial root sheath will be disturbed

e. Formation of mouth vestibule will be disturbed

218. In the surgical department of a dental clinic cases of hospital-acquired staphylococcal infection were registered which was caused by strains with multiple drug resistance. Such feature can be identified by presence of:

a. Temperate bacteriophages

b. F-plasmids

c. R-plasmids

d. Exotoxins

e. Virulent bacteriophages

219. Histological examination of periapical tissue taken from a patient who has been suffering from chronic periodontitis for a long time revealed a granulation tissue interlaced by taeniae of squamous cell epithelium and encircled within a fibrous capsule. What is the most probable diagnosis?

a. Composite granuloma

b. Granulating periodontitis

c. Cystic granuloma

d. Simple granuloma

e. Abscessing periodontitis

220. What method should be applied for sterilization of heatproof and moistureproof stomatological instruments in order to ensure total destruction of viruses, vegetative and spore forms of microorganisms?

a. Pasteurization

b. Boiling

c. Autoclaving

d. Tyndallization

e. Burning in the flame of gas burner

221. Examination of a bronchial tissue sample revealed atrophy of mucous membrane, cystic degeneration of glands, focal metaplastic changes of lining prismatic epithelial cells into multilayer squamous cells; increase in goblet cell number; in some parts of bronchial wall and especially in the mucous membrane there was marked cellular inflammatory infiltration and growth of granulation tissue bulging into the bronchial lumen in form of a polyp. What is the most likely diagnosis?

a. Interstitial pneumonia

b. Chronic bronchitis

c. Acute bronchitis

d. Lobar pneumonia

e. Bronchopneumonia

222. A 10 month old child has high excitability, sleep disturbance, amyotonia, retarded dentition, teeth erupt with inadequate enamel calcification. These changes are caused by deficiency of the following vitamin:

a. Cholecalciferol

b. Thiamine

c. Nicotinamide

d. Retinol

e. Riboflavin

223. In the process of tooth tissue histogenesis dentin wasn't formed in time for some reasons. What process of further histogenesis will be delayed or will not take place at all?

a. Cellular cement formation

b. Acellular cement formation

c. Pulp formation

d. Predentinal space formation

e. Enamel formation

224. A 70-year-old man has developed prosthodontic stomatitis. Apart of this he was found to have an evident lesion of mouth corners. Microscopical examination revealed large ovoid gram-positive cells. What microorganisms are most likely to be the leading etiological agent of such a lesion?

a. Corynebacteria

b. Candida fungi

c. Staphylococci

d. Streptococci

e. Neisseria

225. Enamel is characterized by high resistance to the influence of various mechanical and chemical factors. What components synthesis provides such resistance?

a. Carbonate apatite

b. Hydroxyapatite

c. Chlorapatite

d. Hydroxyapatite

e. Collagen

226. Examination of a kidney tissue sampling revealed leukocyte infiltration of interstitial tissue; multiple abscesses; dystrophic tubules filled with desquamated epithelium and leukocytes. What is the most likely diagnosis?

a. Nephrolithiasis

b. Pyelonephritis

c. Pyelitis

d. Glomerulonephritis

e. Necrotic nephrosis

227. A 23 year old man got perforation of hard palate. There was also a solid well-defined formation. Post-operative microscopical examination of this formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis and cellular infiltrate consisting mainly of plasmacytes but also of lymphocytes and epithelioid cells. What is the most probable diagnosis?

- a. Scleroma
- b. Tuberculosis
- c. Syphilis**
- d. Sarcoma
- e. Lepra

228. A 7 year old child has angina. A smear from the tonsil surface was inoculated on blood agar. 24 hours later there had grown colonies of streptococci. Nutrient medium turned transparent around them. This study revealed presence of the following pathogenous factor:

- a. Endotoxin
- b. Beta-lactamase
- c. Leukocidin
- d. Hemolysin**
- e. Neuraminidase

229. After a trauma a patient lost ability of elbow extension. This might have been caused by dysfunction of the following main muscle:

- a. m. levator scapulae
- b. m. triceps brachii**
- c. m. teres major
- d. m. subscapularis
- e. m. infraspinatus

230. A 25-year-old patient with clinical presentations of nephrotic syndrome underwent puncture biopsy of a kidney. Microscopical examination revealed expansion of the epithelium cells of proximal nephron tubules, vacuoles containing transparent liquid in the cytoplasm, peripheral deviation of the nucleus. What degeneration was revealed in the tubule epithelium?

- a. Keratinization
- b. Hyaline drop
- c. Granular
- d. Adipose
- e. Hydropic**

231. A patient has secretory dysfunction of the submandibular salivary gland. Which nerve is responsible for its vegetative innervation?

- a. N.auriculotemporalis
- b. N.petrosus major
- c. N.petrosus minor
- d. Chorda tympani**
- e. N.mandibularis

232. Pathological material taken from a patient suffering from pulpitis was inoculated onto Kitt-Tarozzi cultural medium. It is planned to find the following microorganisms:

- a. Haemolytic
- b. Aerobic
- c. Acid-resistant
- d. Acidophilic
- e. Anaerobic**

233. Histological examination of myocardium of a 47-year-old patient with rheumatic heart disease (section material) revealed some big visually empty vacuoles within the cardiomyocytes. They turn black when stained with osmic acid, and yellow-red when stained with sudan III. What pathological process is it?

- a. Adipose degeneration**
- b. Hydropic degeneration
- c. Dysproteinosis
- d. Carbohydrate degeneration
- e. Hyaline drop degeneration

234. In spring a patient experiences petechial haemorrhages, loosening of teeth, high liability to colds. A doctor supposes hypobitaminosis C. In this respect loosening of teeth can be explained by:

- a. Structural change of glycosaminoglycan
- b. Mechanical damage of teeth
- c. Disturbed oxidation-reduction process in the periodont
- d. Structural failure of collagen in the periodontal ligaments**
- e. Increased permeability of periodont membranes

235. Examination of a patient revealed that dental hypoplasia was caused by hypovitaminosis of vitamins A and D. These vitamins were administered perorally but they didn't have any medicinal effect. What is the probable cause of disturbed vitamin assimilation?

- a. Achylia
- b. Achlorhydria
- c. Hypochlorhydria
- d. Hyperchlorhydria
- e. Bile acid deficiency**

236. Examination of a 60 y.o. man's oral cavity revealed the following changes: the 26th and 27th tooth are covered with metallic crowns that plunge deep into the gums. There is a parodontal pouch 0,7 cm deep between them containing some pus. Gingival papillae of these teeth are hyperemic, edematous, cyanotic, bleed as a reaction to touching by a dental explorer. X-ray picture shows resorption of interdental septa of 1/2 of tooth root. What is the most probable diagnosis?

- a. Chronic catarrhal gingivitis
- b. Hypertrophic gingivitis
- c. Local parodontitis**
- d. Generalized parodontitis
- e. -

237. After a craniocerebral trauma a patient lost the ability to execute learned purposeful movements (apraxia). The injury is most likely localized in the following region of the cerebral cortex:

- a. Gyrus angularis
- b. Gyrus lingualis
- c. Gyrus parahippocampalis
- d. Gyrus supramarginalis**
- e. Gyrus paracentralis

238. A patient has an inflammation in the pterygopalatine fossa. The infection has spread into the nasal cavity. Which anatomical structure has the infection spread through?

- a. Foramen rotundum
- b. Canalis palatinus minor
- c. Canalis pterygoideus
- d. Foramen sphenopalatinum**
- e. Canalis palatinus major

239. A patient presents with dysfunction of shin muscles. He cannot raise his body by standing on tiptoe. Which muscle is affected?

- a. M. tibialis posterior
- b. M. flexor digitorum longus
- c. M. tibialis anterior
- d. M. triceps surae**
- e. M. extensor digitorum longus

240. A patient has lost skin sensitivity in the region of the medial surface of his shoulder. This is the result of dysfunction of the following nerve:

- a. Axillary nerve
- b. Medial brachial cutaneous nerve**
- c. Radial nerve
- d. Medial antebrachial cutaneous nerve

e. Ulnar nerve

241. When processing a molar tooth with a dental cutter the dentist has by accident deeply wounded the patients cheek and damaged not only the mucosa but also a muscle. Which muscle was hurt?

- a. Masticatory muscle
- b. Greater zygomatic muscle

c. Buccal muscle

- d. Orbicular muscle of the mouth
- e. Mylohyoid muscle

242. An injured person was delivered to the hospital with a penetrating wound in the left lateral region of abdomen. What part of the large intestine is most likely damaged?

- a. Colon transverses
- b. Colon ascendens

c. Colon descendens

- d. Caecum
- e. Rectum

243. After a road accident a driver was delivered to the hospital with an injury of the medial epicondyle of humerus. What nerve might be damaged in this case?

- a. N. radialis
- b. N. musculocutaneus
- c. N. medianus

d. N. ulnaris

- e. N. axillaris

244. A patient with a knife wound in the left lumbar part was delivered to the emergency hospital. In course of operation a surgeon found that internal organs were not damaged but the knife injured one of muscles of renal pelvis. What muscle is it?

a. Greater psoas muscle

- b. Erector muscle of spine
- c. Abdominal external oblique muscle
- d. Abdominal internal oblique muscle
- e. Iliac muscle

245. A patient visited a dentist for acute dental pain in the lower left canine. He was diagnosed with pulpitis. What nerve innervates this tooth?

a. Inferior alveolar

- b. Palatal
- c. Facial
- d. Zygomatic
- e. Superior alveolar

246. A man complains of varicose veins on his left leg. Venous nodes are located on the posterior surface of the shin and on the posterior and anterior surfaces of the thigh. What superficial leg veins are damaged in this patient?

a. Great saphenous vein, small saphenous vein

- b. Popliteal vein, superficial saphenous vein
- c. Posterior tibial vein, great saphenous vein
- d. Femoral vein, great saphenous vein, small saphenous vein
- e. Small saphenous vein, deep femoral vein

247. A patient presents with aspermia. What organ is functionally disturbed?

a. Testicle

- b. Epididymis
- c. -
- d. Prostate
- e. Seminal vesicles

248. A 10-day-old child has undergone a surgery to repair cleft upper lip ("harelip"). Cleft upper lip has resulted from the following in this case:

a. Nonclosure of frontal and maxillary processes of the first pharyngeal arch

b. Nonclosure of the second pharyngeal arch

c. Nonclosure of maxillary and mandibular processes of the first pharyngeal arch

d. Nonclosure of the third pharyngeal arch

e. Nonclosure of palatine tori of maxillary processes of the first pharyngeal arch

249. After facial trauma the patient developed a buccal hematoma. What salivatory gland has its outflow blocked by the hematoma?

a. Parotid

b. Submandibular

c. Buccal

d. Lingual

e. Sublingual

250. A patient complains of painful chewing, especially when his lower jaw moves forward and to the side. It indicates functional disorder of the following muscles:

a. Mylohyoid muscles

b. Temporal muscles

c. Medial pterygoid muscles

d. Masseter muscles

e. Lateral pterygoid muscles

251. After a cold the patient developed impaired perception of pain and thermal stimuli in the front 2/3 of the tongue. What nerve was damaged in this case?

a. Trigeminal

b. Phrenic

c. Chorda tympani

d. Vagus

e. Hypoglossal

252. A 42-year-old man with an incised wound on the lower anterior surface of his shoulder came to the medical station. Objectively he presents with impaired forearm flexion. What muscles are likely to be damaged in this patient?

a. M. deltoideus, m. biceps brachii

b. M. brachialis, m. biceps brachii

c. M. coracobrachialis, m. supraspinatus

d. M. biceps brachii, m. anconeus

e. M. deltoideus, m. infraspinatus

253. During surgery on the stomach, the surgeon has cut the left gastric artery and ligated it. However the opposite end of the cut artery continued to bleed. What artery anastomoses with the left gastric artery?

a. Left gastroepiploic artery

b. Superior pancreaticoduodenal artery

c. Splenic artery

d. Right gastroepiploic artery

e. Right gastric artery

254. A woman has undergone a surgery for femoral hernia. In this case the hernial protrusion is projected into the:

a. Inguinal region

b. Gluteal region

c. -

d. Femoral triangle

e. Pubic region

255. A patient of tall stature with drooping lower lip, big nose, and large extremities has made an appointment with the doctor. What gland is likely to present with excessive secretion in this patient?

a. Anterior lobe of the pituitary gland

b. Pineal gland

c. -

d. Thyroid gland

e. Parathyroid glands

256. During a surgery on the right side of the neck, excursion of the right diaphragmatic dome was disturbed. This disturbance occurred because of the damage to the following nerve:

a. Left transverse cervical nerve

b. Supraclavicular nerve

c. Left phrenic nerve

d. Right transverse cervical nerve

e. Right phrenic nerve

257. A trauma patient has a wound in the temporal region, with trickle of bright red blood streaming from it. What blood vessel Нормальна анатомія 5 is damaged?

a. A. maxillaris

b. A. temporalis superficialis

c. A. occipitalis

d. A. facialis

e. A. auricularis posterior

258. On examination a woman was diagnosed with a retropharyngeal abscess. What cervical space should be accessed by the surgeon lancing this abscess?

a. Prescalene space

b. Interscalene space

c. Retrovisceral space

d. Suprasternal space

e. Previsceral space

259. Brain investigation by means of nuclear magnetic resonance revealed the patient to have a hematoma in the genu of the internal capsule. What pathway is damaged in this case?

a. Tr. cortico-thalamicus

b. Tr. thalamo-corticalis

c. Tr. cortico-spinalis

d. Tr. cortico-fronto-pontinus

e. Tr. cortico-nuclearis

260. A patient was diagnosed with a damaged intervertebral disk in the lumbar spine. What type of joint is it?

a. Synostosis

b. Diarthrosis

c. Syndesmosis

d. Symphysis

e. Synchondrosis

261. A patient complains of severe rhinitis and total loss of olfactory perception. Receptors of the olfactory analyzer are damaged in this patient. Where in the nasal cavity are these receptors located?

a. Inferior nasal meatus

b. Middle nasal meatus

c. Superior nasal meatus

d. Common nasal meatus

e. Choanae

262. A student uses percussion to determine the cardiac border that projects on the anterior thoracic wall at the level of the third costal cartilage. What cardiac border is being determined?

- a. Right
- b. Apex
- c. Lower
- d. Left

e. Upper

263. A trauma patient has a fracture in the petrous part of the temporal bone. The fracture line passes behind the internal auditory foramen. What canal of the temporal bone was damaged?

a. Canaliculus of the chorda tympani

b. Facial canal

- c. Carotid canal
- d. Tympanic canal
- e. Musculotubal canal

264. A patient suffers from disturbed blood supply of the superior lateral surface of the cerebral hemispheres. What blood vessel is damaged?

a. Posterior communicating artery

b. Medial cerebral artery

- c. Posterior cerebral artery
- d. Anterior cerebral artery
- e. Anterior communicating artery

265. Examination of a patient with disturbed process of saliva production in the parotid gland shows that the otic ganglion is likely to be damaged. This ganglion is formed by the following nerve:

a. N. hypoglossus

b. N. petrosus minor

- c. N. auricularis magnus
- d. N. petrosus major
- e. N. vagus

266. During oral cavity examination a dentist noticed eruption of the permanent canines in a child. The child grows and develops normally. Determine the child's age:

- a. 6-7 years
- b. 13-16 years
- c. 11-13 years**
- d. 8-9 years
- e. 9-10 years

267. A tooth has been extracted. Its crown is chisel-shaped, wide, with narrow edge. The root is cone-shaped and flattened from the sides. What tooth was extracted?

- a. Lower incisor
- b. Upper premolar
- c. Upper incisor**
- d. Lower canine
- e. Lower premolar

268. A man cannot lift his drooping lower jaw. What muscles of the head DO NOT function properly in this case?

- a. Zygomaticus major
- b. Buccinators
- c. Superior auricular
- d. Masseters**
- e. Zygomaticus minor