

1. Multiple oval ulcers along the intestine were revealed on autopsy of the person, who died from diffuse peritonitis in the distant part of the small intestine. Bottom parts of the ulcers are clear, smooth, formed with muscular or serous covering, edges of ulcers are flat, rounded. There are perforations up to 0,5 cm in diameter in two ulcers. What disease can be diagnosed?

- a. Typhoid fever
- b. Cholera
- c. Typhus
- d. Tuberculosis
- e. Dysentery

2. Patient suffering from trombophlebitis of the deep veins suddenly died. Autopsy has shown freely lying red friable masses with dim crimped surface in the trunk and bifurcation of the pulmonary artery. What pathologic process was revealed by morbid anatomist?

- a. Fat embolism
- b. Tromboembolism
- c. Tissue embolism
- d. Thrombosis
- e. Embolism with foreign body

3. Examination of a patient revealed a dense, movable skin tumour that is standing out distinctly from the surrounding tissues. Its section is found to be white and composed of fibrous tissue. Microscopic examination revealed interlacing collagen fibers and few cells. What tumour is it?

- a. Dermatofibroma
- b. Desmoid
- c. Myoma
- d. Histiocytoma
- e. Fibroma

4. A 50-year-old man has felt vague abdominal discomfort within past 4 months. Physical examination revealed no lymphadenopathy, and no abdominal masses or organomegaly at palpation. Bowel sounds are heard. An abdominal CT scan shows a 20 cm retroperitoneal soft tissue mass obscuring the left psoas muscle. A stool specimen tested for occult blood is negative. Which of the following neoplasms is this man most likely to have?

- a. Lymphoma
- b. Lipoma
- c. Hamartoma
- d. Melanoma
- e. Adenocarcinoma

5. A 40-year-old woman has had a feeling of abdominal discomfort for the past 8 months. On pelvic examination, there is the right adnexal mass. Abdominal CT scan demonstrates a 7 cm cystic mass involving the right ovary with small areas of calcification. The uterus is normal in size. The right fallopian tube and ovary have been removed surgically. Grossly, the mass on sectioning is filled with abundant hair and sebum. Microscopically, the mass has glandular spaces lined by columnar epithelium, squamous epithelium with hair follicles, cartilage, and dense connective tissue. What type of tumour is it?

- a. Melanoma
- b. Squamous cell carcinoma of ovary
- c. Teratoma
- d. Sarcoma of ovary
- e. Metastase of cervical carcinoma

6. A man died 8 days after the beginning of the disease. He was diagnosed with dysentery. At the autopsy it was found out a thickened wall of the sigma and rectum, fibrinous membrane on the surface of mucous membrane. Histologically: there is a deep necrosis of mucous membrane with infiltration of necrotic masses with fibrin. What kind of colitis does correspond to the changes?

- a. Catarrhal

- b. Chronic
- c. Gangrenous
- d. Diphtheritic**
- e. Ulcerative

7. A woman suffering from dysfunctional metrorrhagia was made a diagnostic abortion. Histologically in the scrape there were a lot of small stamped glandulars covered with multirowed epithelium. The lumens of some glandulars were cystically extended. Choose the variant of general pathologic process in the endometrium

- a. Neoplasm of endometrium
- b. Hypertrophic growth
- c. Atrophy of endometrium
- d. Metaplasia of endometrium

- e. Glandular-cystic hyperplasia of endometrium**

8. A 46 year-old man complains of difficult nose breathing. Mikulich cells, storage of epithelioid cells, plasmocytes, lymphocytes, hyaline balls are discovered in the biopsy material of the nose thickening. What is the most likely diagnosis?

- a. Virus rhinitis
- b. Rhinovirus infection
- c. Meningococcal nasopharyngitis
- d. Scleroma**
- e. Allergic rhinitis

9. Extensive thromboembolic infarction of the left cerebral hemispheres, large septic spleen, immunocomplex glomerulonephritis, ulcers on the edges of the aortic valves, covered with polypous thrombus with colonies of staphylococcus were revealed on autopsy of the young man who died in coma. What disease caused cerebral thromboemboly?

- a. Septic bacterial endocarditis**
- b. Acute rheumatic valvulitis
- c. Rheumatic thromboendocarditis
- d. Septicopyemia
- e. Septicemia

10. A patient ill with diabetes mellitus felt acute pain in his right foot. Objectively: foot thumb is black, foot tissues are edematous, there are foci of epidermis desquamation, stinking discharges. What clinicopathological form of necrosis is it?

- a. Bedsores
- b. Dry gangrene
- c. Infarction
- d. Moist gangrene**
- e. Sequestrum

11. A denaturation of proteins can be found in some substances. Specify the substance that is used for the incomplete denaturation of hemoglobin:

- a. Toluene
- b. Nitric acid
- c. Sodium hydroxide
- d. Urea**
- e. Sulfuric acid

12. During surgery in a 17-year-old patient it was revealed the tumour of 4,5

- a. Hemangiopericytoma
- b. Capillary hemangioma
- c. Cavernous hemangioma**
- d. Hemangioendothelioma
- e. Lymphangioma

13. A sick man with high temperature and a lot of tiny wounds on the body has been admitted to the hospital. Lice have been found in the folds of his clothing. What disease can be suspected in the patient?

- a. Scabies
- b. Tularemia
- c. **Epidemic typhus**
- d. Malaria
- e. Plague

14. On autopsy it is revealed that kidneys are enlarged, surface is large-granular because of multiple cavities with smooth wall, which are filled with clear fluid. What kidney disease did the patient have?

- a. Glomerulonephritis
- b. Infarction
- c. Necrotic nephrosis
- d. Pyelonephritis
- e. **Polycystic kidney**

15. On autopsy it is revealed enlarged dense right lung, fibrin layers on the pleura. Lung tissue is light green color on incision with muddy liqued exudates. What lung disease are these symptoms typical for?

- a. **Lung-fever**
- b. Interstitial pneumonia
- c. Fibrosing alveolitis
- d. Pulmonary gangrene
- e. Bronchopneumonia,

16. On autopsy it is revealed: soft arachnoid membrane of the upper parts of cerebral hemisphere is plethoric, it is of yellowish-green color, soaked with purulent and fibrose exudate, it looks like cap. For what disease is it characteristical picture

- a. **Meningococcal meningitis**
- b. Influenza meningitis
- c. Meningitis at typhus
- d. Meningitis at anthrax
- e. Tuberculous meningitis

17. On autopsy of the 58-year-old man it is revealed: mitral valve is deformed, thickened, not totally closed. Microscopically: centers of collagen fibers are eosinophilic, have positive fibrin reaction. The most likely it is:

- a. **Fibrinoid swelling**
- b. Mucoïd swelling
- c. Amyloidosis
- d. Hyalinosis
- e. Fibrinoid inflammation

18. Chronic inflammation and transformation of the one-layer ciliated epithelium into multiple-layers flat epithelium was revealed in the thickened mucous membrane of the bronchus bioptate of the patient with smoke abuse. Which of the processes is the most likely?

- a. Epithelium hypertrophy
- b. **Metaplasia**
- c. Squamous cancer
- d. Hyperplasia of the epithelium
- e. Leucoplacia

19. For a long time a 49-year-old woman was suffering from glomerulonephritis which caused death. On autopsy it was revealed that kidneys size was 7

- a. DIC-syndrome
- b. Thrombopenia
- c. Anemia

d. Sepsis

e. Uraemia

20. A patient died under conditions of cardiovascular insufficiency. Autopsy results: postinfarction cardiosclerosis, myocardium hypertrophy and dilatation of its cavities, especially of its right ventricle. Liver is enlarged, its surface is smooth, incision revealed that it was plethoric, with dark-red specks against the background of brownish tissue. Histologically: plethora of central parts of lobules; peripheral parts around portal tracts contain hepatocytes in a state of adipose degeneration. How are these liver changes called?

a. Liver steatosis

**b. Nutmeg liver**

c. Amyloidosis

d. Pseudonutmeg liver

e. Liver cirrhosis

21. A 59-year-old man has signs of the parenchymatous jaundice and portal hypertension. On histological examination of the puncture of the liver biopsate, it was revealed: beam-lobule structure is affected, part of hepatocytes has signs of fat dystrophy, port-portal connective tissue septa with formation of pseudo-lobules, with periportal lympho-macrophage infiltrations. What is the most probable diagnosis?

a. Chronic hepatosis

b. Alcohol hepatitis

**c. Liver cirrhosis**

d. Viral hepatitis

e. Toxic dystrophy

22. On microscopic examination of the enlarged neck gland of a 14-year-old girl it was revealed destruction of the tissue structure of the node, absence of the lymph follicles, sclerotic and necrosis parts, cell constitution of the node is polymorphous, lymphocites, eosinophiles, atypical cells of the large size with multiple-lobule nuclei (Beresovsky-Shternberg cells) and onenucleus cells of the large size are present. What is the most likely diagnosis?

a. Chronic lympholeucosis

b. Acute lympholeucosis

**c. Lymphogranulomatous**

d. Berkitts lymphoma

e. Fungous mycosis

23. A female patient suffering from bronchial asthma had got a viral infection that provoked status asthmaticus with fatal outcome. Histological examination of lungs revealed spasm and edema of bronchioles, apparent infiltration of their walls with lymphocytes, eosinophils and other leukocytes; labrocyte degranulation. What mechanism of hypersensitivity underlies the described alterations?

a. Immune cytolysis

**b. Reagin reaction**

c. Autoimmune

d. Inflammatory

e. Immune complex

24. On autopsy of the 40-year-old woman suffering from rheumatic arthritis, the enlarged solid spleen was revealed. On section its tissue is of the mahogany color with enlarged follicles, which look like semi-transparent grayish-whitish grains. What pathological process is the most likely?

a. Porphyric spleen

**b. Sago spleen**

c. Waxy spleen

d. Glaze spleen

e. Hyaline spleen

25. Local lymphonodules enlarged near the infected wound. Increased amount of macrophages, lymphocytes, lymphatic follicles in the cortical layer and large amount of plasma cells were revealed

on histological examination. What process in the lymphatic nodules represent these histological changes?

- a. Hypersensitivity reaction
- b. Antigen stimulation**
- c. Inherited insufficiency of the lymphoid tissue
- d. Acquired insufficiency of the lymphoid tissue
- e. Tumour transformation

26. On autopsy of the man with alcohol abuse for a long time it was revealed: dense, small-knobby, small size liver. Microscopically: small pseudo-lobules, divided with thin layers of connective tissue with lymphomacrophagial infiltrates; hepatocytes in the state of globular fatty dystrophy. What is the most likely diagnosis?

- a. Chronic active alcohol hepatitis
- b. Toxic liver dystrophy
- c. Fatty hepatosis
- d. Alcohol cirrhosis**
- e. Chronic persistent alcohol hepatitis

27. An 8-year-old child was admitted to the infectious department with fever (up to 38C) and punctuate bright-red skin rash. The child was diagnosed as having scarlet fever. Objectively: mucous membrane of pharynx is apparently hyperaemic and edematous, the tonsils are enlarged and have dull yellowish-grey foci with some black areas. What inflammation is the reason for the pharynx alterations?

- a. Catarrhal
- b. Purulent necrotic**
- c. Haemorrhagic
- d. Fibrinous
- e. Serous

28. A 30-year-old patient with bacteriologically proved dysentery developed the signs of paraproctitis. What is the stage of local changes in this patient?

- a. Follicular colitis
- b. Fibrinous colitis
- c. Ulceration stage**
- d. Catarrhal colitis
- e. Healing of the ulcers stage

29. A patient who has been abusing tobacco smoking for a long time has got cough accompanied by excretion of viscous mucus; weakness after minor physical stress, pale skin. The patient has also lost 12,0 kg of body weight. Endoscopic examination of biosy material his illness was diagnosed as squamous cell carcinoma. Name a pathological process that preceded formation of the tumour:

- a. Metaplasia**
- b. Hyperplasia
- c. Sclerosis
- d. Necrosis
- e. Hypoplasia

30. Diagnostic scraping was performed to the woman with dysfunctional uterine bleeding. Multiple convoluted glands, ganglionally dilated cavities of some glands were revealed histologically in the scrape. Name the type of general pathological process

- a. Metaplasia
- b. Atrophy
- c. Glandulo-gangliac hyperplasia**
- d. Displasia
- e. Hypertrophic excrescence

31. Tuberculin was injected intracutaneously to the child for tuberculin test. Marked hyperemia, tissue infiltration developed on the place of injection in 24 hours. What mechanism caused these

modifications?

**a. Cells cytotoxicity**

- b. Antibody cytotoxicity
- c. Immunocomplex cytotoxicity
- d. Granuloma formation
- e. Reagin type cytotoxicity

32. The intraoperative biopsy of mammal gland has revealed the signs of atypical tissue with disorder of parenchyma stroma proportion with domination of the last, gland structures of the different size and shape, lined with single-layer proliferative epithelium. What is the most appropriate diagnosis?

- a. Infiltrative cancer
- b. Mastitis
- c. Papilloma
- d. Noninfiltrative cancer

**e. Fibroadenoma**

33. Arterial hypertension, hyperglycemia, glucosuria were observed clinically for a long time in the patient with upper type of obesity. Death was due to the cerebral haemorrhage. Basophilic hypophysis adenoma, hyperplasia of adrenal gland cortex were revealed on pathomorphological examination. What is the likely diagnosis?

- a. Acromegaly
- b. Diabetes mellitus
- c. Cushing disease**
- d. Hypophysis nanism
- e. Adiposogenitalis dystrophy

34. On autopsy it was revealed: large (1-2 cm) brownish-red, easy crumbling formations covering ulcerative defects on the external surface of the aortic valve. What is the most likely diagnosis?

- a. Acute warty endocarditis
- b. Recurrent warty endocarditis
- c. Polypus-ulcerative endocarditis**
- d. Fibroplastic endocarditis
- e. Diffusive endocarditis

35. Purulent endometritis with fatal outcome was progressing in the woman after abortion performed not at the hospital. On autopsy multiple lung abscesses, subcapsule ulcers in the kidneys, spleen hyperplasia were revealed. What form of sepsis developed in the patient?

- a. Urosepsis
- b. Septopyemia**
- c. Chroniosepsis
- d. Septicemia
- e. Lung sepsis

36. Autopsy of a 73-year-old man who had been suffering from the coronary heart disease along with cardiac insufficiency for a long time revealed: nutmeg liver, brown induration of lungs, cyanotic induration of kidneys and spleen. What kind of circulation disorder was the cause of such effects?

- a. General acute venous congestion
- b. Arterial hyperaemia
- c. General chronic venous congestion**
- d. Acute anaemia
- e. Chronic anaemia

37. A 22 year old patient from the West Ukraine complains of laboured nasal breathing. Morphological examination of biopsy material of nasal mucous membrane revealed lymphoid, epithelioid, plasma cells as well as Mikulicz cells. What is the most probable diagnosis?

- a. Tuberculosis
- b. Glanders

c. Rhinoscleroma

d. Leprosy

e. Syphilis

38. Autopsy of a man who had been working as a miner for many years and died from cardiopulmonary decompensation revealed that his lungs were airless, sclerosed, their apexes had emphysematous changes, the lung surface was greyish-black, the incised lung tissue was coal-black. What disease caused death?

a. Talcosis

b. Silicosis

**c. Anthracosis**

d. Asbestosis

e. Aluminosis

39. Examination of coronary arteries revealed atherosclerotic calcific plaques that close vessel lumen by ?. The muscle has multiple whitish layers of connective tissue. What process was revealed in myocardium?

a. Postinfarction cardiosclerosis

b. Tiger heart

**c. Diffuse cardiosclerosis**

d. Myocarditis

e. Myocardium infarction

40. A 63 year old male patient who had been suffering from chronic diffuse obstructive disease, pulmonary emphysema, for 15 years died from cardiac insufficiency. Autopsy revealed nutmeg liver cirrhosis, cyanotic induration of kidneys and spleen, ascites, edema of lower limbs. These changes of internal organs are typical for the following disease:

a. General cardiac insufficiency

**b. Chronic right-ventricular insufficiency**

c. Chronic left-ventricular insufficiency

d. Acute right-ventricular insufficiency

e. Acute left-ventricular insufficiency

41. Microscopical examination of an enlarged cervical lymph node revealed blurring of its structure, absence of lymphoid follicles; all the microscopic fields showed cells with roundish nuclei and thin limbus of basophil cytoplasm. It is known from the clinical data that other groups of lymph nodes are also enlarged as well as spleen and liver. What disease might be suspected?

a. Multiple myeloma

**b. Lymphoid leukosis**

c. Lymphosarcoma

d. Lymphogranulomatosis

e. Myeloid leukosis

42. A worker of a cattle farm fell acutely ill and then died from the progressing intoxication. Autopsy revealed enlarged, hyposthenic spleen of dark-cherry colour when dissected; excessive pulp scraping. At the base and fornix of brain pia maters are edematous, soaked with blood, dark-red (scarlet hat). Microscopic examination revealed serous haemorrhagic inflammation of brain tissues and tunics along with destruction of small vessel walls. What is the most likely diagnosis?

a. Cholera

**b. Anthrax**

c. Brucellosis

d. Tularemia

e. Plaque

43. Histological examination of a skin tissue sampling revealed granulomas consisting of macrophagal nodules with lymphocytes and plasmatic cells. There are also some big macrophages with fatty vacuoles containing causative agents of a disease packed up in form of spheres (Virchows cells). Granulation tissue is well vascularized. What disease is this granuloma typical for?

- a. Syphilis
- b. Tuberculosis
- c. Lepra**
- d. Rhinoscleroma
- e. Glanders

44. A 40 year old man noticed a reddening and an edema of skin in the area of his neck that later developed into a small abscess. The incised focus is dense, yellowish-green. The pus contains white granules. Histological examination revealed drusen of a fungus, plasmatic and xanthome cells, macrophages. What type of mycosis is the most probable?

- a. Sporotrichosis
- b. Coccidioidomycosis
- c. Aspergillosis
- d. Candidosis
- e. Actinomycosis**

45. A physician examined a patient and found inguinal hernia. Through what anatomic formation does it penetrate into the skin?

- a. Canalis adductorius
- b. Anulus femoralis
- c. Hiatus saphenus**
- d. Lacuna musculorum
- e. Anulus inguinalis superficialis

46. Autopsy of a man who died from burn disease revealed brain edema, liver enlargement as well as enlargement of kidneys with wide light-grey cortical layer and plethoric medullary area. Microscopic examination revealed necrosis of tubules of main segments along with destruction of basal membranes, interstitium edema with leukocytic infiltration and haemorrhages. What is the most probable postmortem diagnosis?

- a. Myeloma kidney
- b. Necrotic nephrosis**
- c. Pyelonephritis
- d. Tubulointerstitial nephritis
- e. Gouty kidney

47. A 30 year old man had been suffering from acute respiratory disease and died from cardiopulmonary decompensation. Autopsy revealed fibrinous-haemorrhagic inflammation in the mucous membrane of larynx and trachea, destructive panbronchitis, enlarged lungs that look black due to the multiple abcesses, haemorrhages, necrosis. What is the most probable postmortem diagnosis?

- a. Adenoviral infection
- b. Influenza**
- c. Respiratory syncytial infection
- d. Parainfluenza
- e. Measles

48. A man with a wound of his limb that had been suppurating for a long time died from intioxication. Autopsy revealed extreme emaciation, dehydration, brown atrophy of liver, myocardium, spleen and cross-striated muscles as well as renal amyloidosis. What diagnosis corresponds with the described picture?

- a. Chroniosepsis**
- b. Septicemia
- c. Brucellosis
- d. Chernogubovs syndrome
- e. Septicopyemia

49. 6 months after delivery a woman had uterine bleeding. Gynecological examination revealed in the uterine cavity a dark-red tissue with multiple cavities that resembled of "sponge". Microscopic

examination of the tumour revealed some atypic light epithelial Langhans cells and giant cells of syncytiotrophoblast in blood lacunas. What tumour is it?

- a. Squamous cell nonkeratinous carcinoma
- b. Fibromyoma
- c. Vesicular mole
- d. Chorioepithelioma**
- e. Adenocarcinoma

50. A patient with android-type obesity had been suffering from arterial hypertension, hyperglycemia, glycosuria for a long time and died from the cerebral haemorrhage. Pathologic examination revealed pituitary basophil adenoma, adrenal cortex hyperplasia. What is the most likely diagnosis?

- a. Itsenko-Cushings syndrome**
- b. Acromegalia
- c. Adiposogenital dystrophy
- d. Pituitary nanism
- e. Diabetes mellitus

51. Mucous membrane of the right palatine tonsil has a painless ulcer with smooth lacquer fundus and regular cartilagenous edges. Microscopically: inflammatory infiltration that consists of lymphocytes, plasmocytes, a small number of neutrophils and epithelioid cells; endovasculitis and perivasculitis. What disease is it?

- a. Syphilis**
- b. Tuberculosis
- c. Ulcerous necrotic Vincents angina
- d. Pharyngeal diphtheria
- e. Actinomycosis

52. Autopsy of a man with a malignant stomach tumour who had died from cancer intoxication revealed in the posteroinferior lung fields some dense, grayish-red irregular foci protruding above the section surface. Microscopic examination revealed exudate containing a large amount of neutrophils in the lumen and walls of small bronchi and alveoles. Such pulmonary alterations indicate the following disease:

- a. Acute purulent bronchopneumonia**
- b. Croupous pneumonia
- c. Acute serous bronchopneumonia
- d. Intermittent pneumonia
- e. Acute bronchitis

53. Microscopical examination of a removed appendix revealed an edema, diffuse neutrophilic infiltration of appendix wall along with necrosis and defect of mucous membrane with affection of its muscle plate. What appendicitis form was developed?

- a. Gangrenous
- b. Phlegmonous
- c. Ulcerophlegmonous**
- d. Superficial
- e. Apostematous

54. A 39 y.o. woman went through an operation in course of which surgeons removed her uterine tube that was enlarged and a part of an ovary with a big cyst. Histological examination of a tube wall revealed decidual cells, chorion villi. What was the most probable diagnosis made after examination of the uterine tube?

- a. Lithopedion
- b. Tubal pregnancy**
- c. Choriocarcinoma
- d. Placental polyp
- e. Papyraceous fetus

55. Autopsy of a 1,5-year-old child revealed haemorrhagic skin rash, moderate hyperaemia and

edema of nasopharyngeal mucous membrane, small haemorrhages in the mucous membranes and internal organs; dramatic dystrophic alterations in liver and myocardium; acute necrotic nephrosis; massive haemorrhages in the adrenal glands. What disease are these alterations the most typical for?

- a. Measles
- b. Epidemic typhus
- c. Scarlet fever
- d. Diphtheria
- e. Meningococcal infection**

56. Hours after performing tuberculin test (Mantoux test) to a child a 10 mm papule appeared on the spot of tuberculin introduction. What hypersensitivity mechanism underlies these changes?

- a. Antibody-dependent cytotoxicity
- b. Anaphylaxis
- c. Cellular cytotoxicity**
- d. Immune complex cytotoxicity
- e. Granulomatosis

57. Colonoscopy of a patient ill with dysentery revealed that mucous membrane of his large intestine is hyperemic, edematous, its surface was covered with grey-and-green coats. Name the morphological form of dysenteric collitis:

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

58. A patient has been suffering from diarrhea for 5 days. On the fifth day colonoscopy revealed that membrane of rectum was inflamed, there were greyish-green films closely adhering to the subjacent tissue. What is the most probable diagnosis?

- a. Dysentery**
- b. Nonspecific ulcerous colitis
- c. Crohn's disease
- d. Salmonellosis
- e. Typhoid fever

59. Autopsy of a 48 y.o. man revealed a round formation 5 cm in diameter with clear-cut outlines in the region of the 1st segment of his right lung. This formation was encircled with a thin layer of connective tissue full of white brittle masses. Make a diagnosis of the secondary tuberculosis form:

- a. Acute focal tuberculosis
- b. Fibrous cavernous tuberculosis
- c. Caseous pneumonia
- d. Acute cavernous tuberculosis
- e. Tuberculoma**

60. A man had worked in a coal mine for over 20 years. After his death autopsy revealed that his lungs were dense, grayish-black and had large areas of neogenic connective tissue containing a lot of microphages with black pigment in the cytoplasm. What is the most likely diagnosis?

- a. Siderosis
- b. Anthracosis**
- c. Silicoanthracosis
- d. Anthracosilicosis
- e. Talcosis

61. Skin of a man who died from cardiac insufficiency has an eruption in form of spots and specks. There are also bedsores in the area of sacrum and spinous vertebral processes. Microscopical examination of CNS, skin, adrenal glands revealed in the vessels of microcirculatory bed and in small arteries destructive-proliferative endothrombovasculitis with Popov's granulomas; interstitial myocarditis. What diagnosis corresponds with the described picture?

- a. Q fever
- b. Nodular periarthritis
- c. HIV
- d. Spotted fever**
- e. Enteric fever

62. Autopsy of a 17 year old girl who died from pulmonary failure revealed a small area of caseous necrosis in the inferior lobe of the right lung, and occurrences of caseous necrosis in the bronchopulmonary, bronchial and bifurcational lymph nodes. What is the most probable postmortem diagnosis?

- a. Primary tuberculosis**

- b. Hematogenous tuberculosis with predominant lung affection
- c. Caseous pneumonia under secondary tuberculosis
- d. Tuberculoma
- e. Hematogenous progression of primary tuberculosis

63. Autopsy of a man who died from the sepsis in his femoral bone revealed phlegmonous inflammation that affected the marrow, haversian canals and periosteum. Under the periosteum there are multiple abscesses, adjoining soft tissues of thigh also have signs of phlegmonous inflammation. What pathological process was described?

- a. -

- b. Acute hematogenous osteomyelitis**

- c. Chronic hematogenous osteomielitis
- d. Osteoporosis
- e. Osteopetrosis

64. An experimental animal was first sensitized whereupon an antigen dose was introduced subcutaneously. This injection resulted in the development of a fibrinous inflammation with alteration of vessel walls, basal substance and fibrous structures of connective tissue in form of mucoid and fibrinoid swelling and necrosis. What immunological reaction took place?

- a. Normergic reaction
- b. Granulomatosis
- c. Delayed-type hypersensitivity
- d. Reaction of transplantation immunity
- e. Immediate hypersensitivity**

65. Examination of a 55 year old woman revealed under the skin of submandibular area a movable slowly growing pasty formation with distinct borders 1,0x0,7 cm large. Histological examination revealed lipocytes that form segments of different forms and sizes separated from each other by thin layers of connective tissue with vessels. What is the most probable diagnosis?

- a. Fibrosarcoma
- b. Lipoma**
- c. Angioma
- d. Fibroma
- e. Liposarcoma

66. A 4 year old child complained of pain during deglutition, indisposition. Objectively: palatine arches and tonsils are moderately edematous and hyperemic, there are greyish-white films up to 1 mm thick closely adhering to the subjacent tissues. What pathological process are these changes typical for?

- a. Dystrophy
- b. Metaplasia
- c. Organization
- d. Inflammation**
- e. Necrosis

67. A 9 m.o. child has delayed dentition, it is also out of order. Upper jaw configuration is horizontal ("high" palate); microscopically - irregular mineralization of tooth enamel, wrinkled enamel prisms, some of them are vacuolated. Predentin zone is extended; there are solitary denticles. What disease is

it?

- a. Osteomalacia
- b. Late rickets
- c. Early rickets**
- d. Gout
- e. Hypervitaminosis D

68. Microscopical renal examination of a 36 y.o. woman who died from renal insufficiency revealed in the glomerules proliferation of capsule nephrothelium as well as of podocytes and phagocytes accompanied by formation of crescents, capillary loop necrosis, fibrinous thrombs in their lumens; sclerosis and hyalinosis of glomerules, atrophy of tubules and fibrosis of renal stroma. What is the most probable diagnosis?

- a. Subacute glomerulonephritis**
- b. Chronic glomerulonephritis
- c. Membranous nephropathy
- d. Focal segmentary sclerosis
- e. Acute glomerulonephritis

69. A forensic medical expert examines the body of a 58 y.o. man who had been consuming large amounts of alcohol for a long time and died at home. Microscopically: the right lung is dense and enlarged, its incision revealed that the tissue is greyish and homogenous, pleura is covered with greyish layers. Microscopically - alveolar cavities contain fibrin, hemolyzed erythrocytes. Make a diagnosis:

- a. Primary pulmonary tuberculosis
- b. Caseous pneumonia
- c. Focal pneumonia
- d. Interstitial pneumonia
- e. Croupous pneumonia**

70. Autopsy of a 50-year-old man revealed the following changes: his right lung was moderately compact in all parts, the dissected tissue was found to be airless, fine-grained, dryish. Visceral pleura had greyish-brown layers of fibrin. What is the most likely diagnosis?

- a. Interstitial pneumonia
- b. Pneumofibrosis
- c. Tuberculosis
- d. Bronchopneumonia
- e. Croupous pneumonia**

71. Autopsy of a 56 y.o. man revealed in the right temporal part of brain a big focus of softened grey matter that was semi-liquid and light grey. Arteries of cerebral tela contain multiple whitish-yellow thickenings of intima that abruptly narrow the lumen. What is your diagnosis?

- a. Brain edema
- b. Ischemic stroke**
- c. Hemorrhage
- d. Brain abscess
- e. Hemorrhagic infarction

72. A 22 y.o. woman has enlarged lymph nodes. Histologically: a lymph node contains lymphocytes, histiocytes, reticular cells, small and big Hodgkin's cells, multinucleated Sternberg cells, isolated foci of caseous necrosis. What disease are these changes typical for?

- a. Chronic leukosis
- b. Lymphosarcoma
- c. Lymphogranulomatosis**
- d. Acute leukosis
- e. Lung cancer metastasis

73. Analysis of a puncture biopsy material of liver revealed hepatocyte dystrophy with necroses as well as sclerosis with disorder of beam and lobulous structure, with formation of pseudolobules and

regenerative nodes. What is the most probable diagnosis:

- a. Acute hepatitis
- b. Liver cirrhosis**
- c. Chronic hepatitis
- d. Chronic hepatosis
- e. Progressive massive liver necrosis

74. Autopsy of a man, who had been suffering from the multiple bronchiectasis for 5 years and died from chronic renal insufficiency, revealed that kidneys were dense and enlarged, with thickened cortical layer of white colour with greasy lustre. What renal disease might be suspected?

- a. Chronic pyelonephritis
- b. Glomerulonephritis
- c. Secondary amyloidosis**
- d. Necrotic nephrosis
- e. -

75. Autopsy of a 49-year-old woman who died from chronic renal insufficiency, revealed: kidneys were dense, reduced, multicoloured, with haemorrhagic areas. Microscopic examination revealed some hematoxylin bodies in the nuclei of the renal tubule epithelium; "wire-loop" thickening of the glomerular capillary basement membrane; here and there in the capillaries some hyaline thrombi and foci of fibrinoid necrosis were present. What is the most likely diagnosis?

- a. Amyloidosis
- b. Atherosclerotic nephrosclerosis
- c. Rheumatism
- d. Arteriosclerotic pneumosclerosis
- e. Systemic lupus erythematosus**

76. Unpainfull formation without marked borders appeared in the soft tissues of the thigh in the young man. On the tissue bioplate the formation looks like a meat of a fish, consisting of the immature fibroblast-like cells with multiple mitosis, which grow through the muscles. What is the most likely diagnosis?

- a. Myoma
- b. Fibrosarcoma**
- c. Fibroma
- d. Myosarcoma
- e. Cancer

77. A 45 y.o. patient consulted a doctor about plaque-shaped formation on his neck. Histological examination of biopsy skin material revealed tumourous cells of round and oval form with thin ring of basophilic cytoplasma that resemble of cells of basal epidermal layer. What tumour is it?

- a. Hydradenoma
- b. Epidermal cancer
- c. Basalioma**
- d. Trichoepithelioma
- e. Syringoadenoma

78. A 63 y.o. man fell ill with acute tracheitis and bronchitis accompanied by bronchial pneumonia. On the 10th day the patient died from cardiopulmonary insufficiency. Autopsy revealed fibrinous hemorrhagic laryngotracheobronchitis; lungs were enlarged, their incision revealed the "coal-miners" effect caused by interlacing of sections of bronchial pneumonia, hemorrhages into the pulmonary parenchyma, acute abscesses and atelectases. Internal organs have discirculatory and dystrophic changes. What is the most probable diagnosis?

- a. Moderately severe influenza
- b. Respiratory syncytial infection
- c. Adenoviral infection
- d. Influenza, severe form**
- e. Parainfluenza

79. Autopsy of a man who died from influenza revealed that his heart was slightly enlarged, pastous, myocardium was dull and had specks. Microscopical examination of myocardium revealed signs of parenchymatous adipose and hydropic dystrophy; stroma was edematic with poor macrophagal and lymphocytic infiltration, vessels were plethoric; perivascular analysis revealed petechial hemorrhages. What type of myocarditis was developed in this case?

- a. Serous diffuse
- b. Serous focal
- c. Granulomatous
- d. Purulent
- e. Interstitial proliferative

80. A boy is 7 y.o. Objectively: against the background of hyperemic skin there is knobby bright-pink rash on his forehead, neck, at the bottom of abdomen, in the popliteal spaces; nasolabial triangle is pale. Examination of oropharyngeal surface revealed localized bright-red hyperemia; tonsils are swollen, soft, lacunas contain pus, tongue is crimson. Cervical lymph nodes are enlarged, dense and painful. What is the most probable diagnosis?

- a. Rubella
- b. Diphtheria
- c. Infectious mononucleosis
- d. Scarlet fever**
- e. Whooping cough

81. Gynecological examination of the uterine cervix in a 30-year-old woman revealed some bright-red lustrous spots that easily bleed when touched. Biopsy showed that a part of the uterine cervix was covered with cylindrical epithelium with papillary outgrowths; in the depth of tissue the growth of glands was present. What pathology of the uterine cervix was revealed?

- a. True erosion
- b. Glandular hyperplasia
- c. Leukoplakia
- d. Pseudoerosion**
- e. Endocervicitis

82. A stillborn child was found to have thickened skin resembling of the tortoise shell, underdeveloped auricles. Histological examination of skin revealed hyperkeratosis, atrophy of the granular epidermis layer; inflammatory changes were not present. What is the most likely diagnosis?

- a. Leukoplakia
- b. Erythroplakia
- c. Dermatomyositis
- d. Ichthyosis**
- e. Xeroderma

83. A pathology-histology laboratory received a vermiform appendix up to 2,0 cm thick. Its serous membrane was pale, thick and covered with yellowish-green films. The wall was flaccid, of grayish-red colour. The appendix lumen was dilated and filled with yellowish-green substance. Histological examination revealed that the appendix wall was infiltrated with neutrophils. Specify the appendix disease:

- a. Acute simple appendicitis
- b. Chronic appendicitis
- c. Acute gangrenous appendicitis
- d. Acute superficial appendicitis
- e. Acute phlegmonous appendicitis**

84. A 46 year old patient who had been suffering from tuberculosis for 6 years died from massive pulmonary haemorrhage. Autopsy revealed different-sized foci of sclerosis and caseous necrosis in lungs, in the upper part of the right lung there was a cavity 5 cm in diameter with dense grey walls, the cavity contained liquid blood and blood clots. What type of tuberculosis is it?

- a. Infiltrative

b. Acute cavernous

c. Fibrocavernous

d. Fibrous focal

e. Acute focal

85. A patient died from cardiopulmonary decompensation. Histological examination revealed diffused pulmonary lesion together with interstitial edema, infiltration of tissue by lymphocytes, macrophages, plasmocytes; pulmonary fibrosis, panacinar emphysema. What disease corresponds with the described picture?

a. Fibrosing alveolitis

b. Bronchopneumonia

c. Bronchial asthma

d. Pulmonary atelectasis

e. Chronic bronchitis

86. A 50 year old patient has been taking treatment thrice for the last 6 months because of fractures caused by domestic accidents. Microscopical examination of bony tissue revealed foci of lacunar resolution, giant-cell granulomas in the tumour-like formations, cysts. Bony tissue was substituted by fibrous connective tissue. Examination revealed also adenoma of parathyroid gland and hypercalcemia. What is the most probable diagnosis?

a. Osteopetrosis

b. Pagets disease

c. Myelomatosis

d. Osteomyelitis

e. Parathyroid osteodystrophy

87. hours after a skeletal extension was performed to a 27 year old patient with multiple traumas (closed injury of chest, closed fracture of right thigh) his condition abruptly became worse and the patient died from acute cardiopulmonary decompensation. Histological examination of pulmonary and cerebral vessels stained with Sudan III revealed orange drops occluding the vessel lumen. What complication of polytrauma was developed?

a. Microbal embolism

b. Gaseous embolism

c. Fat embolism

d. Thromboembolism

e. Air embolism

88. A 50 year old patient underwent resection of tumour of large intestine wall. Microscopically it presents itself as fascicles of divergent collagen fibers of different thickness and form and some monomorphous fusiform cells that are irregularly distributed among the fibers. Cellular atypia is not evident. What tumour is it?

a. Desmoma

b. Fibrosarcoma

c. Fibromyoma

d. Soft fibroma

e. Hard fibroma

89. Autopsy of a 5 year old child revealed in the area of vermis of cerebellum a soft greyish-pink node 2 cm in diameter with areas of haemorrhage. Histologically this tumour consisted of atypical monomorphous small roundish cells with big polymorphous nuclei. What tumour is it?

a. Meningioma

b. Astrocytoma

c. Oligodendrogloma

d. Medulloblastoma

e. Glioblastoma

90. In course of severe respiratory viral infection there appeared clinical signs of progressing cardiac insufficiency that caused death of a patient in the 2nd week of disease. Autopsy revealed that the

heart was sluggish, with significant cavity dilatation. Histological examination of myocardium revealed plethora of microvessels and diffuse infiltration of stroma by lymphocytes and histiocytes. What disease corresponds with the described picture?

- a. Stenocardia
- b. Myocardium infarction
- c. Cardiomyopathy
- d. Myocarditis**
- e. Acute coronary insufficiency

91. A 38 year old patient with full-blown jaundice, small cutaneous hemorrhages, general weakness and loss of appetite underwent puncture biopsy of liver. Histological examination revealed disseminated dystrophy, hepatocyte necrosis, councilmans bodies. Lobule periphery has signs of significant infiltration by lymphocytes, there are also individual multinuclear hepatocytes. What is the most probable diagnosis?

- a. Chronic hepatitis
- b. Acute viral hepatitis**
- c. Miliary hepatic cirrhosis
- d. Acute alcoholic hepatitis
- e. Toxic degeneration of liver

92. A 20 year old patient died from intoxication 8 days after artificial illegal abortion performed in her 14-15th week of pregnancy. Autopsy of the corpse revealed yellowish colour of eye sclera and of skin, necrotic suppurative endometritis, multiple pulmonary abscesses, spleen hyperplasia with a big number of neutrophils in its sinuses. What complication after abortion was developed?

- a. Hemorrhagic shock
- b. Septicemia
- c. Septicopyemia**
- d. Chroniosepsis
- e. Viral hepatitis type A

93. A section of the left lung was found to have an area of dense red tissue. The area was cone-shaped, stood out distinctly from the healthy tissue, with its base directed to the pleura. The dissected tissue was granular, dark-red. What is the most likely diagnosis?

- a. Lung abscess
- b. Primary tuberculous affection
- c. Croupous pneumonia
- d. Haemorrhagic infarction**
- e. Lung gangrene

94. A patient has a cluster of matted together dense lymph nodes on his neck. Histological examination of a removed lymph node revealed proliferation of reticular cells, presence of Reed-Sternberg cells. What disease is meant?

- a. Lymphoblastic leukosis
- b. Myelocytic leukosis
- c. Lymphocytic leukosis
- d. Lymphogranulomatosis**
- e. Myeloblastic leukosis

95. A patient had been suffering from profuse diarrhea and vomiting for 2 days. He died from acute dehydration. Autopsy revealed that the intestinal wall was edematous and hyperemic, with multiple haemorrhages in the mucous membrane. Intestine lumen contains whitish fluid resembling of rice water. What disease caused death?

- a. Typhoid fever
- b. Enterocolitis
- c. Dysentery
- d. Salmonellosis
- e. Cholera**

96. Examination of a 66 year old patient revealed a lytic tumour in the locus of pathological rib fracture. Histologically this tumour consists of atypical plasmoblasts. Further examination revealed osteoporosis in the bones of vertebral column and pelvis. These changes are typical for:

a. Metastatic lung cancer

**b. Myelomatosis**

c. Ewings osteosarcoma

d. Tuberculous osteomyelitis

e. Neuroblastoma

97. A patient died from acute cardiac insufficiency, among clinical presentations there was gastrointestinal haemorrhage. Examination of mucous membrane of stomach revealed some defects reaching myenteron; their edges and bottom were mostly even and loose, some of them contained dark-red blood. What pathological process was revealed?

a. Chronic ulcers

b. Thrombosis

c. Inflammation

**d. Acute ulcers**

e. Erosions

98. A 33 year old man died from uraemia. Autopsy revealed enlarged kidneys weighing 500,0 each and consisting of multiple cavities 0,5-2 cm in diameter. The cavities were full of light-yellow transparent liquid. Renal pelvis and ureters had no peculiarities. What renal disease caused uraemia?

a. Renal tumour

b. Chronic pyelonephritis

**c. Bilateral polycystic renal disease**

d. Renal tuberculosis

e. Rapidly progressing glomerulonephritis

99. A patient ill with tuberculosis died from progressing cardiopulmonary decompensation. Autopsy in the area of the right lung apex revealed a cavity 5 cm in diameter communicating with lumen of a segmental bronchus. On the inside cavity walls are covered with caseous masses with epithelioid and Langhans cells beneath them. What morphological form of tuberculosis is it?

a. Acute focal tuberculosis

**b. Acute cavernous tuberculosis**

c. Caseous pneumonia

d. Tuberculoma

e. Infiltrative tuberculosis

100. A 30 year old woman has applied a lipstick with a fluorescent substance for a long time. Then she got a limited erythema and slight peeling on her lip border, later there appeared transversal striae and cracks. Special methods of microscopic examination of the affected area helped to reveal sensitized lymphocytes and macrophages in the connective tissue; cytolysis. What type of immunological hypersensitivity was developed?

a. III type (immune complex cytotoxicity)

b. Granulomatosis

c. I type (reaginic)

d. II type (antibody cytotoxicity)

**e. IV type (cellular cytotoxicity)**

101. Examination of a young woman revealed a node-like, soft and elastic homogenous tumour of pinkish-white colour along the acoustic nerve. The tumour contains cell bundles with oval nuclei. Cellular fibrous bundles form rhythmic structures made up by parallel rows of regularly oriented cells arranged in form of a palisade with cell-free homogenous zone (Verocay bodies) between them. What tumour is it?

a. Ganglioneuroblastoma

**b. Neurinoma**

c. Ganglioneurinoma

- d. Malignant neurinoma
- e. Neuroblastoma

102. A 23 year old man has perforation of hard palate. In the area of this perforation there was a compact well-defined formation. Microscopic examination of the resected formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis, cellular infiltration composed of lymphocytes, epithelioid cells (mainly plasmacytoid). What is the most probable diagnosis?

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

103. A 50 year old man who was referred to the hospital for treatment of cervical lymphadenitis underwent test for individual sensitivity to penicillin. 30 seconds after he went hot all over, AP dropped down to 0 mm Hg that led to cardiac arrest. Resuscitation was unsuccessful. Autopsy results: acute venous plethora of internal organs; histological examination of skin (from the site of injection) revealed degranulation of mast cells (tissue basophils). Degranulation was also revealed in myocardium and lungs. What type of hypersensitivity reaction is it?

- a. Immunocomplex-mediated
- b. -
- c. Delayed-type hypersensitivity
- d. Complement-mediated cytotoxic
- e. Anaphylactic**

104. A 2 year old child had acute respiratory viral infection and died from cardiopulmonary decompensation. Autopsy revealed that his right lung was hyperemic; in the 2nd, 6th and 10th segments and on the incision there were airless yellowish foci of irregular form, from several mm up to 1 cm large. Microscopical examination revealed exudate consisting mainly of neutrophils in the given areas of pulmonary tissue in the alveoles, bronchioles and bronchial tubes. What is the most probable diagnosis?

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

105. The upper lobe of the right lung is enlarged, grey and airless, the incision surface is dripping with turbid liquid, the pleura has many fibrinogenous films; microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocytes and fibrin fibers. The bronchus wall is intact. What is the most probable diagnosis?

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

106. A 28 year old patient had high arterial pressure, hematuria and facial edema. In spite of treatment renal insufficiency was progressing. 6 months later the patient died from uremia. Microscopic examination of his kidneys and their glomerules revealed proliferation of capsule nephrothelium and of podocytes with demilune formation, sclerosis and hyalinosis of glomerules. What disease corresponds with the described picture?

- a. Chronic glomerulonephritis
- b. Acute glomerulonephritis
- c. Acute pyelonephritis
- d. Nephrotic syndrome

e. Subacute glomerulonephritis

107. Autopsy of a man ill with severe hypothyroidism revealed that connective tissue, organ stroma, adipose and cartilaginous tissues were swollen, semitransparent, mucus-like. Microscopic examination of tissues revealed stellate cells having processes with mucus between them. What type of dystrophy is it?

a. Stromal-vascular carbohydrate

- b. Stromal-vascular proteinaceous
- c. Parenchymatous adipose
- d. Parenchymatous proteinaceous
- e. Stromal-vascular adipose

108. Examination of the anterior abdominal wall of a pregnant woman revealed a tumour-like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was well-defined, dense, 2

a. Lipoma

- b. Hibernoma

- c. Leiomyoma

d. Desmoid

- e. Fibrosarcoma

109. Multiple oval ulcers along the intestine were revealed on autopsy of the person, who died from diffuse of peritonitis in the distant part of the small intestine. Bottom parts of the ulcers are clear, smooth, formed with muscular or serous covering, edges of ulcers are flat, rounded. There are perforations up to 0,5 cm in diameter in two ulcers. What disease can be diagnosed?

a. Cholera

- b. Dysentery

c. Typhoid fever

- d. Tuberculosis

- e. Typhus

110. Patient suffering from trombophlebitis of the deep veins suddenly died. Autopsy has shown freely lying red friable masses with dim crimped surface in the trunk and bifurcation of the pulmonary artery. What pathologic process was revealed by morbid anatomist?

a. Thrombosis

- b. Embolism with foreign body

- c. Fat embolism

d. Tromboembolism

- e. Tissue embolism

111. Examination of a patient revealed a dense, movable skin tumour that is standing out distinctly from the surrounding tissues. Its section is found to be white and composed of fibrous tissue.

Microscopic examination revealed interlacing collagen fibers and few cells. What tumour is it?

a. Myoma

- b. Dermatofibroma

- c. Desmoid

d. Fibroma

- e. Histiocytoma

112. A 50-year-old man has felt vague abdominal discomfort within past 4 months. Physical examination revealed no lymphadenopathy, and no abdominal masses or organomegaly at palpation. Bowel sounds are heard. An abdominal CT scan shows a 20 cm retroperitoneal soft tissue mass obscuring the left psoas muscle. A stool specimen tested for occult blood is negative. Which of the following neoplasms is this man most likely to have?

a. Adenocarcinoma

- b. Lymphoma

- c. Melanoma

- d. Hamartoma

**e. Lipoma**

113. A 40-year-old woman has had a feeling of abdominal discomfort for the past 8 months. On pelvic examination, there is the right adnexal mass. Abdominal CT scan demonstrates a 7 cm cystic mass involving the right ovary with small areas of calcification. The uterus is normal in size. The right fallopian tube and ovary have been removed surgically. Grossly, the mass on sectioning is filled with abundant hair and sebum. Microscopically, the mass has glandular spaces lined by columnar epithelium, squamous epithelium with hair follicles, cartilage, and dense connective tissue. What type of tumour is it?

- a. Squamous cell carcinoma of ovary
- b. Sarcoma of ovary
- c. Metastase of cervical carcinoma

**d. Teratoma**

- e. Melanoma

114. A man died 8 days after the beginning of the disease. He was diagnosed with dysentery. At the autopsy it was found out a thickened wall of the sigma and rectum, fibrinous membrane on the surface of mucous membrane. Histologically: there is a deep necrosis of mucous membrane with infiltration of necrotic masses with fibrin. What kind of colitis does correspond to the changes?

- a. Chronic
- b. Gangrenous
- c. Catarrhal
- d. Ulcerative
- e. Diphtheritic

115. A 46 year-old man complains of difficult nose breathing. Mikulich cells, storage of epithelioid cells, plasmocytes, lymphocytes, hyaline balls are discovered in the biopsy material of the nose thickening. What is the most likely diagnosis?

- a. Allergic rhinitis
- b. Virus rhinitis
- c. Scleroma**
- d. Rhinovirus infection
- e. Meningococcal nasopharyngitis

116. Extensive thromboembolic infarction of the left cerebral hemispheres, large septic spleen, immunocomplex glomerulonephritis, ulcers on the edges of the aortic valves, covered with polypous thrombus with colonies of staphylococcus were revealed on autopsy of the young man who died in coma. What disease caused cerebral thromboemboly?

- a. Septicopyemia
- b. Rheumatic thromboendocarditis
- c. Septicemia
- d. Acute rheumatic valvulitis
- e. Septic bacterial endocarditis**

117. A patient ill with diabetes mellitus felt acute pain in his right foot. Objectively: foot thumb is black, foot tissues are edematous, there are foci of epidermis desquamation, stinking discharges. What clinicopathological form of necrosis is it?

- a. Infarction
- b. Moist gangrene**
- c. Sequestrum
- d. Bedsore
- e. Dry gangrene

118. During surgery in a 17-year-old patient it was revealed the tumour of 4,5 to 5,0 to 3,5 sm in size on the lower surface of the liver with subserose localization, of dark-red colour. On the section tumour has cavities with marked amount of blood. What is preliminary diagnosis?

- a. Hemangiopericytoma
- b. Capillar hemangioma

c. Cavernous hemangioma

d. Hemangioendothelioma

e. Lymphangioma

119. A sick man with high temperature and a lot of tiny wounds on the body has been admitted to the hospital. Lice have been found in the folds of his clothing. What disease can be suspected in the patient?

a. Plague

b. Epidemic typhus

c. Scabies

d. Tularemia

e. Malaria

120. On autopsy it is revealed that kidneys are enlarged, surface is large-granular because of multiple cavities with smooth wall, which are filled with clear fluid. What kidney disease did the patient have?

a. Necrotic nephrosis

b. Glomerulonephritis

c. Infarction

d. Polycystic kidney

e. Pyelonephritis

121. On autopsy it is revealed enlarged dense right lung, fibrin layers on the pleura. Lung tissue is light green color on incision with muddy liqued exudates. What lung disease are these symptoms typical for?

a. Bronchopneumonia,

b. Pulmonary gangrenei

c. Fibrosing alveolitis

d. Lung-fever

e. Interstitial pneumonia

122. On autopsy it is revealed: soft arachnoid membrane of the upper parts of cerebral hemisphere is plethoric, it is of yellowish-green color, soaked with purulent and fibrose exudate, it looks like cap.

For what disease is it characteristical picture

a. Influenza meningitis

b. Tuberculous meningitis

c. Meningococcal meningitis

d. Meningitis at anthrax

e. Meningitis at typhus

123. On autopsy of the 58-year-old man it is revealed: mitral valve is deformed, thickened, not totally closed. Microscopically: centers of collagen fibers are eosinophilic, have positive fibrin reaction. The most likely it is:

a. Fibrinoid inflammation

b. Hyalinosis

c. Amyloidosis

d. Fibrinoid swelling

e. Mucoid swelling

124. Chronic inflammation and transformation of the one-layer ciliated epithelium into multiple-layers flat epithelium was revealed in the thickened mucous membrane of the bronchus bioplate of the patient with smoke abuse. Which of the processes is the most likely?

a. Squamous cancer

b. Hyperplasia of the epithelium

c. Metaplasia

d. Leucoplacia

e. Epithelium hypertrophy

125. For a long time a 49-year-old woman was suffering from glomerulonephritis which caused

death. On autopsy it was revealed that kidneys size was 7 to 3 to 2.5 sm, weight is 65,0 g, they are dense and small-grained. Microscopically: fibrinogenous inflammation of serous and mucous capsules, dystrophic changes of parenchymatous organs, brain edema. What complication can cause such changes of serous capsules and inner organs?

- a. Thrombopenia
- b. Uraemia**
- c. Sepsis
- d. Anemia
- e. DIC-syndrome

126. A patient died under conditions of cardiovascular insufficiency. Autopsy results: postinfarction cardiosclerosis, myocardium hypertrophy and dilatation of its cavities, especially of its right ventricle. Liver is enlarged, its surface is smooth, incision revealed that it was plethoric, with dark-red specks against the background of brownish tissue. Histologically: plethora of central parts of lobules; peripheral parts around portal tracts contain hepatocytes in a state of adipose degeneration. How are these liver changes called?

- a. Pseudonutmeg liver
- b. Liver cirrhosis
- c. Liver steatosis
- d. Nutmeg liver**
- e. Amyloidosis

127. A 59-year-old man has signs of the parenchymatous jaundice and portal hypertension. On histological examination of the puncture of the liver biopsate, it was revealed: beam-lobule structure is affected, part of hepatocytes has signs of fat dystrophy, port-portal connective tissue septa with formation of pseudo-lobules, with periportal lympho-macrophage infiltrations. What is the most probable diagnosis?

- a. Alcohol hepatitis
- b. Viral hepatitis
- c. Toxic dystrophy
- d. Liver cirrhosis**
- e. Chronic hepatosis

128. On microscopic examination of the enlarged neck gland of a 14-year-old girl it was revealed destruction of the tissue structure of the node, absence of the lymph follicles, sclerotic and necrosis parts, cell constitution of the node is polymorphous, lymphocites, eosinophiles, atypical cells of the large size with multiple-lobule nuclei (Beresovsky-Shternberg cells) and onenucleus cells of the large size are present. What is the most likely diagnosis?

- a. Fungous mycosis
- b. Lymphogranulomatous**
- c. Chronic lympholeucosis
- d. Acute lympholeucosis
- e. Berkitts lymphoma

129. On autopsy of the 40-year-old woman suffering from rheumatic arthritis, the enlarged solid spleen was revealed. On section its tissue is of the mahogany color with enlarged follicles, which look like semi-transparent grayish-whitish grains. What pathological process is the most likely?

- a. Sago spleen**
- b. Waxy spleen
- c. Porphyric spleen
- d. Hyaline spleen
- e. Glaze spleen

130. Local lymphonodules enlarged near the infected wound. Increased amount of macrophages, lymphocytes, lymphatic follicles in the cortical layer and large amount of plasma cells were revealed on histological examination. What process in the lymphatic nodules represent these histological changes?

- a. Tumour transformation
- b. Hypersensitivity reaction
- c. Acquired insufficiency of the lymphoid tissue
- d. Innate insufficiency of the lymphoid tissue
- e. Antigen stimulation**

131. On autopsy of the man with alcohol abuse for a long time it was revealed: dense, small-knobby, small size liver. Microscopically: small pseudo-lobules, divided with thin layers of connective tissue with lymphomacrophagial infiltrates; hepatocytes in the state of globular fatty dystrophy. What is the most likely diagnosis?

- a. Alcohol cirrhosis**
- b. Chronic persistent alcohol hepatitis
- c. Fatty hepatosis
- d. Toxic liver dystrophy
- e. Chronic active alcohol hepatitis

132. An 8-year-old child was admitted to the infectious department with fever (up to 38 °C) and punctuate bright-red skin rash. The child was diagnosed as having scarlet fever. Objectively: mucous membrane of pharynx is apparently hyperaemic and edematous, the tonsils are enlarged and have dull yellowish-grey foci with some black areas. What inflammation is the reason for the pharynx alterations?

- a. Serous
- b. Catarrhal
- c. Fibrinous
- d. Haemorrhagic
- e. Purulent necrotic**

133. A 30-year-old patient with bacteriologically proved dysentery developed the signs of paraproctitis. What is the stage of local changes in this patient?

- a. Healing of the ulcers stage
- b. Ulceration stage**
- c. Follicular colitis
- d. Fibrinous colitis
- e. Catarrhal colitis

134. A patient who has been abusing tobacco smoking for a long time has got cough accompanied by excretion of viscous mucus; weakness after minor physical stress, pale skin. The patient has also lost 12,0 kg of body weight. Endoscopic examination of biopsy material his illness was diagnosed as squamous cell carcinoma. Name a pathological process that preceded formation of the tumour:

- a. Necrosis
- b. Sclerosis
- c. Hypoplasia
- d. Hyperplasia
- e. Metaplasia**

135. Diagnostic scraping was performed to the woman with dysfunctional uterine bleeding. Multiple convoluted glands, ganglionally dilated cavities of some glands were revealed histologically in the scrape. Name the type of general pathological process

- a. Atrophy
- b. Displasia
- c. Hypertrophic excrescence
- d. Glandulo-gangliac hyperplasia**
- e. Metaplasia

136. Tuberculin was injected intracutaneously to the child for tuberculin test. Marked hyperemia, tissue infiltration developed on the place of injection in 24 hours. What mechanism caused these modifications?

- a. Antibody cytotoxicity**

b. Reagin type cytotoxicity

c. Cells cytotoxicity

d. Granuloma formation

e. Immunocomplex cytotoxicity

137. Arterial hypertension, hyperglycemia, glucosuria were observed clinically for a long time in the patient with upper type of obesity. Death was due to the cerebral haemorrhage. Basophilic hypophysis adenoma, hyperplasia of adrenal gland cortex were revealed on pathomorphological examination. What is the likely diagnosis?

a. Adiposogenitalis dystrophy

b. Cushing disease

c. Acromegaly

d. Diabetes mellitus

e. Hypophysis nanism

138. On autopsy it was revealed: large (1-2 cm) brownish-red, easy crumbling formations covering ulcerative defects on the external surface of the aortic valve. What is the most likely diagnosis?

a. Polypus-ulcerative endocarditis

b. Acute warty endocarditis

c. Diffusive endocarditis

d. Fibroplastic endocarditis

e. Recurrent warty endocarditis

139. Purulent endometritis with fatal outcome was progressing in the woman after abortion performed not at the hospital. On autopsy multiple lung abscesses, subcapsule ulcers in the kidneys, spleen hyperplasia were revealed. What form of sepsis developed in the patient?

a. Chroniosepsis

b. Septicemia

c. Septopyemia

d. Lung sepsis

e. Urosepsis

140. Autopsy of a 73-year-old man who had been suffering from the coronary heart disease along with cardiac insufficiency for a long time revealed: nutmeg liver, brown induration of lungs, cyanotic induration of kidneys and spleen. What kind of circulation disorder was the cause of such effects?

a. Chronic anaemia

b. General chronic venous congestion

c. General acute venous congestion

d. Arterial hyperaemia

e. Acute anaemia

141. Autopsy of a man who had been working as a miner for many years and died from cardiopulmonary decompensation revealed that his lungs were airless, sclerosed, their apexes had emphysematous changes, the lung surface was greyish-black, the incised lung tissue was coal-black. What disease caused death?

a. Asbestosis

b. Aluminosis

c. Silicosis

d. Talcosis

e. Anthracosis

142. Examination of coronary arteries revealed atherosclerotic calcific plaques that close vessel lumen by one third. The muscle has multiple whitish layers of connective tissue. What process was revealed in myocardium?

a. Diffuse cardiosclerosis

b. Postinfarction cardiosclerosis

c. Myocardium infarction

d. Myocarditis

e. Tiger heart

143. A 63 year old male patient who had been suffering from chronic diffuse obstructive disease, pulmonary emphysema, for 15 years died from cardiac insufficiency. Autopsy revealed nutmeg liver cirrhosis, cyanotic induration of kidneys and spleen, ascites, edemata of lower limbs. These changes of internal organs are typical for the following disease:

- a. Chronic right-ventricular insufficiency
- b. Chronic left-ventricular insufficiency
- c. General cardiac insufficiency
- d. Acute left-ventricular insufficiency
- e. Acute right-ventricular insufficiency

144. A worker of a cattle farm fell acutely ill and then died from the progressing intoxication. Autopsy revealed enlarged, hyposthenic spleen of dark-cherry colour when dissected; excessive pulp scraping. At the base and fornix of brain pia maters are edematous, soaked with blood, dark-red ("scarlet hat"). Microscopic examination revealed serous haemorrhagic inflammation of brain tissues and tunics along with destruction of small vessel walls. What is the most likely diagnosis?

- a. Anthrax
- b. Brucellosis
- c. Cholera
- d. Plaque
- e. Tularemia

145. Histological examination of a skin tissue sampling revealed granulomas consisting of macrophagal nodules with lymphocytes and plasmatic cells. There are also some big macrophages with fatty vacuoles containing causative agents of a disease packed up in form of spheres (Virchows cells). Granulation tissue is well vascularized. What disease is this granuloma typical for?

- a. Lepra
- b. Syphilis
- c. Glanders
- d. Rhinoscleroma
- e. Tuberculosis

146. A 40 year old man noticed a reddening and an edema of skin in the area of his neck that later developed into a small abscess. The incised focus is dense, yellowish-green. The pus contains white granules. Histological examination revealed drusen of a fungus, plasmatic and xanthome cells, macrophages. What type of mycosis is the most probable?

- a. Coccidioidomycosis
- b. Actinomycosis
- c. Candidosis
- d. Aspergillosis
- e. Sporotrichosis

147. A physician examined a patient and found inguinal hernia. Through what anatomic formation does it penetrate into the skin?

- a. Lacuna musculorum
- b. Anulus inguinalis superficialis
- c. Anulus femoralis
- d. Canalis adductorius
- e. Hiatus saphenus

148. A 30 year old man had been suffering from acute respiratory disease and died from cardiopulmonary decompensation. Autopsy revealed fibrinous-haemorrhagic inflammation in the mucous membrane of larynx and trachea, destructive panbronchitis, enlarged lungs that look black due to the multiple abcesses, haemorrhages, necrosis. What is the most probable postmortem diagnosis?

- a. Influenza
- b. Respiratory syncytial infection

c. Adenoviral infection

d. Measles

e. Parainfluenza

149. A man with a wound of his limb that had been suppurating for a long time died from intoxication. Autopsy revealed extreme emaciation, dehydration, brown atrophy of liver, myocardium, spleen and cross-striated muscles as well as renal amyloidosis. What diagnosis corresponds with the described picture?

a. Chernogubovs syndrome

b. Brucellosis

c. Septicopyemia

d. Septicemia

**e. Chroniosepsis**

150. 6 months after delivery a woman had uterine bleeding. Gynecological examination revealed in the uterine cavity a dark-red tissue with multiple cavities that resembled of sponge. Microscopic examination of the tumour revealed some atypic light epithelial Langhans cells and giant cells of syncytiotrophoblast in blood lacunas. What tumour is it?

a. Adenocarcinoma

b. Squamous cell nonkeratinous carcinoma

**c. Chorioepithelioma**

d. Fibromyoma

e. Vesicular mole

151. A patient with android-type obesity had been suffering from arterial hypertension, hyperglycemia, glycosuria for a long time and died from the cerebral haemorrhage. Pathologic examination revealed pituitary basophil adenoma, adrenal cortex hyperplasia. What is the most likely diagnosis?

a. Adiposogenital dystrophy

**b. Itsenko-Cushings syndrome**

c. Acromegalia

d. Diabetes mellitus

e. Pituitary nanism

152. Mucous membrane of the right palatine tonsil has a painless ulcer with smooth lacquer fundus and regular cartilagenous edges. Microscopically: inflammatory infiltration that consists of lymphocytes, plasmocytes, a small number of neutrophils and epithelioid cells; endovasculitis and perivasculitis. What disease is it?

a. Actinomycosis

b. Pharyngeal diphtheria

c. Ulcerous necrotic Vincents angina

**d. Syphilis**

e. Tuberculosis

153. Microscopical examination of a removed appendix revealed an edema, diffuse neutrophilic infiltration of appendix wall along with necrosis and defect of mucous membrane with affection of its muscle plate. What appendicitis form was developed?

a. Superficial

b. Apostematous

c. Phlegmonous

d. Gangrenous

**e. Ulcerophlegmonous**

154. A 39 y.o. woman went through an operation in course of which surgeons removed her uterine tube that was enlarged and a part of an ovary with a big cyst. Histological examination of a tube wall revealed decidual cells, chorion villi. What was the most probable diagnosis made after examination of the uterine tube?

a. Choriocarcinoma

- b. Placental polyp
- c. Tubal pregnancy**
- d. Papyraceous fetus
- e. Lithopedion

155. Autopsy of a 1,5-year-old child revealed haemorrhagic skin rash, moderate hyperaemia and edema of nasopharyngeal mucous membrane, small haemorrhages in the mucous membranes and internal organs; dramatic dystrophic alterations in liver and myocardium; acute necrotic nephrosis; massive haemorrhages in the adrenal glands. What disease are these alterations the most typical for?

- a. Epidemic typhus
- b. Meningococcal infection**
- c. Diphtheria
- d. Scarlet fever
- e. Measles

156. 48 hours after performing tuberculin test (Mantoux test) to a child a 10 mm papule appeared on the spot of tuberculin introduction. What hypersensitivity mechanism underlies these changes?

- a. Cellular cytotoxicity**
- b. Antibody-dependent cytotoxicity
- c. Granulomatosis
- d. Immune complex cytotoxicity
- e. Anaphylaxis

157. Colonoscopy of a patient ill with dysentery revealed that mucous membrane of his large intestine is hyperemic, edematic, its surface was covered with grey-and-green coats. Name the morphological form of dysenteric collitis:

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

158. A patient has been suffering from diarrhea for 5 day. On the fifth day colonoscopy revealed that membrane of rectum was inflamed, there were greyish-green films closely adhering to the subjacent tissue. What is the most probable diagnosis?

- a. Salmonellosis
- b. Crohns disease
- c. Typhoid fever
- d. Nonspecific ulcerous colitis
- e. Dysentery**

159. A man had worked in a coal mine for over 20 years. After his death autopsy revealed that his lungs were dense, grayish-black and had large areas of neogenic connective tissue containing a lot of microphages with black pigment in the cytoplasm. What is the most likely diagnosis?

- a. Anthracosilicosis
- b. Talcosis
- c. Siderosis
- d. Anthracosis**
- e. Silicoanthracosis

160. Autopsy of a man who died from the sepsis in his femoral bone revealed phlegmonous inflammation that affected the marrow, haversian canals and periosteum. Under the periosteum there are multiple abscesses, adjoining soft tissues of thigh also have signs of phlegmonous inflammation. What pathological process was described?

- a. Osteoporosis
- b. Osteopetrosis
- c. -
- d. Acute hematogenous osteomyelitis**

e. Chronic hematogenous osteomielitis

161. An experimental animal was first sensitized whereupon an antigen dose was introduced subcutaneously. This injection resulted in the development of a fibrinous inflammation with alteration of vessel walls, basal substance and fibrous structures of connective tissue in form of mucoid and fibrinoid swelling and necrosis. What immunological reaction took place?

a. Immediate hypersensitivity

- b. Reaction of transplantation immunity
- c. Granulomatosis
- d. Normergic reaction
- e. Delayed-type hypersensitivity

162. Examination of a 55 year old woman revealed under the skin of submandibular area a movable slowly growing pasty formation with distinct borders 1,0x0,7 cm large. Histological examination revealed lipocytes that form segments of different forms and sizes separated from each other by thin layers of connective tissue with vessels. What is the most probable diagnosis?

- a. Liposarcoma
- b. Fibrosarcoma
- c. Fibroma
- d. Angioma
- e. Lipoma

163. Microscopical renal examination of a 36 y.o. woman who died from renal insufficiency revealed in the glomerules proliferation of capsule nephrothelium as well as of podocytes and phagocytes accompanied by formation of "crescents", capillary loop necrosis, fibrinous thrombs in their lumens; sclerosis and hyalinosis of glomerules, atrophy of tubules and fibrosis of renal stroma. What is the most probable diagnosis?

- a. Chronic glomerulonephritis
- b. Acute glomerulonephritis
- c. Subacute glomerulonephritis
- d. Focal segmentary sclerosis
- e. Membranous nephropathy

164. A forensic medical expert examines the body of a 58 y.o. man who had been consuming large amounts of alcohol for a long time and died at home. Microscopically: the right lung is dense and enlarged, its incision revealed that the tissue is greyish and homogenous, pleura is covered with greyish layers. Microscopically - alveolar cavities contain fibrin, hemolyzed erythrocytes. Make a diagnosis:

- a. Caseous pneumonia
- b. Croupous pneumonia
- c. Interstitial pneumonia
- d. Focal pneumonia
- e. Primary pulmonary tuberculosis

165. Autopsy of a 56 y.o. man revealed in the right temporal part of brain a big focus of softened grey matter that was semi-liquid and light grey. Arteries of cerebral tela contain multiple whitish-yellow thickenings of intima that abruptly narrow the lumen. What is your diagnosis?

- a. Hemorrhagic infarction
- b. Brain edema
- c. Brain abscess
- d. Hemorrhage
- e. Ischemic stroke

166. A 22 y.o. woman has enlarged lymph nodes. Histologically: a lymph node contains lymphocytes, histiocytes, reticular cells, small and big Hodgkin's cells, multinucleated Sternberg cells, isolated foci of caseous necrosis. What disease are these changes typical for?

- a. Lung cancer metastasis
- b. Lymphogranulomatosis

- c. Chronic leukosis
- d. Lymphosarcoma
- e. Acute leukosis

167. Analysis of a puncture biopsy material of liver revealed hepatocyte dystrophy with necroses as well as sclerosis with disorder of beam and lobulous structure, with formation of pseudolobules and regenerative nodes. What is the most probable diagnosis:

- a. Chronic hepatitis
- b. Chronic hepatosis
- c. Liver cirrhosis**
- d. Progressive massive liver necrosis
- e. Acute hepatitis

168. Autopsy of a man, who had been suffering from the multiple bronchiectasis for 5 years and died from chronic renal insufficiency, revealed that kidneys were dense and enlarged, with thickened cortical layer of white colour with greasy lustre. What renal disease might be suspected?

- a. Necrotic nephrosis
- b. -
- c. Glomerulonephritis
- d. Chronic pyelonephritis
- e. Secondary amyloidosis**

169. Autopsy of a 49-year-old woman who died from chronic renal insufficiency, revealed: kidneys were dense, reduced, multicoloured, with haemorrhagic areas. Microscopic examination revealed some hematoxylin bodies in the nuclei of the renal tubule epithelium; "wire-loop" thickening of the glomerular capillary basement membrane; here and there in the capillaries some hyaline thrombi and foci of fibrinoid necrosis were present. What is the most likely diagnosis?

- a. Systemic lupus erythematosus**
- b. Arteriosclerotic pneumosclerosis
- c. Atherosclerotic nephrosclerosis
- d. Amyloidosis
- e. Rheumatism

170. Unpainfull formation without marked borders appeared in the soft tissues of the thigh in the young man. On the tissue biopstite the formation looks like a meat of a fish, consisting of the immature fibroblast-like cells with multiple mitosis, which grow through the muscles. What is the most likely diagnosis?

- a. Fibrosarcoma**
- b. Fibroma
- c. Myoma
- d. Cancer
- e. Myosarcoma

171. A 63 y.o. man fell ill with acute tracheitis and bronchitis accompanied by bronchial pneumonia. On the 10th day the patient died from cardiopulmonary insufficiency. Autopsy revealed fibrinous hemorrhagic laryngotracheobronchitis; lungs were enlarged, their incision revealed the "coal-miners" effect caused by interlacing of sections of bronchial pneumonia, hemorrhages into the pulmonary parenchyma, acute abscesses and atelectases. Internal organs have discirculatory and dystrophic changes. What is the most probable diagnosis?

- a. Influenza, severe form**
- b. Parainfluenza
- c. Adenoviral infection
- d. Respiratory syncytial infection
- e. Moderately severe influenza

172. Autopsy of a man who died from influenza revealed that his heart was slightly enlarged, pastous, myocardium was dull and had specks. Microscopical examination of myocardium revealed signs of parenchymatous adipose and hydropic dystrophy; stroma was edematic with poor macrophagal and

lymphocytic infiltration, vessels were plethoric; perivascular analysis revealed petechial hemorrhages. What type of myocarditis was developed in this case?

- a. Interstitial proliferative
- b. Purulent
- c. Granulomatous
- d. Serous diffuse**
- e. Serous focal

173. A boy is 7 y.o. Objectively: against the background of hyperemic skin there is knobby bright-pink rash on his forehead, neck, at the bottom of abdomen, in the popliteal spaces; nasolabial triangle is pale. Examination of oropharyngeal surface revealed localized bright-red hyperemia; tonsils are swollen, soft, lacunas contain pus, tongue is crimson. Cervical lymph nodes are enlarged, dense and painful. What is the most probable diagnosis?

- a. Infectious mononucleosis
- b. Scarlet fever**
- c. Whooping cough
- d. Rubella
- e. Diphtheria

174. Gynecological examination of the uterine cervix in a 30-year-old woman revealed some bright-red lustrous spots that easily bleed when touched. Biopsy showed that a part of the uterine cervix was covered with cylindrical epithelium with papillary outgrowths; in the depth of tissue the growth of glands was present. What pathology of the uterine cervix was revealed?

- a. Endocervicitis
- b. True erosion
- c. Pseudoerosion**
- d. Glandular hyperplasia
- e. Leukoplakia

175. A stillborn child was found to have thickened skin resembling of the tortoise shell, underdeveloped auricles. Histological examination of skin revealed hyperkeratosis, atrophy of the granular epidermis layer; inflammatory changes were not present. What is the most likely diagnosis?

- a. Dermatomyositis
- b. Ichthyosis**
- c. Xeroderma
- d. Leukoplakia
- e. Erythroplakia

176. Acute renal impairment caused death of a bleeding patient. Autopsy revealed enlarged kidneys with a broad pale pink cortical layer expressively demarcated from dark red renal pyramids. Macroscopic examination revealed lack of epithelial nuclei of convoluted tubules, tubulorrhesis, phlebostasis. The cell nuclei of choroid glomus and straight tubules were present. What pathology is it?

- a. Pyelonephritis
- b. Nephrosis
- c. Infarction
- d. Glomerulonephritis
- e. Necronephrosis**

177. A pathology-histology laboratory received a vermiform appendix up to 2,0 cm thick. Its serous membrane was pale, thick and covered with yellowish-green films. The wall was flaccid, of grayish-red colour. The appendix lumen was dilated and filled with yellowish-green substance. Histological examination revealed that the appendix wall was infiltrated with neutrophils. Specify the appendix disease:

- a. Acute superficial appendicitis
- b. Acute gangrenous appendicitis
- c. Acute phlegmonous appendicitis**

- d. Acute simple appendicitis
- e. Chronic appendicitis

178. A patient died from cardiopulmonary decompensation. Histological examination revealed diffused pulmonary lesion together with interstitial edema, infiltration of tissue by lymphocytes, macrophages, plasmocytes; pulmonary fibrosis, panacinar emphysema. What disease corresponds with the described picture?

- a. Bronchial asthma
- b. Fibrosing alveolitis**
- c. Bronchopneumonia
- d. Chronic bronchitis
- e. Pulmonary atelectasis

179. A 50 year old patient has been taking treatment thrice for the last 6 months because of fractures caused by domestic accidents. Microscopical examination of bony tissue revealed foci of lacunar resolution, giant-cell granulomas in the tumour-like formations, cysts. Bony tissue was substituted by fibrous connective tissue. Examination revealed also adenoma of parathyroid gland and hypercalcemia. What is the most probable diagnosis?

- a. Pagets disease
- b. Parathyroid osteodystrophy**
- c. Osteomyelitis
- d. Myelomatosis
- e. Osteopetrosis

180. 2 days after labour a woman developed shock along with DIC syndrome that caused her death. Autopsy revealed purulent endomyometritis, regional purulent lymphangitis, lymphadenitis and purulent thrombophlebitis. There were also dystrophic alterations and interstitial inflammation of parenchymal organs. What is the most likely diagnosis?

- a. Tuberculosis of genital organs
- b. Syphilis
- c. Septicemia**
- d. Chorioadenoma destruens
- e. Hydatid mole

181. 2 hours after a skeletal extension was performed to a 27 year old patient with multiple traumas (closed injury of chest, closed fracture of right thigh) his condition abruptly became worse and the patient died from acute cardiopulmonary decompensation. Histological examination of pulmonary and cerebral vessels stained with Sudan III revealed orange drops occluding the vessel lumen. What complication of polytrauma was developed?

- a. Fat embolism**
- b. Microbal embolism
- c. Air embolism
- d. Thromboembolism
- e. Gaseous embolism

182. A 50 year old patient underwent resection of tumour of large intestine wall. Microscopically it presents itself as fascicles of divergent collagen fibers of different thickness and form and some monomorphous fusiform cells that are irregularly distributed among the fibers. Cellular atypia is not evident. What tumour is it?

- a. Hard fibroma**
- b. Soft fibroma
- c. Fibrosarcoma
- d. Desmoma
- e. Fibromyoma

183. Autopsy of a 5 year old child revealed in the area of vermis of cerebellum a soft greyish-pink node 2 cm in diameter with areas of haemorrhage. Histologically this tumour consisted of atypical monomorphous small roundish cells with big polymorphous nuclei. What tumour is it?

a. Oligodendrogloma

**b. Medulloblastoma**

c. Glioblastoma

d. Meningioma

e. Astrocytoma

184. In course of severe respiratory viral infection there appeared clinical signs of progressing cardiac insufficiency that caused death of a patient in the 2nd week of disease. Autopsy revealed that the heart was sluggish, with significant cavity dilatation. Histological examination of myocardium revealed plethora of microvessels and diffuse infiltration of stroma by lymphocytes and histiocytes. What disease corresponds with the described picture?

a. Myocardium infarction

b. Cardiomyopathy

c. Stenocardia

d. Acute coronary insufficiency

**e. Myocarditis**

185. A patient with high-titer antinuclear antibodies died from progressing renal impairment. Autopsy revealed mesangiproliferative glomerulonephritis and abacterial polypous endocarditis. There was periarterial bulbar sclerosis in spleen and productive proliferative vasculitis in skin. What is the most likely diagnosis?

a. Periarteritis nodosa

**b. Systemic lupus erythematosus**

c. Rheumatism

d. Nephrotic syndrome

e. Dermatomyositis

186. A 38 year old patient with full-blown jaundice, small cutaneous hemorrhages, general weakness and loss of appetite underwent puncture biopsy of liver. Histological examination revealed disseminated dystrophy, hepatocyte necrosis, Councilmans bodies. Lobule periphery has signs of significant infiltration by lymphocytes, there are also individual multinuclear hepatocytes. What is the most probable diagnosis?

a. Miliary hepatic cirrhosis

b. Acute alcoholic hepatitis

**c. Acute viral hepatitis**

d. Toxic degeneration of liver

e. Chronic hepatitis

187. A 20 year old patient died from intoxication 8 days after artificial illegal abortion performed in her 14-15th week of pregnancy. Autopsy of the corpse revealed yellowish colour of eye sclera and of skin, necrotic suppurative endometritis, multiple pulmonary abscesses, spleen hyperplasia with a big number of neutrophils in its sinuses. What complication after abortion was developed?

a. Septicemia

b. Chroniosepsis

c. Viral hepatitis type A

**d. Septicopyemia**

e. Hemorrhagic shock

188. A section of the left lung was found to have an area of dense red tissue. The area was cone-shaped, stood out distinctly from the healthy tissue, with its base directed to the pleura. The dissected tissue was granular, dark-red. What is the most likely diagnosis?

a. Lung gangrene

b. Lung abscess

**c. Haemorrhagic infarction**

d. Primary tuberculous affection

e. Croupous pneumonia

189. A patient has a cluster of matted together dense lymph nodes on his neck. Histological

examination of a removed lymph node revealed proliferation of reticular cells, presence of Reed-Sternberg cells. What disease is meant?

- a. Lymphocytic leukosis
- b. Lymphogranulomatosis**
- c. Myeloblastic leukosis
- d. Lymphoblastic leukosis
- e. Myelocytic leukosis

190. Examination of a 66 year old patient revealed a lytic tumour in the locus of pathological rib fracture. Histologically this tumour consists of atypical plasmoblasts. Further examination revealed osteoporosis in the bones of vertebral column and pelvis. These changes are typical for:

- a. Ewings osteosarcoma
- b. Tuberculous osteomyelitis
- c. Myelomatosis**
- d. Neuroblastoma
- e. Metastatic lung cancer

191. A patient died from acute cardiac insufficiency, among clinical presentations there was gastrointestinal haemorrhage. Examination of mucous membrane of stomach revealed some defects reaching myenteron; their edges and bottom were mostly even and loose, some of them contained dark-red blood. What pathological process was revealed?

- a. Erosions
- b. Chronic ulcers
- c. Acute ulcers**
- d. Thrombosis
- e. Inflammation

192. A 33 year old man died from uraemia. Autopsy revealed enlarged kidneys weighing 500,0 each and consisting of multiple cavities 0,5-2 cm in diameter. The cavities were full of light-yellow transparent liquid. Renal pelvis and ureters had no peculiarities. What renal disease caused uraemia?

- a. Bilateral polycystic renal disease**
- b. Renal tumour
- c. Rapidly progressing glomerulonephritis
- d. Renal tuberculosis
- e. Chronic pyelonephritis

193. A patient ill with tuberculosis died from progressing cardiopulmonary decompensation. Autopsy in the area of the right lung apex revealed a cavity 5 cm in diameter communicating with lumen of a segmental bronchus. On the inside cavity walls are covered with caseous masses with epithelioid and Langhans cells beneath them. What morphological form of tuberculosis is it?

- a. Acute cavernous tuberculosis**
- b. Caseous pneumonia
- c. Acute focal tuberculosis
- d. Infiltrative tuberculosis
- e. Tuberculoma

194. Examination of a young woman revealed a node-like, soft and elastic homogenous tumour of pinkish-white colour along the acoustic nerve. The tumour contains cell bundles with oval nuclei. Cellular fibrous bundles form rhythmic structures made up by parallel rows of regularly oriented cells arranged in form of a palisade with cell-free homogenous zone (Verocay bodies) between them. What tumour is it?

- a. Neuroblastoma
- b. Ganglioneuroblastoma
- c. Malignant neurinoma
- d. Ganglioneurinoma
- e. Neurinoma**

195. A 23 year old man has perforation of hard palate. In the area of this perforation there was a

compact well-defined formation. Microscopic examination of the resected formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis, cellular infiltration composed of lymphocytes, epithelioid cells (mainly plasmocytes). What is the most probable diagnosis?

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

196. A 50 year old man who was referred to the hospital for treatment of cervical lymphadenitis underwent test for individual sensitivity to penicillin. 30 seconds after he went hot all over, AP dropped down to 0 mm Hg that led to cardiac arrest. Resuscitation was unsuccessful. Autopsy results: acute venous plethora of internal organs; histological examination of skin (from the site of injection) revealed degranulation of mast cells (tissue basophils). Degranulation was also revealed in myocardium and lungs. What type of hypersensitivity reaction is it?

- a. Delayed-type hypersensitivity
- b. Immunocomplex-mediated
- c. -
- d. Anaphylactic**
- e. Complement-mediated cytotoxic

197. A 2 year old child had acute respiratory viral infection and died from cardiopulmonary decompensation. Autopsy revealed that his right lung was hyperemic; in the 2nd, 6th and 10th segments and on the incision there were airless yellowish foci of irregular form, from several mm up to 1 cm large. Microscopical examination revealed exudate consisting mainly of neutrophils in the given areas of pulmonary tissue in the alveoles, bronchioles and bronchial tubes. What is the most probable diagnosis?

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

198. A 28 year old patient had high arterial pressure, hematuria and facial edema. In spite of treatment renal insufficiency was progressing. 6 months later the patient died from uremia. Microscopic examination of his kidneys and their glomerules revealed proliferation of capsule nephrothelium and of podocytes with "demilune" formation, sclerosis and hyalinosis of glomerules. What disease corresponds with the described picture?

- a. Chronic glomerulonephritis
- b. Acute glomerulonephritis
- c. Acute pyelonephritis
- d. Nephrotic syndrome
- e. Subacute glomerulonephritis**

199. Autopsy of a man ill with severe hypothyroidism revealed that connective tissue, organ stroma, adipose and cartilaginous tissues were swollen, semitransparent, mucus-like. Microscopic examination of tissues revealed stellate cells having processes with mucus between them. What type of dystrophy is it?

- a. Parenchymatous proteinous
- b. Parenchymatous adipose
- c. Stromal-vascular adipose
- d. Stromal-vascular proteinous
- e. Stromal-vascular carbohydrate**

200. Examination of the anterior abdominal wall of a pregnant woman revealed a tumour-like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was

well-defined, dense, 2x1 cm large. Histological examination revealed that the tumour was composed of differentiated connective tissue with prevailing collagen fibres. What tumour might be suspected?

- a. Fibrosarcoma
- b. Lipoma
- c. Desmoid
- d. Hibernoma
- e. Leiomyoma

201. Multiple oval ulcers along the intestine were revealed on autopsy of the person, who died from diffuse peritonitis in the distal part of the small intestine. Bottom parts of the ulcers are clear, smooth, formed with muscular or serous covering, edges of ulcers are flat, rounded. There are perforations up to 0,5 cm in diameter in two ulcers. What diseases can be diagnosed?

- a. Dysentery
- b. Tuberculosis
- c. Typhus
- d. Typhoid fever
- e. Cholera

202. Examination of a patient revealed a dense, movable skin tumour that is standing out distinctly from the surrounding tissues. Its section is found to be white and composed of fibrous tissue.

Microscopic examination revealed interlacing collagen fibers and few cells. What tumour is it?

- a. Desmoid
- b. Fibroma
- c. Histiocytoma
- d. Myoma
- e. Dermatofibroma

203. A 40-year-old woman has had a feeling of abdominal discomfort for the past 8 months. On pelvic examination, there is the right adnexal mass. Abdominal CT scan demonstrates a 7 cm cystic mass involving the right ovary with small areas of calcification. The uterus is normal in size. The right fallopian tube and ovary have been removed surgically. Grossly, the mass on sectioning is filled with abundant hair and sebum. Microscopically, the mass has glandular spaces lined by columnar epithelium, squamous epithelium with hair follicles, cartilage, and dense connective tissue. What type of tumour is it?

- a. Sarcoma of ovary
- b. Metastase of cervical carcinoma
- c. Squamous cell carcinoma of ovary
- d. Melanoma
- e. Teratoma

204. A woman suffering from dysfunctional metrorrhagia was made a diagnostic abortion.

Histologically in the scrape there were a lot of small stamped glandulars covered with multirowed epithelium. The lumens of some glandulars were cystically extended. Choose the variant of general pathologic process in the endometrium

- a. Atrophy of endometrium
- b. Neoplasm of endometrium
- c. Hypertrophic growth
- d. Glandular-cystic hyperplasia of endometrium
- e. Metaplasia of endometrium

205. A denaturation of proteins can be found in some substances. Specify the substance that is used for the incomplete denaturation of hemoglobin:

- a. Sulfuric acid
- b. Toluene
- c. Urea
- d. Nitric acid
- e. Sodium hydroxide

206. During surgery in a 17-year-old patient it was revealed the tumour of 4,5x5,0x3,5 sm in size on the lower surface of the liver with subserose localization, of dark-red color. On the section tumour has cavities with marked amount of blood. What is preliminary diagnosis?

- a. Hemangioendothelioma
- b. Lymphangioma
- c. Capillary hemangioma
- d. Hemangiopericytoma
- e. Cavernous hemangioma

207. A sick man with high temperature and a lot of tiny wounds on the body has been admitted to the hospital. Lice have been found in the folds of his clothing. What disease can be suspected in the patient?

- a. Malaria
- b. Plague
- c. Tularemia
- d. Scabies
- e. Epidemic typhus

208. On autopsy it is revealed enlarged dense right lung, fibrin layers on the pleura. Lung tissue is light green color on incision with muddy liqued exudates. What lung disease are these symptoms typical for?

- a. Fibrosing alveolitis
- b. Lung-fever
- c. Interstitial pneumonia
- d. Bronchopneumonia
- e. Pulmonary gangrene

209. On autopsy it is revealed: soft arachnoid membrane of the upper parts of cerebral hemisphere is plethoric, it is of yellowish-green color, soaked with purulent and fibrose exudate, it looks like cap. For what disease is it characteristical picture

- a. Meningitis at anthrax
- b. Meningitis at typhus
- c. Tuberculous meningitis
- d. Influenza meningitis
- e. Meningococcal meningitis

210. On autopsy of the 58-year-old man it is revealed: mitral valve is deformed, thickened, not totally closed. Microscopically: centers of collagen fibers are eosinophilic, have positive fibrin reaction. The most likely it is:

- a. Amyloidosis
- b. Fibrinoid swelling
- c. Mucoid swelling
- d. Fibrinoid inflammation
- e. Hyalinosis

211. Chronic inflammation and transformation of the one-layer ciliated epithelium into multiple-layers flat epithelium was revealed in the thickened mucous membrane of the bronchus bioplate of the patient with smoke abuse. Which of the processes is the most likely?

- a. Leucoplacia
- b. Epithelium hypertrophy
- c. Hyperplasia of the epithelium
- d. Squamous cancer
- e. Metaplasia

212. For a long time a 49-year-old woman was suffering from glomerulonephritis which caused death. On autopsy it was revealed that kidneys size was 7x3x2.5 sm, weight is 65,0 g, they are dense and small-grained. Microscopically: fibrinogenous inflammation of serous and mucous capsules, dystrophic changes of parenchymatous organs, brain edema. What complication can cause such

changes of serous capsules and inner organs?

- a. Sepsis
- b. Anemia
- c. Uraemia**
- d. DIC-syndrome
- e. Thrombopenia

213. A patient died under conditions of cardiovascular insufficiency. Autopsy results: postinfarction cardiosclerosis, myocardium hypertrophy and dilatation of its cavities, especially of its right ventricle. Liver is enlarged, its surface is smooth, incision revealed that it was plethoric, with dark-red specks against the background of brownish tissue. Histologically: plethora of central parts of lobules; peripheral parts around portal tracts contain hepatocytes in a state of adipose degeneration. How are these liver changes called?

- a. Liver cirrhosis
- b. Liver steatosis
- c. Pseudonutmeg liver
- d. Amyloidosis
- e. Nutmeg liver**

214. A 59-year-old man has signs of the parenchymatous jaundice and portal hypertension. On histological examination of the puncture of the liver bioplate, it was revealed: beam-lobule structure is affected, part of hepatocytes has signs of fat dystrophy, port-portal connective tissue septa with formation of pseudo-lobules, with periportal lympho-macrophage infiltrations. What is the most probable diagnosis?

- a. Toxic dystrophy
- b. Liver cirrhosis**
- c. Chronic hepatosis
- d. Alcohol hepatitis
- e. Viral hepatitis

215. Local lymphonodules enlarged near the infected wound. Increased amount of macrophages, lymphocytes, lymphatic follicles in the cortical layer and large amount of plasma cells were revealed on histological examination. What process in the lymphatic nodules represent these histological changes?

- a. Hypersensitivity reaction
- b. Antigen stimulation**
- c. Innate insufficiency of the lymphoid tissue
- d. Acquired insufficiency of the lymphoid tissue
- e. Tumour transformation

216. An 8-year-old child was admitted to the infectious department with fever (up to 38 degrees C) and punctuate bright-red skin rash. The child was diagnosed as having scarlet fever. Objectively: mucous membrane of pharynx is apparently hyperaemic and edematic, the tonsils are enlarged and have dull yellowish-grey foci with some black areas. What inflammation is the reason for the pharynx alterations?

- a. Haemorrhagic
- b. Fibrinous
- c. Purulent necrotic**
- d. Serous
- e. Catarrhal

217. A patient who has been abusing tobacco smoking for a long time has got cough accompanied by excretion of viscous mucus; weakness after minor physical stress, pale skin. The patient has also lost 12,0 kg of body weight. Endoscopic examination of biopsy material his illness was diagnosed as squamous cell carcinoma. Name a pathological process that preceded formation of the tumour:

- a. Metaplasia**
- b. Hyperplasia

- c. Sclerosis
- d. Necrosis
- e. Hypoplasia

218. Diagnostic scraping was performed to the woman with dysfunctional uterine bleeding. Multiple convoluted glands, ganglionally dilated cavities of some glands were revealed histologically in the scrape. Name the type of general pathological process

- a. Hypertrophic excrescence
- b. Glandulo-gangliac hyperplasia**
- c. Metaplasia
- d. Atrophy
- e. Displasia

219. The intraoperative biopsy of mammal gland has revealed the signs of atypical tissue with disorder of parenchyma stroma proportion with domination of the last, gland structures of the different size and shape, lined with single-layer proliferative epithelium. What is the most appropriate diagnosis?

- a. Papilloma
- b. Infiltrative cancer
- c. Mastitis
- d. Fibroadenoma**
- e. Noninfiltrative cancer

220. On autopsy it was revealed: large (1-2 cm) brownish-red, easy crumbling formations covering ulcerative defects on the external surface of the aortic valve. What is the most likely diagnosis?

- a. Fibroplastic endocarditis
- b. Diffusive endocarditis
- c. Recurrent warty endocarditis
- d. Acute warty endocarditis
- e. Polypus-ulcerative endocarditis**

221. Purulent endometritis with fatal outcome was progressing in the woman after abortion performed not at the hospital. On autopsy multiple lung abscesses, subcapsule ulcers in the kidneys, spleen hyperplasia were revealed. What form of sepsis developed in the patient?

- a. Urosepsis
- b. Septicopyemia**
- c. Chroniosepsis
- d. Septicemia
- e. Lung sepsis

222. Autopsy of a woman with cerebral atherosclerosis revealed in the left cerebral hemisphere a certain focus that is presented by flabby, anhistic, greyish and yellowish tissue with indistinct edges. What pathological process is the case?

- a. Multiple foci of fresh and old cerebral hemorrhage
- b. Multifocal tumor growth with cystic degeneration
- c. Ischemic stroke**
- d. Focal encephalitis
- e. Senile encephalopathy

223. Autopsy of a man who had tuberculosis revealed a 3x2 cm large cavity in the superior lobe of the right lung. The cavity was interconnected with a bronchus, its wall was dense and consisted of three layers: the internal layer was pyogenic, the middle layer was made by tuberculous granulation tissue and the external one was made by connective tissue. What is the most likely diagnosis?

- a. Fibrous focal tuberculosis
- b. Acute focal tuberculosis
- c. Acute cavernous tuberculosis
- d. Fibrous cavernous tuberculosis**
- e. Tuberculoma

224. Autopsy of a man who died from ethylene glycol poisoning revealed that his kidneys are a little bit enlarged, edematic; their capsule can be easily removed. Cortical substance is broad and light-grey. Medullary substance is dark-red. What pathology had this man?

- a. Acute glomerulonephritis
- b. Acute pyelonephritis
- c. Necrotic nephrosis
- d. Acute tubular-interstitial nephritis
- e. Lipoid nephrosis

225. A man with a long-term history of bronchial asthma died from asphyxia. Histological examination of his lungs revealed that the lumens of bronchioles and minor bronchi contained a lot of mucus with some eosinophils. There was also sclerosis of interalveolar septa, dilatation of alveole lumens. What mechanism accounts for the development of hypersensitivity reaction?

- a. Reagine reaction
- b. Immune complex reaction
- c. Granulomatosis
- d. Lymphocyte-mediated cytolysis
- e. Cytotoxic reaction

226. Histologic analysis of uterus mucous membrane revealed twisting glands, serrated and spinned, they were extended by stroma growth with proliferation of its cells. Formulate a diagnosis:

- a. Leiomyoma
- b. Acute endometritis
- c. Glandular hyperplasia of endometrium
- d. Cystic mole
- e. Placental polyp

227. A 22 year old patient from the West Ukraine complains of laboured nasal breathing. Morphological examination of biopsy material of nasal mucous membrane revealed lymphoid, epithelioid, plasma cells as well as Mikuliczs cells. What is the most probable diagnosis?

- a. Glanders
- b. Leprosy
- c. Syphilis
- d. Rhinoscleroma
- e. Tuberculosis

228. Autopsy of a man who had been working as a miner for many years and died from cardiopulmonary decompensation revealed that his lungs were airless, sclerosed, their apexes had emphysematous changes, the lung surface was greyish-black, the incised lung tissue was coal-black. What disease caused death?

- a. Aluminosis
- b. Anthracosis
- c. Talcosis
- d. Silicosis
- e. Asbestosis

229. Examination of coronary arteries revealed atherosclerotic calcific plaques that close vessel lumen by 1/3. The muscle has multiple whitish layers of connective tissue. What process was revealed in myocardium?

- a. Myocardium infarction
- b. Diffuse cardiosclerosis
- c. Postinfarction cardiosclerosis
- d. Tiger heart
- e. Myocarditis

230. Microscopical examination of an enlarged cervical lymph node revealed blurring of its structure, absence of lymphoid follicles; all the microscopic fields showed cells with roundish nuclei and thin limbus of basophil cytoplasm. It is known from the clinical data that other groups of lymph nodes are

also enlarged as well as spleen and liver. What disease might be suspected?

- a. Lymphogranulomatosis
- b. Myeloid leukosis
- c. Multiple myeloma
- d. Lymphoid leukosis**
- e. Lymphosarcoma

231. A worker of a cattle farm fell acutely ill and then died from the progressing intoxication. Autopsy revealed enlarged, hyposthenic spleen of dark-cherry colour when dissected; excessive pulp scraping. At the base and fornix of brain pia maters are edematous, soaked with blood, dark-red (scarlet hat). Microscopic examination revealed serous haemorrhagic inflammation of brain tissues and tunics along with destruction of small vessel walls. What is the most likely diagnosis?

- a. Anthrax**
- b. Brucellosis
- c. Cholera
- d. Plaque
- e. Tularemia

232. Autopsy of a man who died from burn disease revealed brain edema, liver enlargement as well as enlargement of kidneys with wide light-grey cortical layer and plethoric medullary area.

Microscopic examination revealed necrosis of tubules of main segments along with destruction of basal membranes, interstitium edema with leukocytic infiltration and haemorrhages. What is the most probable postmortem diagnosis?

- a. Tubulointerstitial nephritis
- b. Gouty kidney
- c. Myeloma kidney
- d. Necrotic nephrosis**
- e. Pyelonephritis

233. A man with a wound of his limb that had been suppurating for a long time died from intoxication. Autopsy revealed extreme emaciation, dehydration, brown atrophy of liver, myocardium, spleen and cross-striated muscles as well as renal amyloidosis. What diagnosis corresponds with the described picture?

- a. Chroniosepsis**
- b. Septicemia
- c. Brucellosis
- d. Chernogubovs syndrome
- e. Septicopyemia

234. 6 months after delivery a woman had uterine bleeding. Gynecological examination revealed in the uterine cavity a dark-red tissue with multiple cavities that resembled of "sponge". Microscopic examination of the tumour revealed some atypic light epithelial Langhans cells and giant cells of syncytiotrophoblast in blood lacunas. What tumour is it?

- a. Adenocarcinoma
- b. Squamous cell nonkeratinous carcinoma
- c. Chorioepithelioma**
- d. Fibromyoma
- e. Vesicular mole

235. Autopsy of a man with a malignant stomach tumour who had died from cancer intoxication revealed in the posteroinferior lung fields some dense, grayish-red irregular foci protruding above the section surface. Microscopic examination revealed exudate containing a large amount of neutrophils in the lumen and walls of small bronchi and alveoles. Such pulmonary alterations indicate the following disease:

- a. Intermittent pneumonia
- b. Acute serous bronchopneumonia
- c. Acute bronchitis**

d. Croupous pneumonia

e. Acute purulent bronchopneumonia

236. Microscopical examination of a removed appendix revealed an edema, diffuse neutrophilic infiltration of appendix wall along with necrosis and defect of mucous membrane with affection of its muscle plate. What form of appendicitis was developed?

- a. Superficial
- b. Apostematosus
- c. Phlegmonous
- d. Gangrenous

e. Ulcerophlegmonous

237. A 39 y.o. woman went through an operation in course of which surgeons removed her uterine tube that was enlarged and a part of an ovary with a big cyst. Histological examination of a tube wall revealed decidual cells, chorion villi. What was the most probable diagnosis made after examination of the uterine tube?

- a. Papyraceous fetus
  - b. Lithopedion
  - c. Placental polyp
  - d. Choriocarcinoma
- e. Tubal pregnancy

238. 48 hours after performing tuberculin test (Mantoux test) to a child a 10 mm papule appeared on the spot of tuberculin introduction. What hypersensitivity mechanism underlies these changes?

- a. Immune complex cytotoxicity
  - b. Granulomatosis
  - c. Anaphylaxis
  - d. Antibody-dependent cytotoxicity
- e. Cellular cytotoxicity

239. Colonoscopy of a patient ill with dysentery revealed that mucous membrane of his large intestine is hyperemic, edematic, its surface was covered with grey-and-green coats. Name the morphological form of dysenteric collitis:

- a. Ulcerous
- b. Catarrhal
- c. Fibrinous
- d. Purulent
- e. Necrotic

240. A patient has been suffering from diarrhea for 5 day. On the fifth day colonoscopy revealed that membrane of rectum was inflamed, there were greyish-green films closely adhering to the subjacent tissue. What is the most probable diagnosis?

- a. Typhoid fever
  - b. Salmonellosis
  - c. Crohns disease
- d. Dysentery
- e. Nonspecific ulcerous colitis

241. Autopsy of a 48 y.o. man revealed a round formation 5 cm in diameter with clear-cut outlines in the region of the 1st segment of his right lung. This formation was encircled with a thin layer of connective tissue full of white brittle masses. Make a diagnosis of the secondary tuberculosis form:

- a. Fibrous cavernous tuberculosis
- b. Tuberculoma
- c. Acute cavernous tuberculosis
- d. Caseous pneumonia
- e. Acute focal tuberculosis

242. A man had worked in a coal mine for over 20 years. After his death autopsy revealed that his

lungs were dense, grayish-black and had large areas of neogenic connective tissue containing a lot of microphages with black pigment in the cytoplasm. What is the most likely diagnosis?

- a. Talcosis
- b. Siderosis
- c. Anthracosilicosis
- d. Silicoanthracosis
- e. Anthracosis**

243. Skin of a man who died from cardiac insufficiency has an eruption in form of spots and specks. There are also bedsores in the area of sacrum and spinous vertebral processes. Microscopical examination of CNS, skin, adrenal glands revealed in the vessels of microcirculatory bed and in small arteries destructive-proliferative endothrombovasculitis with Popovs granulomas; interstitial myocarditis. What diagnosis corresponds with the described picture?

- a. HIV
- b. Spotted fever**
- c. Enteric fever
- d. Q fever
- e. Nodular periarthritis

244. Autopsy of a 17 year old girl who died from pulmonary failure revealed a small area of caseous necrosis in the inferior lobe of the right lung, and occurrences of caseous necrosis in the bronchopulmonary, bronchial and bifurcational lymph nodes. What is the most probable postmortem diagnosis?

- a. Caseous pneumonia under secondary tuberculosis
- b. Primary tuberculosis**
- c. Hematogenous tuberculosis with predominant lung affection
- d. Hematogenous progression of primary tuberculosis
- e. Tuberculoma

245. Autopsy of a man who died from the sepsis in his femoral bone revealed phlegmonous inflammation that affected the marrow, haversian canals and periosteum. Under the periosteum there are multiple abscesses, adjoining soft tissues of thigh also have signs of phlegmonous inflammation. What pathological process was described?

- a. Osteopetrosis
- b. -
- c. Osteoporosis
- d. Chronic hematogenous osteomielitis
- e. Acute hematogenous osteomyelitis**

246. An experimental animal was first sensitized where upon an antigen dose was introduced subcutaneously. This injection resulted in the development of a fibrinous inflammation with alteration of vessel walls, basal substance and fibrous structures of connective tissue in form of mucoid and fibrinoid swelling and necrosis. What immunological reaction took place?

- a. Delayed-type hypersensitivity
- b. Normergic reaction
- c. Granulomatosis
- d. Immediate hypersensitivity**
- e. Reaction of transplantation immunity

247. A 4 year old child complained of pain during deglutition, indisposition. Objectively: palatine arches and tonsils are moderately edematous and hyperemic, there are greyish-white films up to 1 mm thick closely adhering to the subjacent tissues. What pathological process are these changes typical for?

- a. Organization
- b. Inflammation**
- c. Necrosis
- d. Dystrophy

e. Metaplasia

248. A 9 m.o. child has delayed dentition, it is also out of order. Upper jaw configuration is horizontal ("high" palate); microscopically - irregular mineralization of tooth enamel, wrinkled enamel prisms, some of them are vacuolized. Predentin zone is extended; there are solitary denticles. What disease is it?

- a. Gout
- b. Hypervitaminosis D
- c. Late rickets
- d. Osteomalacia
- e. Early rickets**

249. Microscopical renal examination of a 36 y.o. woman who died from renal insufficiency revealed in the glomerules proliferation of capsule nephrothelium as well as of podocytes and phagocytes accompanied by formation of "crescents", capillary loop necrosis, fibrinous thrombs in their lumens; sclerosis and hyalinosis of glomerules, atrophy of tubules and fibrosis of renal stroma. What is the most probable diagnosis?

- a. Subacute glomerulonephritis**
- b. Chronic glomerulonephritis
- c. Membranous nephropathy
- d. Focal segmentary sclerosis
- e. Acute glomerulonephritis

250. Autopsy of a 50-year-old man revealed the following changes: his right lung was moderately compact in all parts, the dissected tissue was found to be airless, fine-grained, dryish. Visceral pleura had greyish-brown layers of fibrin. What is the most likely diagnosis?

- a. Bronchopneumonia
- b. Tuberculosis
- c. Croupous pneumonia**
- d. Interstitial pneumonia
- e. Pneumofibrosis

251. Autopsy of a 56 y.o. man revealed in the right temporal part of brain a big focus of softened grey matter that was semi-liquid and light grey. Arteries of cerebral tela contain multiple whitish-yellow thickenings of intima that abruptly narrow the lumen. What is your diagnosis?

- a. Hemorrhage
- b. Brain abscess
- c. Ischemic stroke**
- d. Hemorrhagic infarction
- e. Brain edema

252. Autopsy of a man, who had been suffering from the multiple bronchiectasis for 5 years and died from chronic renal insufficiency, revealed that kidneys were dense and enlarged, with thickened cortical layer of white colour with greasy lustre. What renal disease might be suspected?

- a. Secondary amyloidosis**
- b. Chronic pyelonephritis
- c. -
- d. Necrotic nephrosis
- e. Glomerulonephritis

253. Autopsy of a 49-year-old woman who died from chronic renal insufficiency, revealed: kidneys were dense, reduced, multicoloured, with haemorrhagic areas. Microscopic examination revealed some hematoxylin bodies in the nuclei of the renal tubule epithelium; "wire-loop" thickening of the glomerular capillary basement membrane; here and there in the capillaries some hyaline thrombi and foci of fibrinoid necrosis were present. What is the most likely diagnosis?

- a. Rheumatism
- b. Amyloidosis
- c. Atherosclerotic nephrosclerosis

d. Systemic lupus erythematosus

e. Arteriosclerotic pneumosclerosis

254. Unpainfull formation without marked borders appeared in the soft tissues of the thigh in the young man. On the tissue bioplate the formation looks like a meat of a fish, consisting of the immature fibroblast-like cells with multiple mitosis, which grow through the muscles. What is the most likely diagnosis?

- a. Cancer
- b. Myoma
- c. Myosarcoma
- d. Fibroma

e. Fibrosarcoma

255. A 39 year old man who had been operated for the stomach ulcer died 7 days after the surgery. Autopsy revealed that peritoneal leaves were dull, plethoric, covered with massive yellow-greenish films, the peritoneal cavity contained for about 300 ml of thick yellow-greenish liquid. What pathologic process was revealed in the peritoneal cavity?

- a. Fibrinous haemorrhagic peritonitis

b. Fibrinous suppurative peritonitis

- c. Fibrinous serous peritonitis

- d. Serous peritonitis

- e. Peritoneal commissures

256. A 71 year old man had been presenting with diarrhea for 10 days. The feces had admixtures of blood and mucus. He was delivered to a hospital in grave condition and died 2 days later. Autopsy of the body revealed the following: diphtheritic colitis with multiple irregularly-shaped ulcers of different depth in both sigmoid colon and rectus. Bacteriological analysis revealed Shigella. What was the main disease?

a. Dysentery

- b. Salmonellosis

- c. Yersiniosis

- d. Nonspecific ulcerous colitis

- e. Typhoid fever

257. A 63 y.o. man fell ill with acute tracheitis and bronchitis accompanied by bronchial pneumonia. On the 10th day the patient died from cardiopulmonary insufficiency. Autopsy revealed fibrinous hemorrhagic laryngotracheobronchitis; lungs were enlarged, their incision revealed the "coal-miners" effect caused by interlacing of sections of bronchial pneumonia, hemorrhages into the pulmonary parenchyma, acute abscesses and atelectases. Internal organs have discirculatory and dystrophic changes. What is the most probable diagnosis?

- a. Parainfluenza

- b. Moderately severe influenza

c. Influenza, severe form

- d. Respiratory syncytial infection

- e. Adenoviral infection

258. A boy is 7 y.o. Objectively: against the background of hyperemic skin there is knobby bright-pink rash on his forehead, neck, at the bottom of abdomen, in the popliteal spaces; nasolabial triangle is pale. Examination of oropharyngeal surface revealed localized bright-red hyperemia; tonsils are swollen, soft, lacunas contain pus, tongue is crimson. Cervical lymph nodes are enlarged, dense and painful. What is the most probable diagnosis?

- a. Diphtheria

- b. Infectious mononucleosis

- c. Rubella

- d. Whooping cough

e. Scarlet fever

259. Autopsy of a 75 year old patient who had been suffering from disseminated atherosclerosis and

died under chronic cardiac failure revealed constriction and deformation of coronary arteries, tuberous intima whose section appeared to be white and petrosal. Specify the stage of atherosclerosis morphogenesis:

- a. Liposclerosis
- b. Lipoidosis
- c. Atherocalcinosis
- d. Bilipid
- e. Atheromatosis

260. 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. Lobar pneumonia
- b. Bronchopneumonia
- c. Interstitial pneumonia
- d. Chronic bronchitis
- e. Acute bronchitis

261. A 46 year old patient who had been suffering from tuberculosis for 6 years died from massive pulmonary haemorrhage. Autopsy revealed different-sized foci of sclerosis and caseous necrosis in lungs, in the upper part of the right lung there was a cavity 5 cm in diameter with dense grey walls, the cavity contained liquid blood and blood clots. What type of tuberculosis is it?

- a. Fibrous focal
- b. Acute focal
- c. Acute cavernous
- d. Infiltrative
- e. Fibrocavernous

262. A 50 year old patient has been taking treatment thrice for the last 6 months because of fractures caused by domestic accidents. Microscopical examination of bony tissue revealed foci of lacunar resolution, giant-cell granulomas in the tumour-like formations, cysts. Bony tissue was substituted by fibrous connective tissue. Examination revealed also adenoma of parathyroid gland and hypercalcemia. What is the most probable diagnosis?

- a. Osteomyelitis
- b. Myelomatosis
- c. Parathyroid osteodystrophy
- d. Osteopetrosis
- e. Pagets disease

263. 2 days after labour a woman developed shock along with DIC syndrome that caused her death. Autopsy revealed purulent endomyometritis, regional purulent lymphangitis, lymphadenitis and purulent thrombophlebitis. There were also dystrophic alterations and interstitial inflammation of parenchymal organs. What is the most likely diagnosis?

- a. Hydatid mole
- b. Septicemia
- c. Tuberculosis of genital organs
- d. Syphilis
- e. Chorioadenoma destruens

264. A patient who abuses smoking has chronic bronchitis. Biopsy of his primary bronchus revealed multilayer pavement epithelium. What pathological process was revealed in the bronchus?

- a. Reparative regeneration
- b. Physiological regeneration
- c. Metaplasia
- d. Hyperplasia

e. Dysplasia

265. 2 hours after a skeletal extension was performed to a 27 year old patient with multiple traumas (closed injury of chest, closed fracture of right thigh) his condition abruptly became worse and the patient died from acute cardiopulmonary decompensation. Histological examination of pulmonary and cerebral vessels stained with Sudan III revealed orange drops occluding the vessel lumen. What complication of polytrauma was developed?

- a. Microbal embolism
- b. Gaseous embolism
- c. Fat embolism**
- d. Thromboembolism
- e. Air embolism

266. A 50 year old patient underwent resection of tumour of large intestine wall. Microscopically it presents itself as fascicles of divergent collagen fibers of different thickness and form and some monomorphous fusiform cells that are irregularly distributed among the fibers. Cellular atypia is not evident. What tumour is it?

- a. Fibrosarcoma
- b. Hard fibroma**
- c. Soft fibroma
- d. Fibromyoma
- e. Desmoma

267. Autopsy of a 5 year old child revealed in the area of vermis of cerebellum a soft greyish-pink node 2 cm in diameter with areas of haemorrhage. Histologically this tumour consisted of atypical monomorphous small roundish cells with big polymorphous nuclei. What tumour is it?

- a. Glioblastoma
- b. Meningioma
- c. Medulloblastoma**
- d. Astrocytoma
- e. Oligodendrolioma

268. In course of severe respiratory viral infection there appeared clinical signs of progressing cardiac insufficiency that caused death of a patient in the 2nd week of disease. Autopsy revealed that the heart was sluggish, with significant cavity dilatation. Histological examination of myocardium revealed plethora of microvessels and diffuse infiltration of stroma by lymphocytes and histiocytes. What disease corresponds with the described picture?

- a. Stenocardia
- b. Myocardium infarction
- c. Cardiomyopathy
- d. Myocarditis**
- e. Acute coronary insufficiency

269. A patient with high-titer antinuclear antibodies died from progressing renal impairment. Autopsy revealed mesangiproliferative glomerulonephritis and abacterial polypous endocarditis. There was periarterial bulbar sclerosis in spleen and productive proliferative vasculitis in skin. What is the most likely diagnosis?

- a. Rheumatism
- b. Nephrotic syndrome
- c. Systemic lupus erythematosus**
- d. Dermatomyositis
- e. Periarteritis nodosa

270. A 38 year old patient with full-blown jaundice, small cutaneous hemorrhages, general weakness and loss of appetite underwent puncture biopsy of liver. Histological examination revealed disseminated dystrophy, hepatocyte necrosis, Councilmans bodies. Lobule periphery has signs of significant infiltration by lymphocytes, there are also individual multinuclear hepatocytes. What is the most probable diagnosis?

- a. Chronic hepatitis
- b. Acute viral hepatitis**
- c. Miliary hepatic cirrhosis
- d. Acute alcoholic hepatitis
- e. Toxic degeneration of liver

271. A 20 year old woman died in 8 days of intoxication after artificial illegal abortion performed in her 14-15th week of pregnancy. Autopsy of the corpse revealed yellowish colour of eye sclera and of skin, necrotic suppurative endometritis, multiple pulmonary abscesses, spleen hyperplasia with a big number of neutrophils in its sinuses. What complication after abortion was developed?

- a. Chroniosepsis
- b. Viral hepatitis type A
- c. Septicemia
- d. Hemorrhagic shock
- e. Septicopyemia**

272. A section of the left lung was shown an area of dense red tissue. The area was cone-shaped, stood out distinctly from the healthy tissue, with its base directed to the pleura. The dissected tissue was granular, dark-red. What is the most likely diagnosis?

- a. Croupous pneumonia
- b. Haemorrhagic infarction**
- c. Lung gangrene
- d. Lung abscess
- e. Primary tuberculous affection

273. A patient has a cluster of matted together dense lymph nodes on his neck. Histological examination of a removed lymph node revealed proliferation of reticular cells, presence of Reed-Sternberg cells. What disease is meant?

- a. Myeloblastic leukosis
- b. Lymphoblastic leukosis
- c. Lymphogranulomatosis**
- d. Myelocytic leukosis
- e. Lymphocytic leukosis

274. Examination of a 66 year old patient revealed a lytic tumour in the locus of pathological rib fracture. Histologically this tumour consists of atypical plasmoblasts. Further examination revealed osteoporosis in the bones of vertebral column and pelvis. These changes are typical for:

- a. Tuberculous osteomyelitis
- b. Neuroblastoma
- c. Metastatic lung cancer
- d. Myelomatosis**
- e. Ewings osteosarcoma

275. A patient died from acute cardiac insufficiency, among clinical presentations there was gastrointestinal haemorrhage. Examination of mucous membrane of stomach revealed some defects reaching myenteron; their edges and bottom were mostly even and loose, some of them contained dark-red blood. What pathological process was revealed?

- a. Erosions
- b. Chronic ulcers
- c. Acute ulcers**
- d. Thrombosis
- e. Inflammation

276. A 33 year old man died from uraemia. Autopsy revealed enlarged kidneys weighing 500,0 each and consisting of multiple cavities 0,5-2 cm in diameter. The cavities were full of light-yellow transparent liquid. Renal pelvis and ureters had no peculiarities. What renal disease caused uraemia?

- a. Chronic pyelonephritis
- b. Renal tuberculosis

c. Rapidly progressing glomerulonephritis

d. Bilateral polycystic renal disease

e. Renal tumour

277. A patient ill with tuberculosis died from progressing cardiopulmonary decompensation. Autopsy in the area of the right lung apex revealed a cavity 5 cm in diameter communicating with lumen of a segmental bronchus. On the inside cavity walls are covered with caseous masses with epithelioid and Langhans cells between them. What morphological form of tuberculosis is it?

a. Acute cavernous tuberculosis

b. Caseous pneumonia

c. Acute focal tuberculosis

d. Infiltrative tuberculosis

e. Tuberculoma

278. A 45 year old male died from disseminated tuberculosis. On autopsy the symptoms of tuberculosis were confirmed by both microscopical and histological analyses. All the affected organs had epithelioid cell granulomas with caseous necrosis in the centre. What kind of hypersensitivity reaction underlies the process of granuloma development?

a. Anaphylactic

b. Immune complex

c. Antibody-dependent cytotoxicity

d. Complement-dependent cytotoxicity

e. Delayed

279. Examination of a young woman revealed a node-like, soft and elastic homogenous tumour of pinkish-white colour along the acoustic nerve. The tumour contains cell bundles with oval nuclei. Cellular fibrous bundles form rhythmic structures made up by parallel rows of regularly oriented cells arranged in form of a palisade with cell-free homogenous zone (Verocay bodies) between them. What tumour is it?

a. Ganglioneurinoma

b. Malignant neurinoma

c. Neurinoma

d. Neuroblastoma

e. Ganglioneuroblastoma

280. A 23 year old man has perforation of hard palate. In the area of this perforation there was a compact well-defined formation. Microscopic examination of the resected formation revealed a large focus of caseous necrosis surrounded by granulation tissue with endovasculitis, cellular infiltration composed of lymphocytes, epithelioid cells (mainly plasmocytes). What is the most probable diagnosis?

a. Syphilis

b. Scleroma

c. Leprosy

d. Sarcoma

e. Tuberculosis

281. The upper lobe of the right lung is enlarged, grey and airless, the incision surface is dripping with turbid liquid, the pleura has many fibrinogenous films; microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocytes and fibrin fibers. The bronchus wall is intact. What is the most probable diagnosis?

a. Croupous pneumonia

b. Pulmonary abscess

c. Influenzal pneumonia

d. Focal pneumonia

e. Interstitial pneumonia

282. A 28 year old patient had high arterial pressure, hematuria and facial edema. In spite of treatment renal insufficiency was progressing. 6 months later the patient died from uremia.

Microscopic examination of his kidneys and their glomerules revealed proliferation of capsule nephrothelium and of podocytes with "semilune" formation, sclerosis and hyalinosis of glomerules. What disease corresponds with the described picture?

- a. Acute glomerulonephritis
- b. Subacute glomerulonephritis**
- c. Nephrotic syndrome
- d. Acute pyelonephritis
- e. Chronic glomerulonephritis

283. Autopsy of a man ill with severe hypothyroidism revealed that connective tissue, organ stroma, adipose and cartilaginous tissues were swollen, semitransparent, mucus-like. Microscopic examination of tissues revealed stellate cells having processes with mucus between them. What type of dystrophy is it?

- a. Parenchymatous adipose
- b. Stromal-vascular carbohydrate**
- c. Stromal-vascular proteinaceous
- d. Stromal-vascular adipose
- e. Parenchymatous proteinaceous

284. Examination of the anterior abdominal wall of a pregnant woman revealed a tumour-like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was well-defined, dense, 2 to 1 cm large. Histological examination revealed that the tumour was composed of differentiated connective tissue with prevailing collagen fibres. What tumour might be suspected?

- a. Fibrosarcoma
- b. Lipoma
- c. Desmoid**
- d. Hibernoma
- e. Leiomyoma

285. Autopsy of a 60-year-old woman, who for a long time had been suffering from essential hypertension, shows significantly diminished kidneys (weight of both kidneys is 80 g) with finely granular surface. Uniform renal cortical thinning can be observed on section. Name the described changes in the kidneys:

- a. Primary contracted kidney**
- b. Secondary contracted kidney
- c. Diabetic nephrosclerosis
- d. Amyloid contracted kidney
- e. Pyelonephritic contracted kidney

286. Autopsy of a 3-year-old child shows a tumor in the cerebellum. The tumor has no clear margins separating it from the surrounding tissues. Histologically it is made of small atypical cells with hyperchromic nuclei. This tumor is most likely a:

- a. Medullary sarcoma
- b. Sarcoma metastasis
- c. Glioblastoma
- d. Medulloblastoma**
- e. Cancer metastasis

287. Autopsy revealed a large wedge-shaped patch of a dense dark red tissue with clear margins in the upper lobe of the right lung. Histological examination detected there necrosis of the alveolar walls; the alveolar lumen is tightly packed with erythrocytes. What process occurred in the lungs?

- a. Carneous degeneration
- b. Hemorrhage
- c. Atelectasis
- d. Hemorrhagic infarction**
- e. Gangrene

288. Regional lymph nodes surrounding an infected wound are enlarged. Histological examination shows increased number of macrophages, lymphocytes, and lymphatic follicles in the cortical layer of the lymph nodes, as well as a large amount of plasma cells. What process in the lymph nodes is indicated by these histological changes?

- a. Congenital deficiency of lymphoid tissue
- b. Acquired deficiency of lymphoid tissue
- c. Antigen stimulation**
- d. Neoplastic aberration
- e. Transplant rejection

289. A patient has gradually developed a skin plaque on his face. In the center of this plaque there are necrotic patch and an ulcer. Histopathological analysis of the biopsy material reveals proliferation of atypical epithelial cells with large number of pathologic mitoses. What is the most likely diagnosis?

- a. Trophic ulcer
- b. Fibroma
- c. Sarcoma
- d. Papilloma
- e. Skin cancer**

290. Histological analysis of a biopsy skin sample obtained from a 24-year-old patient detects caseous necrosis surrounded with cellular infiltrate consisting of lymphocytes, among which there are single giant cells; proliferation of connective tissue and endovasculites are observed. Characterize this pathologic process:

- a. Proliferative granulomatous inflammation**
- b. Abscess
- c. Ichorous inflammation
- d. Catarrhal inflammation
- e. Proliferative interstitial inflammation

291. Autopsy of a man, who had been suffering from mitral stenosis, reveals dense brown lungs. What pathologic process had occurred in the lungs?

- a. Hemosiderosis**
- b. Jaundice
- c. Lipofuscinosis
- d. Hemomelanosis
- e. Hemochromatosis

292. A 63-year-old man, who has been suffering from chronic diffuse obstructive pulmonary emphysema for 15 years, died of progressive heart failure. Autopsy shows nutmeg liver cirrhosis, cyanotic induration of kidneys and spleen, ascites, and edemas of the lower limbs. What type of heart failure can be characterized by such changes in the internal organs?

- a. Acute global heart failure
- b. Chronic heart failure**
- c. Chronic atrial failure
- d. Acute right ventricular failure
- e. Acute left ventricular failure

293. A 6-year-old girl presents with acute onset of a disease. She developed sore throat and high temperature that were later accompanied by a punctate skin rash. Oral examination reveals acute pharyngeal hyperemia, raspberry tongue, and enlarged bright red tonsils with dull gray and yellow foci that spread to the peritonsillar tissues. The submandibular lymph nodes are enlarged. What disease are these changes characteristic of?

- a. Measles
- b. Laryngeal diphtheria
- c. Meningococcal nasopharyngitis
- d. Scarlet fever**
- e. Pharyngeal diphtheria

294. Autopsy of a man, who served on a nuclear submarine, revealed the following pathologies: bone marrow atrophy (panmyelophthisis), anemia, leukopenia, thrombocytopenia, lymphocytic disintegration in the lymph nodes, spleen, gastrointestinal lymphatic system, and hemorrhages into the adrenal glands. What disease had developed in this case?

- a. Acute leukemia
- b. Decompression sickness
- c. **Acute radiation sickness**
- d. Acute anemia
- e. Vibration disease

295. A 9-month-old child presents with delayed tooth eruption, improper sequence of tooth eruption, and horizontal maxillary configuration (high-arched palate). Microscopically enamel mineralization pattern is irregular, enamel columns are wrinkled, some of them are vacuolated, predentin zones are widened, single denticles can be observed. What disease is it?

- a. Late rickets
- b. Gout
- c. Hypervitaminosis D
- d. Early rickets**
- e. Osteomalacia

296. Autopsy of a 58-year-old man, who for a long time has been drinking alcohol in large amounts and died at home, is being conducted. Macroscopically the right lung is dense and enlarged, its tissue is gray and homogeneous on section, its pleura is covered with grayish membranous deposits. Microscopically the alveolar cavities contain fibrin threads, neutrophils, and hemolysed erythrocytes. Make the diagnosis:

- a. Croupous pneumonia**
- b. Interstitial pneumonia
- c. Caseous pneumonia
- d. Primary pulmonary tuberculosis
- e. Focal pneumonia

297. Autopsy of a 49-year-old woman who died of chronic kidney failure shows small dense striated kidneys with areas of hemorrhages. Microscopically nuclei of epithelial channels contain hematoxylin bodies; glomerular capillaries resemble wire loops, have thickened basement membranes, and in places contain hyaline thrombi and foci of fibrinoid necrosis. What is the most likely diagnosis?

- a. Rheumatism
- b. Amyloidosis
- c. Atherosclerotic nephrosclerosis
- d. Systemic lupus erythematosus**
- e. Arteriosclerotic nephrosclerosis

298. A 34-year-old man died in a comatose state. According to his family after a business trip to an African country he developed periodical jaundice attacks. Autopsy shows the following: dense enlarged spleen with slate-black pulp; enlarged plethoric liver, gray-black on section; cerebral gray matter is brown-gray; cerebral white matter contains numerous small hemorrhages. What infectious disease can be suspected?

- a. Meningococcemia
- b. Generalized herpetic infection
- c. Generalized cryptococcosis
- d. Malaria**
- e. Prion infection

299. A 27-year-old woman has undergone a sector resection of mammary gland tissue. Macroscopy detects a dense white node, 4 cm in diameter, with clear margins in the excised tissue. Immediate histological analysis shows the tumor to consist of a large amount of fibrous stroma with stromal proliferation around the small canalliculi. Canalicular epithelium overlays the basement membrane and retains its polarity. Make the diagnosis:

- a. Adenocarcinoma
- b. Dyshormonal disorders
- c. Cancer
- d. Pericanalicular fibroadenoma**
- e. Sarcoma

300. In the course of an urgent surgery, the vermiform appendix of the patient was excised. The appendix was acutely distended and gray-black throughout its whole length. In the distal segment a defect of the appendix wall was detected, through which a foul-smelling gray-brown substance was being discharged from the appendix lumen. Histological analysis shows necrotization of the appendix wall with hemorrhagic foci; lumen of the mesenteric artery is filled with a thrombus. What type of appendicitis is it?

- a. Acute simple
- b. Acute phlegmonous
- c. Acute gangrenous**
- d. Acute superficial
- e. Chronic

301. A 39-year-old man underwent a surgery for peptic ulcer disease of the stomach. He died 7 days after the surgery. On autopsy the peritoneal layers are plethoric, dull, and covered with massive yellow-green membranous deposits. The peritoneal cavity contains approximately 300 mL of thick yellow-green fluid. What pathologic process was detected in the peritoneal cavity?

- a. Serous peritonitis
- b. Peritoneal commissures
- c. Fibrinohemorrhagic peritonitis
- d. Fibrinopurulent peritonitis**
- e. Serofibrinous peritonitis