

?

An autopsy of a 45-year-old male, who suffered from numerous pathological fractures during his lifetime, revealed changes in his long tubular bones: the bones of the thigh and shin were bent, in some places they resembled spirals, their surface was tuberos, a section revealed an obliterated medullary channel and a change in the compact structure of the cortical layer by the spongy type. Microscopically, there was a mosaic type of the bone structures: against a background of a disordered thin-fibrous or lamellar structure of the bone fragments there were numerous cavities of sinusal resorption combined with signs of new formation of the osseous tissue. The arteries, which supplied the bone tissue, were dilated and convoluted. Name a diagnosis.

- + Deforming osteodystrophy
- Osteopetrosis
- Parathyroid osteodystrophy
- Fibrous dysplasia
- Chronic osteomyelitis

?

A 20-year-old girl developed complaints about an expressed fatiguability of her ocular, masticatory, speech and deglutitive groups of muscles, when the normal contraction of the muscles after great activity absolutely discontinued, but after some rest the functioning of the muscles was restored again. Some time later the pathological process involved the muscles of the extremities and intercostal ones. An inadequate ventilation of the lungs resulted in development of the secondary lobular pneumonia which caused the patient's death. An autopsy revealed an atrophy of the striated muscles, their dystrophy with focal clusters of the lymphocytes in the

- Tuberculosis
- Actinomycosis
- + Syphilis
- Polyarteritis nodosa
- Leprosy

?

On autopsy of a 40-year-old male, who died from intoxication, his small intestine contained groups of follicles which rose above the mucous coat. Their surface had grooves and convolutions, their pattern resembling the cerebral surface. Against a background of loss of lymphocytes, a microscopic examination of the follicles revealed a proliferation of monocytes, histiocytes and reticular cells, as well as clusters of macrophages which formed granulomata. What disease are the described changes typical for?

- Dysentery
- Salmonellosis
- Amoebiasis
- + Typhoid fever
- Cholera

?

On visual examination of a male, who was admitted in a severe state and with a high body temperature, the physician noticed that the inguinal lymph nodes were enlarged up to 8 cm in diameter, tightly united with the surrounding tissue and immobile, the skin above them was hyperaemic and sharply tender. A microscopic examination revealed the most acute serous-haemorrhagic inflammation in a lymph node. From his case history it was known that the patient had spent some time before on a mountain pasture. What disease is characterized by the changes described?

- Tularaemia
- + Plague
- Anthrax
- Brucellosis
- ?

A 40-year-old male hunter at first noticed appearance of some pustule on the index finger of his right hand, later it turned into an ulcer with uneven edges. His right axillary lymph nodes were significantly enlarged and tightly united among themselves. A biopsy of the finger skin was made. Its microscopic examination revealed necrosis of the epithelium and underlying tissues, the derma had granulomata consisting of epithelioid cells, lymphocytes, a large number of segmented leukocytes and giant cells. There were areas of necrosis and suppuration in the centres of the granulomata. What are these changes typical for?

- Tuberculosis
- Syphilis
- + Tularaemia
- Brucellosis
- Actinomycosis
- ?

A 35-year-old milkmaid died from cardiovascular insufficiency. On autopsy, a pathologist diagnosed polypous-ulcerous endocarditis of the aortic valve. Microscopically, the aortic valve revealed an inflammatory infiltration by polymorphonuclear leukocytes, areas of ulceration and thrombi with organization. The myocardial stroma was characterized by sclerosis and granulomata consisting of disorderly located epithelioid, giant, plasma cells and eosinophils, the vessels had vasculitis. What disease is characterized by the described changes in the heart?

- + Brucellosis
- Chronic sepsis
- Rheumatism
- Systemic lupus erythematosus
- Systemic scleroderma
- ?

A 45-year-old female furrier died from brain oedema. On autopsy, the pia mater in the vault and base of the skull were dark red and impregnated with blood, as if they were covered with a "red cap"; the brain substance was oedematous, the stem was strangulated in the great foramen. Microscopically, the pia mater had a haemorrhagic inflammation, the cerebral tissue was characterized by a serous-

haemorrhagic inflammation, necrosis of the walls of small vessels, numerous haemorrhages. What disease was the patient most probably ill with?

- Tuberculous leptomeningitis
- Meningococcal leptomeningitis
- Meningococcal meningoencephalitis
- Subarachnoid haemorrhage

+ Anthrax

?

A 40-year-old male butcher died from sepsis. His right cheek had a dark red, conical and dense infiltrate, 5 cm in diameter, with a black coal-like centre. The right halves of the face and neck were oedematous and dense. The cervical lymph nodes were enlarged, on section they were dark red, the surrounding fat was red and oedematous. A microscopic examination revealed the most acute serous-haemorrhagic inflammation in the infiltrate, the centre of the latter had necrosis of the epidermis and underlying layers, the lymph nodes and fat were characterized by a serous-haemorrhagic inflammation. What disease should be suspected?

- Tularaemia

+ Anthrax

- Plague

- Carbuncle

- Furuncle

?

An autopsy of a male, who died from uraemia, revealed deformity of the spinal column with a sharp limitation of mobility. The articular cartilages of small joints of the spinal column were destroyed, there were some expressed signs of a prolonged chronic inflammation in the articular tissues, the cavities of the joints were filled with the connective tissue, but in some places with the osseous one together with formation of ankyloses. The aorta, heart and lungs revealed a chronic inflammation and focal sclerosis. The kidneys were characterized by amyloidosis. What diagnosis was the most probable in this case?

- Paget's disease (deforming osteosis)

- Rheumatoid arthritis

+ Bekhterev's disease

- Parathyroid osteodystrophy

- Osteopetrosis (marble bone disease)

?

The disease in a male patient began with chills, an elevation of the body temperature up to 40°C, a headache, a cough, dyspnoea. On the 5th day, under the phenomena of respiratory insufficiency, the patient died. On autopsy it was found that the lungs were enlarged and motley by appearance. Against a background of an impairment of circulation and massive haemorrhages, a microscopic examination revealed numerous foci of serous-haemorrhagic pneumonia, foci of an emphysema and atelectasis. What disease is characterized by such a picture in the lungs?

- Croupous pneumonia

- Adenovirus infection

- + Influenza
- Respiratory-syncytial infection
- Parainfluenza
- ?

The grouped lymphatic follicles of the small intestine are enlarged and rise above the surface of the mucous membrane, their surface has grooves and convolutions resembling the cerebral surface; on section, the follicles are grey-red and succulent. Microscopically, the follicles are characterized by a proliferation of the monocytes and histiocytes, the clusters of macrophages form typhoid fever granulomata. Name the stage of typhoid fever.

- + Cerebriform swelling
- Necrosis
- Formation of ulcers
- Clear ulcers
- Healing
- ?

A visual examination of the fauces in a 5-year-old child revealed that the faucial and tonsillar mucosae were hyperaemic, the tonsils were enlarged and covered with some yellow-whitish dense films, which were removed with difficulty leaving a deep tissue defect at the place of their removal. The soft tissues of the neck were oedematous, the cervical regional lymph nodes were enlarged and tender. What disease might be suspected?

- + Diphtheria of fauces and tonsils
- Scarlet fever
- Measles
- Parotitis
- Adenovirus infection
- ?

A 5-year-old child developed rhinitis and tickling in the throat, an elevation of the body temperature up to 40°C, later accompanied by a sharp headache, vomiting, restlessness and chills. Four days later he also had a haemorrhagic eruption on the skin, oliguria and adrenal insufficiency, that caused the patient's death. On bacteriological examination of smears from the nasopharynx, a meningococcus was revealed. What form of the disease took place?

- Meningococcal nasopharyngitis
- Meningococcal meningitis
- Meningoencephalitis
- + Meningococcaemia
- ?

A child, who acutely fell ill with scarlet fever, developed a significant enlargement and a bright hyperaemia of the tonsils, their surface and the depth of their tissue had greyish dim foci and ulcers with uneven edges. Name the form of tonsillitis which accompanied the disease.

- Fibrinous
- + Necrotic

- Superficial
- Lacunar
- Follicular
- ?

An autopsy of a 18-year-old youth, who acutely fell ill and died from an infectious toxic shock, revealed enlarged tonsils, covered with grey-white films which spread to his palatine arches, as well as an oedema of the soft tissues of the neck. A histological examination revealed necrosis of the epithelium of the tonsils and arches, the underlying tissues were impregnated with some fibrinous exudate which formed massive depositions on the surface. Make a diagnosis of the infectious disease.

- Infectious mononucleosis
- Scarlet fever
- Adenovirus infection
- + Diphtheria
- Staphylococcal infection
- ?

In an 8-year-old child, the disease began acutely with catarrhal phenomena, hyperthermia, whitish spots on the buccal mucosa against the lower premolars; on the 4th day these signs were accompanied by macromacular exanthema, on the 6th day the patient developed signs of respiratory insufficiency, that progressed and resulted in a lethal outcome on the 8th day of the disease. A histological examination of the lungs revealed necrotic panbronchitis, a focal emphysema, an infiltration of the interalveolar septa by lymphocytes, plasma cells and histiocytes, while the alveolar walls contained giant cells with eosinophilic inclusions in the cytoplasm and parietally located "hyaline membranes". Make a diagnosis of the infectious disease which is characterized by the changes in the lungs described.

- Adenovirus infection
- Respiratory-syncytial infection
- Parainfluenza
- Influenza
- + Measles
- ?

An autopsy of a 50-year-old male, who was ill with tuberculosis and died under the phenomena of cardiopulmonary insufficiency, revealed the lobar type of affection of his lungs: The upper lobe of the right lung was enlarged and dense, on section it was yellow, the pleura had fibrinous superpositions. Name the form of secondary tuberculosis.

- Acute focal tuberculosis
- Tuberculoma
- Infiltrative tuberculosis
- Fibrofocal tuberculosis
- + Caseous pneumonia
- ?

An autopsy of a 17-year-old girl, who died from pulmonary insufficiency, revealed in the lower lobe of her right lung some confluent areas of caseous necrosis which were surrounded by fresh foci of an exudative inflammation; the bronchopulmonary, bronchial and bifurcation lymph nodes were characterized by phenomena of caseous necrosis. Which of the diagnoses listed below was the most probable?

- + Growth of primary affect in primary tuberculosis
- Haematogenic form in progression of primary tuberculosis
- Haematogenic tuberculosis with predominant affection of lungs
- Tuberculoma
- Caseous pneumonia in secondary tuberculosis

?

A visual examination of the corpse of a 40-year-old male, who died from heart failure, revealed traces of a rash in the form of brown spots and points on his skin, as well as a conjunctival eruption. There were bedsores in the regions of the sacrum and spinous processes of the vertebrae, and paraffinomas in the places of subcutaneous injections of drugs. A microscopic examination of the CNS, skin, adrenal glands revealed destructive-proliferative endothrombovasculitis in the vessels of the microcirculation and small arteries of the above organs with presence of Popov's granulomata, and there was isolated myocarditis in the heart. Which of the diagnoses listed below was the most probable?

- Kussmaul's disease
- Q fever
- Enteric fever
- + Epidemic typhus
- HIV infection

?

An autopsy of a male, who died from tularaemia, revealed signs of the haemorrhagic syndrome in the form of a petechial rash on the skin, haemorrhages in the serous and mucous membranes, as well as in the internal organs. The spleen was enlarged, gave an abundant scrape of the pulp, the lymph nodes were enlarged, the marrow was characterized by an increased blood circulation. What form of tularaemia does this picture correspond to?

- + Typhoid
- Pulmonary
- Bubonic
- Primary tularaemic affect

?

An autopsy of a male cattle-breeder, who was ill for 3.5 months and died from heart failure, revealed polypous-ulcerous endocarditis of the aortic valve, productive myocarditis with presence of granulomata, systemic allergic productive-destructive vasculitis, hyperplasia of the spleen. Name the disease.

- Relapsing fever
- + Brucellosis
- Plague

- Tularaemia
- Anthrax
- ?

A male patient complained of a fever, a severe headache, dyspnoea, and tachycardia. He died under the phenomena of heart failure. On visual examination of the body, roseolae and petechiae on the skin of the thorax, bedsores of the shins and a gangrene of the toes were found. A histological examination of the myelencephalon tissue revealed a hyperaemia, stases, perivascular cuffs of plasma cells and foci of a proliferation of the microglia (Popov's granulomata). What is your diagnosis?

- Anthracic meningoencephalitis
- Meningococcal meningoencephalitis
- + Epidemic typhus
- Typhoid fever
- Rubella

?

An autopsy of a 45-year-old male, who died under the phenomena of heart failure, revealed jaundice, numerous haemorrhages on the skin, in the conjunctiva of the eyes, on the serous and mucous membranes, as well as some thickening of the ungual phalanges, foci of necrosis in the subcutaneous fat, polypous-ulcerous endocarditis of the aortic valve with perforation of one of the cusps, sclerosis, calcinosis and deformity of the others. Histologically, an infiltration of the stroma of the internal organs by lymphocytes, histiocytes and macrophages, as well as endo-and perivasculitides were found. Name the disease.

- Rheumatism
- Atherosclerotic defect of aortic valve
- Libman-Sacks endocarditis
- + Bacterial endocarditis
- Löffler's endocarditis

?

An autopsy of a male, who died from sepsis, revealed a purulent melting of the tissue of the neck and the fat of the anterior mediastinum. Histologically, there were a lot of small abscesses with a honeycomb structure, whose centres had basophilic homogenous formations to which some short rod-like structures were connected with one end. What is your diagnosis?

- + Actinomycosis
- Tuberculosis
- Diphtheria
- Leishmaniasis
- Scarlet fever

?

A 7-year-old child developed a pain in the throat, his body temperature rose. On the 2nd day of his disease there appeared red eruptions on the skin in the form of small and densely located spots which covered all the body, excluding the nasolabial triangle. A visual examination revealed a bright reddening in the fauces,

the tonsils were enlarged and hyperaemic, the tongue was crimson-red and dry.

What is your diagnosis?

- Streptococcal tonsillitis
- Measles
- Faucial diphtheria
- Adenovirus infection
- + Scarlet fever
- ?

An autopsy of a cachectic 36-year-old male, who during 10 years was suffering from femoral osteomyelitis with periodic elevations of the body temperature up to 38°C, general weakness, a headache, and manifestations of intoxication and died from a progressing renal failure, revealed amyloid shrunk kidneys, a brown atrophy of the myocardium and liver, a sago spleen. What kind of sepsis was the complication of osteomyelitis in this case?

- Septic endocarditis
- Fulminant sepsis
- Septicopyaemia
- Septicaemia
- + Chronic septicaemia
- ?

An autopsy of a 46-year-old male, who died from intoxication, revealed mucus and some blood in the lumens of the rectum and sigmoid colon, the mucous membrane had numerous brown-green membranous superpositions and haemorrhages. Microscopically, fibrinous colitis was found. On bacteriological examination of the intestinal contents, *Shigella sonnei* was isolated. Make a diagnosis of the disease.

- Cholera
- Salmonellosis
- + Dysentery
- Yersiniosis
- Crohn's disease
- ?

An autopsy of an 8-year-old boy, who was ill with diphtheria of the fauces and tonsils and died on the 2nd week, after the onset of the disease, revealed changes in the myocardium in the form of microfocal necroses and an oedema of the stroma. Diagnose the kind of myocarditis.

- + Alterative
- Septic
- Productive granulomatous
- Productive diffuse
- Focal exudative
- ?

On autopsy of a 48-year-old male it was found that the area of the Is' segment of the right lung had a round formation, 5 cm in diameter, with clear contours; it was surrounded by a layer of the connective tissue and represented by white-yellowish crumbling masses. Diagnose the form of secondary tuberculosis.



- Caseous pneumonia
- + Tuberculoma
- Acute cavernous tuberculosis
- Acute focal tuberculosis
- Fibrocavernous tuberculosis

?

A 34-year-old male injection addict died from progressing respiratory insufficiency. A pathoanatomical examination revealed the following changes: enlarged peribronchial, bifurcation, paratracheal and paraaortic lymph nodes; the pulmonary tissue was air-free, the surface of its section discharged a large amount of some mucous-foamy viscous fluid. Microscopically, the lumens of alveoli contained foamy eosinophilic masses and clusters of macrophages, among which on silvering some small round grey-black corpuscles with a light area in the centre were identified. Make a diagnosis of the disease.

- Streptococcal pneumonia
- Lung candidiasis
- Pneumococcal pneumonia
- Cytomegalovirus pneumonia
- + Pneumocystic pneumonia

?

A 10-year-old girl was admitted to a traumatology department with signs of a pathological fracture of her right femur. A histological examination of the operational material revealed that the bone marrow of the removed femoral fragment had numerous foci of caseous necrosis surrounded on periphery by epithelioid cells and solitary Pirogov-Langhans cells; the regions of caseous necrosis spread to the adjacent areas of the bone tissue destroying them. Make a diagnosis of the disease.

- Tuberculous spondylitis
- + Tuberculous osteomyelitis
- Hip-joint disease
- Poncet's disease
- Traumatic spondylitis

?

A 4-year-old boy was hospitalized to a resuscitation department due to a progressing drop of his blood pressure. Twenty-four hours after the moment of admission to the hospital the boy died from an uncontrolled collapse. A pathoanatomical examination revealed the following changes: macroscopically, there were diffuse subcutaneous haemorrhages with foci of necrosis, bilateral massive haemorrhages in the cortical layer of the both adrenal glands, ischaemia of the cortical layer of the kidneys and hyperaemia of the malpighian pyramids in the medullary layer. Histologically, a disseminated intravascular blood coagulation, a necrosis of the epithelium in the renal tubules, alterative changes in the liver, myocardium and brain were found. Diagnose the disease.

- Generalized viral infection
- Septicaemia

- Septicopyaemia
- + Meningococcaemia
- Fulminant sepsis
- ?

A 40-year-old male prisoner died at a corrective labour settlement from tuberculosis. An autopsy revealed a deformity and a reduction of the apices of his both lungs in size, numerous cavities with dense walls in the upper lobes of the both lungs, disseminated foci (5 mm to 2 cm in diameter) of caseous necrosis in the lower lobes of the lungs, a hypertrophy of the myocardium and a dilation of the cavities of the right ventricle and atrium. Diagnose the form of tuberculosis..

- + Secondary fibrocavernous
- Secondary fibrofocal
- Haematogenous macrofocal with affection of lungs
- Primary with growth of primary affect
- Secondary cirrhotic
- ?

On autopsy of a 45-year-old male, who died from intoxication, the wall of the ileum revealed some grouped and solitary follicles which rose above the level of the mucous coat and whose surface had numerous grooves and convolutions. Histologically, the follicles were characterized by a proliferation of monocytes, histiocytes and reticular cells, as well as large macrophages with a light cytoplasm, and these macrophages formed granulomata. The above picture is typical for:

- Cholera
- Dysentery
- + Typhoid fever
- Yersiniosis
- Salmonellosis
- ?

A 10-year-old child developed a sharp pain on swallowing, an oedema of his neck, the body temperature rose up to 39°C, against a background of the general hyperaemia of the skin there rapidly appeared bright red microfocal eruptions all over the body, excluding the region of the nasolabial triangle. The fauces and tonsils were acutely plethoric (the "glowing fauces"), and he had a "strawberry tongue". The tonsillar surface had solitary greyish foci of necroses. What disease might it be?

- Measles
- Influenza
- Diphtheria
- Meningococcal nasopharyngitis
- + Scarlet fever
- ?

An autopsy of a 40-year-old male, who was ill with tuberculosis for 10 years, the 1st and 2nd segments of the right lung revealed some cavity with a dense wall. The inner surface of the cavity was uneven, with beams which represented obliterated

bronchi or thrombosed vessels. The middle and lower lobes were dense, on section they had yellowish foci. What form of tuberculosis may be suspected in the patient?

- Tuberculoma
- Acute cavernous
- Fibrofocal
- + Fibrocavernous
- Cirrhotic
- ?

An autopsy of a female, who died 4 days after a criminal abortion, revealed jaundice, an expressed thrombohaemorrhagic syndrome, fibrinous-purulent endometritis, necronephrosis in the kidneys, a septic hyperplasia of the spleen. Name the clinical-morphological form of sepsis.

- Chronic septicaemia
- Bacterial shock
- Septicopyaemia
- + Septicaemia
- Septic endometritis
- ?

Colonoscopy in a male patient, who was ill with dysentery, revealed that the mucous membrane of the large intestine was hyperaemic and oedematous, its surface was covered with grey-green films. Name the morphological form of dysenteric colitis.

- Catarrhal
- Ulcerous
- Purulent
- Necrotic
- + Fibrinous
- ?

Colonoscopy in a male patient on the 5th day after the onset of diarrhoea revealed in the inflamed mucous membrane of his rectum some grey-green membranous superpositions tightly connected with the underlying tissues. What is the most probable diagnosis?

- Typhoid fever
- Nonspecific ulcerous colitis
- + Dysentery
- Salmonellosis
- Crohn's disease
- ?

An autopsy of a male patient, who died one week after the beginning of a profuse diarrhoea, revealed a sharply expressed ex'icosis, the tissues were dry, the blood was thick. On bacteriological examination of the contents of the small intestine, that resembled rice water, vibrios were found. What disease caused the patient's death?

- + Cholera
- Dysentery

- Typhoid fever
- Salmonellosis
- Food intoxication

?

An autopsy of a 52-year-old male, who died from intoxication, revealed in his lungs a primary tuberculous complex in the form of a focus of caseous pneumonia, lymphangitis and caseous bronchoadenitis; the pia mater in the base and on the lateral surfaces of the brain, the spleen, the kidneys and the liver contained a large number of grey dense nodules 0.5-1 mm in diameter. On histological examination, the nodules consisted of epithelioid, lymphoid and some giant cells with nuclei located on the periphery of the cells in the form of a horseshoe. Name the form of tuberculosis.

- + Miliary tuberculosis
- Caseous pneumonia
- Tuberculous bronchoadenitis
- Macrofocal acute miliary tuberculosis
- Primary pulmonary phthisis

?

An autopsy of a 1.5-year-old child, who died from acute renal failure, revealed haemorrhagic eruptions on the skin, a moderate hyperaemia and an oedema of the nasopharyngeal mucosa, microfocal haemorrhages in the mucous membranes and internal organs, sharp dystrophic changes in the liver and myocardium, acute necrotic nephrosis, massive haemorrhages in the adrenal glands. What disease is the most typically characterized by the revealed changes?

- Septic scarlet fever
- + Meningococcaemia
- Faucial diphtheria
- Toxic scarlet fever
- Toxic form of influenza

?

The disease in a child began with a high body temperature, a pain in the throat, some swelling of the submandibular lymph nodes. On visual examination of the fauces, its surface was oedematous and moderately hyperaemic, the tonsils were enlarged and covered with white-greyish films which were tightly united with the underlying tissues, any attempt to remove them caused formation of bleeding defects. What disease are the revealed changes typical for?

- Catarrhal angina
- Scarlet fever
- + Diphtheria
- Meningococcal infection
- Measles

?

The disease in a 6-year-old girl began acutely with a pain in the throat, a high body temperature, a bit later she developed a microfocal rash on the skin. A visual examination of the oral cavity revealed a sharp faucial hyperaemia, a "strawberry

tongue", enlarged bright red tonsils with some greyish and yellowish dim foci involving the peritonsillar tissues, and enlarged submandibular lymph nodes. What disease are these changes typical for?

- Toxic scarlet fever
- Faucial diphtheria
- Laryngeal diphtheria
- + Septic scarlet fever
- Meningococcal nasopharyngitis
- ?

The disease in a child began with acute rhinitis, tickling in the throat and malaise, later accompanied by a high body temperature, a headache, nausea, vomiting. The child was hospitalized at an infectious department, but 2 days later he died in spite of the treatment. An autopsy revealed sharply thickened, yellowish-greenish, dim, oedematous and plethoric pia mater, the brain was sharply oedematous with a strangulation of its stem in the great foramen. What disease is characterized by the above clinical-morphological data?

- Meningococcaemia
- Poliomyelitis
- Diphtheria
- Septic scarlet fever
- + Meningococcal meningitis
- ?

A 40-year-old male butcher died from sepsis. His right cheek had a dark red, conical and dense infiltrate, 6 cm in diameter, with a black crust in its centre.. The right halves of the face and neck were oedematous and dense. A microscopic examination revealed an acute serous-haemorrhagic inflammation in the infiltrate, the centre of the latter had necrosis of the epidermis and underlying tissues. What diagnosis did a pathologist make?

- + Anthrax
- Plague
- Tularaemia
- Phlegmon of neck
- Furuncle
- ?

During an operation for elimination of phimosis, a round ulcer with a smooth bottom and dense edges was found on the glans penis. On a microscopic examination of the tissue taken from an edge of the ulcer a pathologist found a polymorphous infiltrate consisting of disorderly located plasma and lymphoid elements with some admixture of heterophilic leukocytes and epithelioid cells; the infiltrate was located mostly around small vessels. The vessels were characterized by phenomena of endangiitis. What disease are the described changes typical for?

- + Syphilis
- Brucellosis
- Poliomyelitis
- Polyarteritis nodosa

- Rheumatism

?

The 8th segment of a surgically removed (owing to a suppurated cyst) lobe of the lung revealed a focus, 1.8 cm in diameter, which had an irregularly rounded form and was dense to touch. On section, the focus was white-yellow, dim and had small areas of bone density. What is this macroscopic picture typical for?

- Peripheral carcinoma

- Chondroma

- Carnification

+ Healed tuberculous affect

- Chronic pneumonia

?

The mucous membrane of the right tonsil revealed a painless ulcer with a smooth vanished bottom and even edges of the chondroid density. Microscopically, a biopsy from the ulcer edge had a perivascular inflammatory infiltrate consisting of lymphocytes, plasmacytes, some neutrophils and epithelioid cells. The vessels were characterized by a proliferation of endotheliocytes up to the absolute closure of the lumens. Name the disease.

- Ulceronecrotic angina

- Actinomycosis

+ Syphilis

- Candidiasis

- Faucial diphtheria

?

In a male cattle-breeder, the disease began with appearance of some red spot on the skin of his right arm; at first, a vesicle with some serous-haemorrhagic fluid formed in the centre of the spot, but later the central part of the vesicle necrotized and became black. The axillary lymph nodes were sharply enlarged and dark red on section. Microscopically, a biopsy of the skin and lymph nodes had a picture of acute serous-haemorrhagic inflammation. What disease was the most probable?

- Tularaemia

- Streptococcal pyoderma

- Plague

- Actinomycosis of skin

+ Anthrax

?

A geologist, who several months before had been on an expedition in the Central Asia, had paroxysms of a fever, an icteric colouring of the skin, hypochromic anaemia and loss of body mass during his life-time. On autopsy, a sharp enlargement of the spleen and liver, as well as hyperplasia of the marrow were found. Microscopically, there was haemomelanososis of the liver, spleen and marrow. What disease are such changes typical for?

- Amoebiasis

- Chronic septicaemia

- Epidemic typhus

- + Malaria
- Relapsing fever
- ?

The disease in a male hunter began with an elevation of his body temperature up to 37-38°C, increased reflex excitability, a disturbance of sleep and hydrophobia. Later these signs were accompanied by spasms of the muscles of the larynx and pharynx, as well as those of respiration. The patient's death was caused by arrest of respiration. On autopsy, an oedema and plethora of the brain, as well as small haemorrhages in the region of the myelencephalon were found. On histological examination of the brain, its stem part, walls of the 3rd ventricle and hippocampus revealed necrosis of the nerve cells which were surrounded (as well as small vessels) by nodules consisting of clusters of microglial and lymphoid cells. The cytoplasm of the nerve cells of the hippocampus contained some rounded eosinophilic inclusions (Babes-Negri bodies). What disease is characterized by the picture described?

- Epidemic typhus
- + Rabies
- Poliomyelitis
- Tick-borne encephalitis
- Typhoid fever
- ?

A 21-year-old male patient with faucial diphtheria died on the 5th day from acute heart failure. On autopsy, the following changes were found: the both tonsils were covered with massive grey films tightly united with the underlying tissues; the left ventricular cavity was dilated, the myocardium was flaccid and motley all the way long - small grey-yellow areas were alternated with microfocal reddish foci. Microscopically, the myocardium had necroses of groups of cardiomyocytes which were surrounded by polymorphocellular inflammatory infiltrates on the periphery. What was the morphological substrate of acute heart failure?

- Diffuse isolated myocarditis
- Focal exudative myocarditis
- Diffuse exudative myocarditis
- + Alterative myocarditis
- Granulomatous myocarditis
- ?

An autopsy of a male revealed signs of septicopyaemia and polypous-ulcerous endocarditis of the aortic valve. From the case history it is known that the septic state had been lasting in the patient for 1.5-2 months. Name the most reliable pathomorphological sign of polypous-ulcerous endocarditis.

- Defect of aortic valve
- Massive thrombotic superpositions on valvular cusps
- + Colonies of bacteria in thrombotic superpositions
- Deformities and ulcerations of valve
- Petrification of valvular cusps
- ?

An autopsy of a child, who suffered from purulent omphalitis during his lifetime, revealed abscesses in the liver, an enlarged spleen with a thick scrape of the pulp, purulent meningoencephalitis and ulcerous-purulent colitis. Name the disease.

- Meningococcal meningoencephalitis
- + Septicopyaemia
- Septicaemia
- Ulcerative colitis
- Dysentery
- ?

On autopsy of a male, who died from a rupture of an aneurysm in the ascending aorta, some whitish nodules were found on the inner surface of the aneurysm. A microscopic examination of the middle coat of the aorta revealed around the microvessels some infiltrates, consisting of lymphocytes and plasmacytes, with an admixture of Pirogov-Langhans giant multinucleate cells. What is your diagnosis?

- + Syphilitic mesaortitis
- Atherosclerosis
- Nonspecific aortitis
- Obliterating endarteritis
- Polyarteritis nodosa
- ?

The disease in a 35-year-old male began acutely with diarrhoea and numerous vomitings, his faeces were watery. Against a background of a sharply expressed dehydration, he developed spasms followed by a comatose state, and the patient died. On autopsy, an expressed cadaveric rigidity, a dry wrinkled skin of the hands and blood thickening were found. The lumen of the small intestine was sharply dilated and overfilled with some colourless fluid which resembled rice water. The mucous coats of the stomach and intestine were oedematous, with a lot of microfocal haemorrhages. Microscopically, serous-haemorrhagic gastroenteritis was revealed. What is your diagnosis?

- Salmonellosis
- Yersiniosis
- Colibacillosis
- + Cholera
- Typhoid fever
- ?

The disease in a 29-year-old male hunter acutely began with an elevation of his body temperature up to 38-40°C, chills, muscle pains, nasal bleeding. A papule up to 1.5 cm in diameter appeared on his hand, the former rapidly turned into a pustule and later into a very painful ulcer. Axillary lymphadenopathy developed. On histological examination of a skin biopsy, the derma revealed granulomata consisting of epithelioid, lymphoid, multinucleate giant cells and polymorphonuclear leukocytes; the centres of the granulomata had necroses. Granulomata of the same structure, foci of necrosis and suppuration were found in the lymph nodes. What is your diagnosis?

- Brucellosis



- Plague
- + Tularaemia
- Actinomycosis
- Anthrax

?

A male worker of a farm acutely fell ill and died under increasing phenomena of intoxication. On autopsy, an enlarged dark cherry flaccid spleen giving an abundant scrape of pulp was found. The pia mater of the vault and base of the skull were dark red, oedematous and impregnated with blood (a "cardinal's cap"). Microscopically, there was a serous-haemorrhagic inflammation of the pia mater and brain tissue with destruction of the walls of small vessels. What is your diagnosis?

- Tularaemia
- + Anthrax
- Brucellosis
- Plague
- Meningococcal meningoenzephalitis

?

For a long time a 45-year-old countrywoman complained of weakness, insomnia, irritability, pains in her muscles and joints, an elevation of the body temperature up to 37.1-37.3°C. Her death came under the phenomena of multiorgan insufficiency. On autopsy, the organs revealed granulomata formed by epithelioid cells, disorderly located Pirogov-Langhans giant cells and a small number of plasma cells and eosinophils. The granulomata had a lot of vessels, there were no foci of necrosis, and systemic productive-destructive vasculitis was revealed. What is your diagnosis?

- + Brucellosis
- Tularaemia
- Plague
- Tuberculosis
- Anthrax

?

The disease in a 67-year-old woman acutely began with an expressed oedema and tenderness of the skin and soft tissues of the neck. A phlegmon of neck and mediastinitis were diagnosed. The patient died under the increasing phenomena of intoxication. On autopsy, the left tonsil was slightly enlarged and dense; on section, it was yellowish-greenish and had a lot of small cavities which imparted a honeycomb structure to it. The soft tissues of the neck and the fat of the anterior mediastinum had signs of purulent melting. Microscopically, the tissue had a lot of small abscesses, their centres having intensive basophilic formations, which consisted of short rod-like elements connected with their one end to the common centre. What is your diagnosis?

- Amoebiasis
- Leishmaniasis
- Brucellosis
- + Actinomycosis

- Giardiasis

?

An autopsy of a 43-year-old male, who died at a surgical department from generalized purulent peritonitis, revealed Peyer's patches in the distal part of the small intestine; they protruded into the lumen, the surface of some of them was covered with brownish-greenish structure-free masses, in the centre of some patches with a clear bottom there were defects spreading to the serous layer. What disease is characterized by the changes found in the small intestine?

+ Typhoid fever

- Dysentery

- Intestinal tuberculosis

- Crohn's disease

- Staphylococcal enteritis

?

A male patient, who came from the Central Asia, had persistent diarrhoeae, a loss of body weight and signs of intoxication against whose background he died. An autopsy revealed numerous hepatic abscesses, the caecum was characterized by dingy green areas of necrosis of its mucous membrane, these areas slightly rose above its surface and penetrated into the muscular layer. The ulcers resulting from the necrosis were characterized by undermined edges which hung over their bottom. The inflammatory reaction in the intestinal wall was poorly expressed. What was the most probable disease in that case?

- Bacterial dysentery

- Cholera

- Typhoid fever

+ Amoebiasis

- Salmonellosis

?

A 48-year-old male died from progressing cardiopulmonary insufficiency. From his case history it is known that before he had been ill with primary tuberculosis. An autopsy revealed a pulmonary emphysema, reticular pneumosclerosis, white-grey foci with corticopleural localization and a hypertrophy of the right ventricle of the heart. The mesenterial lymph nodes had a picture of tuberculous lymphadenitis. On microscopic examination, the pulmonary tissue was characterized by prevalence of a productive tissue reaction with formation of tuberculous granulomata. What form of pulmonary tuberculosis is such a picture typical for?

- Acute focal

- Fibrofocal

- Infiltrative

+ Haematogenous-disseminated

- Miliary

?

Three days after a criminal abortion a female developed an elevation of her body temperature up to 40°C, cloudiness of consciousness, petechial haemorrhages on

her skin. Two days later she died under increasing phenomena of intoxication. An autopsy revealed jaundice, petechial haemorrhages in the serous and mucous membranes, a sharp enlargement of the spleen and lymph nodes. Microscopically, the spleen and lymph nodes were characterized by a proliferation of the lymphoid and reticular cells, as well as a large number of immature forms of haemopoiesis. Besides, there were dystrophic changes and an interstitial inflammation in the liver, kidneys, heart, as well as disseminated necrotic vasculitides. What was the most probable form of sepsis?

- Septicopyaemia
  - Chernogubov's disease
  - + Septicaemia
  - Chronic sepsis
  - Fulminant sepsis
- ?

An 8-year-old girl, who was ill with diphtheria, died under the phenomena of heart failure. On section, the myocardium was flaccid, the cavities of the heart chambers were dilated. Microscopically, there were expressed dystrophic and necrotic changes of the cardiomyocytes, a plethora of the vessels, lymphocytic infiltrates in the stroma. What myocarditis resulted in the failure of heart activity?

- Diffuse isolated exudative
  - + Alterative
  - Focal isolated exudative
  - Isolated productive
  - Productive granulomatous
- ?

A boy, who was ill with chronic tuberculous bronchoadenitis with periods of exacerbation and remission, developed oedema and deformity of the joints. The skin tuberculin test was positive. A biopsy of the synovial membrane revealed an oedema and a diffuse proliferation of the lymphocytes and macrophages. Name the most probable diagnosis.

- Rheumatic arthritis
  - + Poncet's disease
  - Rheumatism
  - Bekhterev's disease
  - Nonspecific polyarthritis
- ?

On the 5<sup>th</sup> day after the appearance of a fever a male patient developed exanthemata on the skin and a sharp drop of the arterial pressure. During the 3<sup>rd</sup> week of his disease he revealed bedsores and bulbar disorders in the form of disturbances of swallowing and breathing. He died from heart failure. A pathoanatomical examination revealed serous meningitis, destructive-proliferative endothrombovasculitis, Popov's granulomata in the myelencephalon, isolated myocarditis, necroses and haemorrhages in the adrenal glands. Name the most probable disease.

- Scarlet fever

- + Epidemic typhus
- Measles
- Typhoid fever
- Influenza

?

An autopsy of an old male, who suffered from an intestinal dysfunction during the previous two weeks, revealed changes in the rectum and sigmoid: their walls were thickened, the lumen was narrowed, there was a brown-green film located on the surface and between the folds and tightly connected with the underlying tissues. Microscopically, there was necrosis of the mucous membrane involving it with a different depth, the necrotic masses were pierced with threads of fibrin, there were foci of haemorrhages and a leukocytic infiltration. Which of the diagnoses listed below was the most probable?

- + Fibrinous dysenteric colitis
- Catarrhal dysenteric colitis
- Ulcerative dysenteric colitis
- Typhoid fever, the stage of necrosis
- Typhoid form of cholera

?

An autopsy of 2-month-old infant revealed papules and pustules on the skin, white dense lungs (white pneumonia), a brown dense liver (a brimstone liver), signs of osteochondritis. Indicate the most probable diagnosis.

- + Congenital syphilis
- Congenital toxoplasmosis
- Congenital cytomegalovirus infection
- Congenital herpetic infection
- Congenital mononucleosis

?

An autopsy of a 33-year-old male revealed a white focus of caseous necrosis, 1.5 x 2.5 cm in size, in the 2nd segment of the right lung, as well as enlarged bifurcation lymph nodes. Microscopically, the above focus had a massive necrosis surrounded by a bank of epithelioid cells with an admixture of lymphocytes and Pirogov-Langhans giant cells. Name the form of tuberculosis.

- Caseous pneumonia
- Primary tuberculosis
- Tuberculoma
- Fibrofocal tuberculosis
- + Acute focal tuberculosis

?

An autopsy of an 8-year-old child, who suffered from deafness during his lifetime and died of pneumonia, revealed signs of parenchymatous keratitis and twisted teeth with formation of crescent grooves on the central incisors (Hutchinson's triad). Microscopically, there was a chronic diffuse interstitial inflammation in the liver, lungs and ovarian tissue, as well as Dubois's abscesses in the thymus. Which of the diagnoses listed below was the most probable?

- Congenital toxoplasmosis
- + Congenital syphilis
- Congenital cytomegalovirus infection
- Congenital herpetic infection
- Congenital mononucleosis

?

A male furrier, who dressed coypu skins (nutrias), died from respiratory insufficiency. On autopsy, his lung had dense foci whose microscopic examination revealed serous-haemorrhagic pneumonia, coagulation necroses, granulomata consisting of epithelioid, lymphoid and giant cells, as well as foci of suppuration. The enlarged regional lymph nodes had the same granulomata, necroses and suppuration. Which of the diagnoses listed below was the most probable?

- + Tularaemia
- Plague
- Tuberculosis
- Sarcoidosis
- Actinomycosis

?

A 32-year-old female died during a puerperal period. An autopsy revealed purulent endometritis, purulent thrombophlebitis of the uterine veins, numerous pulmonary abscesses, abscesses of the kidneys and spleen, apostematous myocarditis and purulent meningitis. Make a diagnosis of the clinical-morphological form of sepsis.

- + Septicopyaemia
- Septicaemia
- Chronic sepsis
- Chernogubov's disease
- Fulminant sepsis

?

A female patient, who complained of sharp weakness, diarrhoea and vomiting, died from uraemia. Microscopically, her gastric mucosa revealed an oedema of the mucous membrane with microfocal haemorrhages, the small intestine had signs of an acute serous inflammation with a vacuolized epithelium which lost microvilli, some of them were characterized by necrosis and desquamation. What was the most probable diagnosis?

- Typhoid fever
- Dysentery
- Choleraic enteritis
- + Choleraic gastroenteritis
- Choleraic algid

?

A microscopic examination of a small intestine in a 42-year-old female, who died from typhoid fever, revealed enlarged grouped follicles with soft sequestra in their centres and rejection of necrotic masses. Indicate the stage of the disease.

- Cerebriform swelling of grouped follicles
- Necrosis of grouped follicles

+ Formation of ulcers

- Clear ulcers

- Healing of ulcers

?

An autopsy of a 45-year-old male, who had had a fever with signs of intoxication during his life-time, revealed an enlarged dense spleen (500 g); on section, its pulp had numerous grey-white and white-yellow miliary necroses of follicles, and there were infarct-like foci of necrosis under the capsule. A histological examination revealed hyperplasia of the follicles with breakdown of leukocytes and accumulation of neutrophils, and numerous thrombi in the vessels. Which of the diagnoses listed below was the most probable?

- Haematogenous general miliary tuberculosis

+ Relapsing fever

- Tularaemia

- Typhoid fever

- Plague

?

An autopsy of a 36-year-old male, who died from cardiopulmonary insufficiency, revealed obliteration of the right pleural cavity, the tissue of the right lung was dense, it had large encapsulated and calcified, foci in the 1st and 2" segments (Aschoff-Pul foci), acinic and lobular foci of caseous pneumonia. Which of the forms of tuberculosis was the most probable?

+ Fibrofocal

- Acute cavernous

- Fibrocavemous

- Acute focal

- Infiltrative

?

On autopsy of a 48-year-old male, who suffered from tuberculosis and died of cardiopulmonary insufficiency, the corticopleural portions of the both lungs revealed numerous foci of caseous necrosis up to 1 cm in diameter, tender reticular pneumosclerosis and an emphysema, as well as hypertrophy of the right cardiac ventricle ("pulmonary heart"); the bifurcation lymph nodes were characterized by tuberculous caseous lymphadenitis. The 3rd segment of the right lung had a Ghon's focus. Which of the diagnoses listed below was the most probable?

- Haematogenous generalization of the primary tuberculosis

- Chronic primary tuberculosis

- Chronic miliary tuberculosis

+ Haematogenous acute miliary tuberculosis

- Cirrhotic tuberculosis

?

A female, who had a phlegmon of her thigh, died from intoxication. An autopsy revealed jaundice, petechiae on the skin, haemorrhages in the serosae, mucosae and internals. Microscopically, the spleen and lymph nodes had a proliferation of the lymphoid and reticular cells with accumulation of immature cells of haemopoiesis

in the marrow. The parenchymatous organs were characterized by a diffuse interstitial inflammation, manifestations of cloudy swelling and fatty degeneration.-Which of the diagnoses listed below was the most probable?

- + Septicaemia
  - Septicopyaemia
  - Chronic sepsis
  - Plague
  - AIDS
- ?

An autopsy of a male patient, who died from cardiopulmonary insufficiency, revealed a healed primary tuberculous focus in the 3rd segment of the right lung. The kidneys, liver, spleen and pia mater had numerous miliary tubercles. Microscopically, the tubercles were represented with caseous necroses surrounded by epithelioid, lymphoid and solitary Pirogov-Langhans giant multinucleate cells. Name the variety of haematogenous tuberculosis.

- The most acute (necrotic) tuberculous sepsis
  - + Acute general miliary
  - Acute general macro focal
  - Haematogenous acute miliary
- ?

An autopsy and subsequent microscopic examination of the organs of a 50-year-old male, who suffered from feverish paroxysms, hypochromic anaemia and jaundice during his life-time, revealed that the liver and spleen were dark grey and significantly enlarged, the marrow was dark grey and characterized by hyperplasia. The cortex and other areas in the grey matter of the brain were dark grey, the white matter had numerous microfocal peri vascular haemorrhages, the vessels contained agglutinated erythrocytes with some parasites in the cytoplasm. In some places the vessels were surrounded by foci of necrosis with formation of Durk's granulomata. The kidneys had signs of glomerulonephritis. What was the most probable diagnosis?

- Epidemic typhus
  - Relapsing fever
  - Vivax malaria
  - Malariae malaria
  - + Falciparum malaria
- ?

An autopsy of a male, who suffered from typhoid fever and died during the 5th day of the disease, revealed the following changes: the grouped follicles of the ileum were enlarged, plethoric and rose above the surface of the mucous membrane, their surface had grooves and convolutions. Histologically, there was a plethora and oedema of the follicular tissue, as well as presence of large cells with a light cytoplasm and typhoid bacilli. What period of typhoid fever might it be?

- + Cerebriform swelling
- Necrosis
- Healing of ulcers

- Clear ulcers
- Formation of ulcers

?

An autopsy of a 47-year-old cachectic male, who suffered from a progressing form of secondary tuberculosis during his life-time, revealed some large yellow-white petrified and encapsulated foci in the 1st and 2nd segments of the right lung. The lower lobe of the right lung was enlarged and dense, yellow on section and had fibrinous superpositions on the pleura. Microscopically, this area was characterized by prevalence of necrotic changes over perifocal exudative ones. Name the form of secondary tuberculosis.

- + Caseous pneumonia
- Infiltrative tuberculosis
- Acute focal tuberculosis
- Fibrofocal tuberculosis
- Fibrocavemous tuberculosis

?

During his life-time, a 40-year-old male had a high body temperature, jaundice, clouded consciousness, bacteraemia. On autopsy, his sclerae and skin were yellow, there were numerous haemorrhages in the serous and mucous membranes, as well as enlarged lymph nodes and spleen. Microscopically, the spleen and lymph nodes had a proliferation of the reticular cells. The heart, liver and kidneys were characterized by an interstitial inflammation, a parenchymatous cloudy swelling; the vascular walls had vasculitides and a fibrinoid swelling. Which of the diagnoses listed below was the most probable?

- + Septicaemia
- Septicopyaemia
- Acute lymphocytic leukaemia
- Acute stem cell leukaemia
- Chronic sepsis

?

An autopsy of a male juvenile, who died from peritonitis, occasionally revealed that the 3rd segment of the right lung contained a focus of caseous necrosis surrounded by an area of a perifocal inflammation. There was a serous-fibrinous inflammation in the pleura and caseous bronchadenitis in the bifurcation lymph nodes. A microscopic examination revealed epithelioid-cellular and giant-cell tubercles on the periphery of the above focus, in the pleura, lymph vessels and bifurcation lymph nodes. Indicate the form of primary tuberculosis.

- Healed primary tuberculosis
- + Primary pulmonary tuberculosis
- Haematogenous progressing of primary tuberculosis
- Growth of primary affect
- Lymphogenous form of progressing of primary tuberculosis

?

An autopsy of a 40-year-old male, who worked as a sheep-breeder and died from a severe intoxication, revealed on the skin some papulopustular haemorrhagic rash



with necroses and ulcerations, as well as enlarged immovable dark red lymph nodes in the inguinal region which were united with one another and had a doughy consistency. The spleen was enlarged, flaccid and had an abundant scrape. Microscopically, the lungs revealed a focal serous-haemorrhagic inflammation with necroses; the heart, liver and kidneys were characterized by dystrophic and necrotic changes; the lymph nodes had haemorrhagic-necrotic lymphadenitis with some purulent melting. Make a diagnosis.

- Bubocutaneous form of plague

+ Bubonic plague

- Primary pneumonic plague

- Septicaemic plague

- Septicaemia

?

A 33-year-old male with a protracted feverish state and a cutaneoconjunctival rash died under the phenomena of increasing bulbar disorders. Histologically, the capillaries and arteioles of his brain revealed vasculitides: an oedema, destruction and desquamation of the epithelium with formation of thrombi and a proliferation of the endothelium, adventitial and periadventitial cells, with an admixture of lymphocytes and neutrophils (Popov's nodules); the vascular walls were characterized by a focal fibrinoid necrosis. Which of the diagnoses was the most probable?

- Rabies

- Influenza

- Tick-borne encephalitis

+ Epidemic typhus

- Malaria

?

A professional male hunter developed an acute elevation of body temperature and enlarged united lymph nodes in his left axilla. A microscopic examination of the lymph nodes revealed granulomata consisting of epithelioid, lymphoid, giant cells and polymorphonuclear leukocytes, as well as foci of necrosis and purulent inflammation. Which of the diagnoses listed below was the most probable?

- Brucellosis

- Plague

- Tuberculosis

- Anthrax

+ Tularaemia

?

On autopsy, the 3rd segment of the right lung under the pleura had some whitish focus of a bone density, 0.8 cm in diameter. The regional lymph nodes were dense and had whitish foci on section. A microscopic examination of the pulmonary tissue in the above region revealed calcified caseous masses surrounded by a rough fibrous connective tissue with formation of bone beams with a fatty marrow in the inner layer; the lymph nodes were characterized by fibrosis with petrification. Name the form of tuberculosis.

- Cirrhotic
- Fibrofocal
- Progressing primary
- Acute focal
- + Healed primary
- ?

A 15-year-old female patient died at an infectious hospital on the 3rd day of some disease from intoxication. On autopsy, a punctate rash on the skin, excluding the region of the nasolabial triangle, was found. The fauces, tonsils and tongue were brightly hyperaemic (the "glowing fauces", a "strawberry tongue"). Microscopically, the internal organs revealed prevalence of dystrophic changes and a sharp disturbance of circulation. Which of the diagnoses was the most probable?

- + Toxic form of scarlet fever
- Septic form of scarlet fever
- Allergic period of scarlet fever
- Diphtheria of respiratory tract
- Measles
- ?

A microscopic examination of a biopsy taken from a large intestine revealed necrosis of the mucous coat involving it with a different depth, the necrotic masses were pierced with threads of fibrin. The mucous membrane around the necrotic foci was oedematous, infiltrated by leukocytes and had focal haemorrhages. The submucosal (Meissner's) and myenteric (Auerbach's) plexuses had dystrophic and necrotic changes.. Which of the kinds of colitis was the most probable?

- Catarrhal
- + Diphtheritic
- Ulcerous
- Haemorrhagic
- Gangrenous
- ?

A 50-year-old male, who had dysentery, died on the 8th day of the disease from intoxication. An autopsy revealed thickened walls of the sigmoid and initial portions of the rectum, the mucous membrane was covered with a fibrinous film which was tightly connected with the underlying tissues. Histologically, the intestinal wall had a deep necrosis of the mucous membrane and the necrotic masses were impregnated with fibrin. What kind of colitis did the patient have?

- Catarrhal
- Postdysenteric
- Ulcerous
- + Diphtheritic
- Gangrenous
- ?

On autopsy of a male, who died from typhoid fever, the whole length of the ileum revealed ulcers with a smooth bottom represented by a muscular layer or the serous

membrane of the intestine, as well as ulcers with through defects. At what stage of typhoid fever is it observed?

+ Clear ulcers

- Cerebriform swelling

- Necrosis

- Dirty ulcers

- Healing of ulcers

?

A disease in an 8-year-old boy began acutely with a catarrh of the upper respiratory tract and conjunctivitis, on the 3rd day of the disease he developed some macrofocal papular eruption behind the ears, and later on the face, neck and trunk. The patient died on the 10th day under the phenomena of severe respiratory insufficiency. An autopsy revealed lobular pneumonia with foci of suppuration. Microscopically, he had purulonecrotic panbronchitis and bronchiolitis, peribronchial interstitial pneumonia with a focal infiltration of the interstice by lymphoid, plasma cells, macrophages and giant multinucleate cells. Which of the diagnoses listed below was the most probable?

- Influenza

- Respiratory-syncytial infection

- Adenovirus infection

- Scarlet fever

+ Measles

?

A male juvenile, who underwent antituberculous treatment, fell ill with measles. He developed an elevated body temperature, dyspnoea, a cough with a discharge of sputum, a headache, sometimes with a loss of consciousness. His death resulted from intoxication. On autopsy, the right lung had a subpleural focus of caseous necrosis, 6 cm in diameter, as well as enlarged and dense grey-yellow bifurcation lymph nodes. The pia mater, lungs, kidneys and spleen had numerous miliary tubercles. Indicate the form of progressing of primary tuberculosis.

- Growth of primary affect

- Lymphogenous (lymphoglandular)

+ Haematogenous (miliary)

- Haematogenous (macrofocal)

- Mixed

?

An autopsy of a 39-year-old male, who was ill with tuberculosis during his lifetime, revealed in the upper lobe of the right lung some cavity, 2.0 x 3.0 cm in size, which communicated with the lumen of the segmental bronchus. The wall of the cavity was heterogeneous: its inner layer consisted of caseous masses, the outer one of a condensed pulmonary tissue. Microscopically, the cavity wall had tuberculous granulomata. Which of the forms of tuberculosis listed below was the most probable?

+ Acute cavernous tuberculosis

- Fibrocavernous tuberculosis

- Tuberculoma
  - Fibrofocal tuberculosis
  - Acute focal tuberculosis
- ?

A male patient, who was ill with encephalitis, developed excitement and death from a brain oedema. An autopsy revealed numerous diapedesis haemorrhages in the myelencephalon. Microscopically, there was chromatolysis and necrosis of neurons with formation of nodules of lymphoid and microglial cells around the neurons. The hippocampal neurons contained Babes-Negri bodies. Which of the encephalitis listed below was the most probable?

- Tick-borne
  - Meningococcal
  - Influenzal
  - + Encephalitis in rabies
  - Morbillous
- ?

A 45-year-old female patient with a diagnosis of typhoid fever died from peritonitis. On autopsy, the whole length of the small intestine revealed ulcers with even rounded edges and a smooth bottom represented by a circular muscular layer or the serous membrane. Name the stage of typhoid fever.

- Cerebriform swelling
  - Necrosis of Peyer's patches
  - Formation of dirty ulcers
  - + Formation of clear ulcers
  - Healing of ulcers
- ?

At the height of an epidemic of influenza, visual examination of the upper respiratory tract in a female patient revealed catarrhal laryngotracheitis. Microscopically, a biopsy from the larynx had a hyperaemic oedematous mucous membrane with a diffuse lymphohistiocytic infiltration, desquamation of the epithelium and small superficial foci of necrosis. Name the form of influenza

- + Mild form
  - Influenza of moderate severity
  - Severe form
  - Toxic form
  - Influenza with pneumonic complications
- ?

On autopsy of a 65-year-old male, who for many years was ill with a rheumatic heart defect and died from cardiovascular insufficiency, it was found that the weight of the heart was 900 g, the patient had hypertrophy of the left ventricle of the heart, polypous-ulcerous endocarditis of the aortic and mitral valves with their petrification and deformation, hyperplasia of the spleen, "old" renal and pulmonary infarcts. A microscopic examination revealed diffuse vasculitides, proliferative isolated myocarditis, nephritis, hepatitis, glomerulonephritis, the

thrombohaemorrhagic syndrome. Which of the diagnoses listed below was the most probable?

- Chernogubov's disease
  - + Secondary bacterial endocarditis
  - Fibroplastic endocarditis
  - Acute verrucous endocarditis
  - Aortomitral heart defect
- ?

An autopsy of a male revealed that the right upper extremity was oedematous, the skin in the middle third part of the arm was dark red, dense and diffusely impregnated with blood, in the centre there was a vesicle with some serous-haemorrhagic exudate (a "phlyctena"). The regional lymph nodes were enlarged, united with one another and immobile. Microscopically, the lymph nodes were characterized by a serous-haemorrhagic inflammation, a large number of microbes, a proliferation of the reticular cells, foci of necrosis. There were dystrophic processes in the parenchymatous organs, the spleen was enlarged and flaccid. Which of the diagnoses listed below was the most probable?

- Bubonic plague
  - + Bubocutaneous plague
  - I'riniiry pneumonic plague
  - Septicacmic plague
  - Secondary bubonic pneumonia
- ?

On autopsy of a male, who died from an intestinal bleeding, the ileum revealed necrosis of grouped and solitary follicles with imbibition of necrotic tissues with bile and blood; the lower portion of the intestine had phenomena of sequestration with rejection of the necrotic masses and formation of defects. Name the stage of typhoid fever.

- Healing of ulcers
  - Cerebriform swelling
  - Necrosis
  - Clear ulcers
  - + Dirty ulcers
- ?

Microscopically, a biopsy from the rectum of a patient with dysentery revealed hyperaemia and oedema of the mucous membrane, microfocal haemorrhages, foci of superficial necrosis and leukocytic infiltrates in the stroma. Name the variety of dysenteric colitis.

- Healing of ulcers
  - Fibrinous colitis
  - Follicular colitis
  - Formation of ulcers
  - + Catarrhal colitis
- ?

A 24-year-old female, who 2 months before had had diphtheria and suffered from paralysis of the soft palate, suddenly died from heart failure. On autopsy, an eccentric hypertrophy of the heart and a dim flaccid myocardium were found. A microscopic examination of the glossopharyngeal, phrenic nerves and vagus revealed a lumpy breakdown of the myelin and a plethora of the epineural vessels. The 3rd cervical sympathetic ganglion and the nodose one of the vagus were characterized by an impaired circulation and phenomena of cytolysis. Which of the diagnoses was the most probable?

- Alterative myocarditis
  - + Late paralysis of heart
  - Isolated myocarditis
  - Toxic myocarditis
  - Exudative myocarditis
- ?

A male patient was at an infectious hospital with profuse diarrhoea, signs of exicosis, a fall of the body temperature. He died from uraemia. On autopsy, the small intestine contained some colourless fluid resembling rice-water, its mucous membrane was oedematous. Microscopically, a plethora of the vessels, focal haemorrhages, a desquamation of the enterocytes, a hypersecretion of the goblet cells and a lympholeukocytic infiltration of the mucosa were found. Which of the diagnoses listed below was the most probable?

- Salmonellosis
  - Typhoid fever
  - Choleraic algid
  - + Choleraic enteritis
  - Choleraic gastroenteritis
- ?

Against a background of a satisfactory general state and a subfebrile body temperature, a visual examination of a 6-year-old child revealed eruptions on the face, head and trunk in the form of red spots and vesicles having transparent contents, some vesicles were covered with crusts. From the side of the fauces and upper respiratory tract, expressed catarrhal changes were determined. Microscopically, the areas of the eruptions were characterized by a plethora of the vessels, a balloon dystrophy and giant multinucleate cells in the spinous layer of the epidermis. The oral mucosa had small erosions, plethoric vessels and perivascular lymphohistiocytic infiltrates. Which of the diagnoses was the most probable?

- Measles
  - + Varicella
  - Smallpox
  - Rubella
  - Scarlet fever
- ?

A male cattle-farm worker developed a dark red spot on the skin of his thigh; in the centre of the spot there was formation of a vesicle filled with some serous-

haemorrhagic fluid, a bit later the centre necrotized and became dark. The inguinal lymph nodes were enlarged, dense and dark red on section. Under the phenomena of severe intoxication the patient died. A microscopic examination of the skin vesicles and lymph nodes revealed a diffuse haemorrhagic infiltration and a sharp oedema of the surrounding tissues. Which of the forms of anthrax was the most probable?

- Enteric
- Septicaemic
- + Cutaneous
- Primary pneumonic
- Mixed
- ?

An autopsy of a 30-year-old male, who was ill with an acute respiratory disease and died under the phenomena of acute cardiopulmonary insufficiency, revealed a fibrinous-haemorrhagic inflammation in the mucous membrane of the larynx and trachea, destructive panbronchitis and enlarged lungs which were motley because of abscesses, haemorrhages and necroses. Which of the diagnoses was the most probable?

- + Influenza
- Parainfluenza
- Respiratory syncytial infection
- Measles
- Adenovirus infection
- ?

An autopsy of a male, who had a prolonged suppuration of the wound following an injury of his extremity and died under the phenomena of intoxication, revealed cachexia, dehydration, a brown atrophy of the liver, myocardium, spleen and striated muscles, as well as renal amyloidosis. Which of the diagnoses was the most probable?

- Brucellosis
- Chernogubov's disease
- Septicaemia
- Septicopyaemia
- + Chronic sepsis
- ?

An autopsy of a 45-year-old male, who was ill with tuberculosis and died from cardiopulmonary insufficiency, revealed in the upper lobe of the right lung some cavity, 3x2 cm in size, with a dense wall and uneven inner surface crossed by obliterated bronchi. Microscopically, the wall of the cavity had three layers: internal - pyogenic, middle - a layer of the tuberculous granulation tissue, outer - connective-tissue. Which of the diagnoses was the most probable?

- + Fibrocavernous tuberculosis
- Fibrofocal tuberculosis
- Tuberculoma
- Acute focal tuberculosis

- Acute cavernous tuberculosis

?

A male cattle-farm worker acutely fell ill and died under the phenomena of intoxication. An autopsy revealed an enlarged flaccid spleen, which was dark cherry on section and gave an abundant scrape. The pia mater of the vault and base of the skull were dark red and oedematous (a "cardinal's cap"). Microscopically, there was a serous-haemorrhagic inflammation of the meninges and cerebral tissues with destruction of the walls of small vessels. What was the most probable diagnosis?

- Tularaemia

+ Anthrax

- Brucellosis

- Plague

- Meningococcal meningoenzephalitis

?

An autopsy of a male, who was ill with primary tuberculosis and died after severe influenza under the phenomena of cardiopulmonary insufficiency, revealed in the 2<sup>nd</sup> segment of the right lung a subpleural focus of caseous pneumonia which involved the whole segment. Microscopically, there was caseous necrosis of the pulmonary tissue with foci of melting of the caseous masses, this necrosis was surrounded by a region of a perifocal exudative inflammation; the peribronchial lymph nodes were characterized by caseous lymphadenitis with melting of the caseous masses and formation of fistulae. Which of the forms of progressing of primary tuberculosis was the most probable?

- Lymphogenous

- Haematogenous

- Growth of primary tuberculous affect

+ Mixed progressing

- Chronic course of primary tuberculosis

?

An autopsy of a 55-year-old male, who worked at a meat-packing plant, acutely fell ill and died from sepsis, revealed some serous-haemorrhagic fluid in the abdominal cavity, the lower portion of the ileum had large areas of a haemorrhagic infiltration and ulcers against a background of a serous-haemorrhagic inflammation, the mesenteric lymph nodes and their surrounding fat were characterized by a serous-haemorrhagic inflammation. The spleen was enlarged and flaccid, on section it was dark cherry and had an abundant scrape of the pulp. Which of the diagnoses was the most probable?

+ Anthrax

- Salmonellosis

- Typhoid fever

- Dysentery

- Plague

?



The body of a 39-year-old male with reduced nourishment was received for autopsy. From the case history it was known that some 5 years before he had undergone several surgical interventions after a car accident. During the past two years he significantly lost flesh, developed a generalized lymphadenopathy, a fever of an unknown genesis and diarrhea. Within the past half a year he suffered several times from pneumonias. Macro- and microscopic examinations revealed double polysegmental pneumonia. A bacteriological study of the material from the lungs found pneumolysis. Which of the diseases was the most probable in the dead person?

- + HIV infection
- Typhoid fever
- Chronic dysentery
- Chronic sepsis
- Tuberculous colitis

?

On autopsy of a male, who died from an acute intestinal upset and dehydration, the small intestinal loops were stretched and their lumen contained much colourless fluid with a rice-water appearance and without any odor. Microscopically, the small intestine was characterized by a sharp plethora of the vessels, an edema of the mucous membrane, necrosis and desquamation of the epithelial cells. A bacteriological study of smears from the mucous membrane of the small intestine revealed some microorganisms in the form of "offish shoals". Which of the diagnoses corresponds to the above clinical and morphological changes?

- Salmonellosis
- Typhoid fever
- + Cholera
- Dysentery
- Amoebiasis

?

An autopsy of a male, who was ill with tuberculosis for more than 20 years, revealed that his lungs were deformed and the pleura had some focal thickening. On section of the lungs, mostly in their upper lobes, each of them had several cavities with a necrotic detritus and a trabecular appearance of their inner surface. Microscopically, the walls of the cavities were represented by a necrotic layer followed by those of the granulation and connective tissues. Which of the diagnoses was the most probable?

- Acute focal tuberculosis
- Infiltrative tuberculosis
- + Fibrocavernous tuberculosis
- Fibrofocal tuberculosis
- Acute cavernous tuberculosis

?

A room for dissections received the body of a male with reduced nourishment, who was ill with pulmonary tuberculosis and died from cardiopulmonary insufficiency. On autopsy, the lungs were enlarged, dense, with a thickened pleura and fibrinous-

purulent superpositions on it. On section, the lungs contained grey-yellow polysegmental foci which were confluent in the upper lobes and actually occupied the whole lobe. A microscopic examination revealed prevalence of necrotic changes over the perifocal ones. The first segment of the right lung had a Ghon's focus. Which of the diagnoses was the most probable?

- Infiltrative tuberculosis
  - + Caseous pneumonia
  - Acute focal tuberculosis
  - Tuberculomata
  - Fibrofocal tuberculosis
- ?

On autopsy of a 16-year-old male juvenile with reduced nourishment, who was ill with primary pulmonary tuberculosis and died from an accompanying pneumonia, it was found that the 2th segment of the right lung had a Ghon's focus, the peribronchial and bifurcation lymph nodes were enlarged, united in packs, grey-yellow, dense in consistency and crumbled. Microscopically, the 3rd segment of the right lung contained a primary affect surrounded by fibrosed tuberculous granulomata and a connective-tissue capsule; the lymph nodes were characterized by caseous necrosis. Which of the forms of tuberculosis was the most probable?

- + Lymphogenous progressing of tuberculosis
  - Chronic course of primary tuberculosis
  - Haematogenous acute miliary tuberculosis
  - Acute focal pulmonary tuberculosis
  - Caseous pneumonia
- ?

On the section of corpse is discovered a cereous necrosis of rectus. In the terminal portion of small intestine are found out ulcers of 3-5 cm in the diameter. The walls of ulcers are covered with brittle grey-yellow masses. The edges of ulcers moderately go up the surface of mucous membrane. Vidal's reaction is positive.

- + Typhoid fever with abenteric complications
  - Typhoid fever with enteric complications
  - Crohn's disease
  - Dysentery
- ?

At the forensic medical dissection of the man's cadaver, who has died in the train, is discovered full-blown cadaveric rigidity ("gladiator's pose"). The skin, mucous and serous membranes, muscles are dry. Between the loops of small intestine is defined a clammy transparent mucus. In the lumen of small intestine there is a large quantity of colourless fluid alike rice water, which is taken on the bacteriological research. What previous diagnosis is the most probable?

- + Cholera
- Dysentery
- Salmonellosis
- Typhoid fever
- Yersiniosis

?

On the section of corpse is discovered a cereous necrosis of rectus. In the terminal portion of small intestine are found out ulcers of 3-5 cm in the diameter. The walls of ulcers are covered with brittle grey-yellow masses. The edges of ulcers moderately go up the surface of mucous membrane. Vidal's reaction is positive.

- + Typhoid fever with abenteric complications
- Typhoid fever with enteric complications
- Crohn's disease
- Dysentery

?

A child of 12 years old has abruptly fallen ill with the rise of the temperature to 38°C, headache, congested pipes, then a rough cough appeared, on the third day on the skin of the face, neck and upper part of the trunk, – abundant maculosus papula eruption, which does not itch. The mucous tunic of the mouth is hyperemic, with a fine white enanthema on the cheeks near the lower permanent teeth. What is the most provisional diagnosis?

- + rubeola
- Scarlatina
- German measles
- Allergic dermatitis
- Dysentery

?

The patient of 20 years old died of intoxication in 8 days after the artificial extramural abortion at the term of pregnancy of 14–15 weeks. At the postmortem dissection has been defined a yellowish tincture of sclera, skin, pyogenic-necrotic endometritis, numerous abscesses in lungs, hyperplasia of spleen with a great number of neutrophiles in its sinuses. Which sequela of abortion has developed?

- + Septicopyemia
- Septicemia
- Haemorrhagic shock
- Chronic septic
- Viral hepatitis A

?

A young man died of increasing cardiac insufficiency. At the pathomorphological research is discovered: immune complex-mediated glomerulonephritis, the spleen weighing 500g, the ulcers of semilunar valves of aorta, which are covered with polypoid thrombi with the colonies of bacteria. Indicate the most firm diagnosis.

- + Septic bacterial endocarditis
- Septicemia
- Rheumatic thromboendocarditis
- Acute rheumatic valvulitis
- Septicopyemia

?

A patient had a profuse diarrhea, vomiting during two days; the death came of acute dehydration. At the postmortem dissection the wall of the bowel is edematous,

hyperemic with the plural hemorrhages in the mucus membrane. There is a whitish liquid in the lumen of the bowel; it reminds rice water. Indicate the disease, what has developed.

- + Cholera
- Dysentery
- Salmonellosis
- Abdominal typhoid
- Enterocolitis
- ?

A patient died of respiratory distress. He fell ill 4 days ago, the body temperature-40°Ñ, coryza changed into the fits of unproductive coughing, chest pain; dyspnea progressed during 2 days. He was brought to the treatment station by ambulance service, without consciousness, with respiratory distress, cardiovascular insufficiency, the body temperature-39°Ñ, hypoxia of CNS. In spite of qualified medical aid, a patient died in twenty-four hours after the hospitalization. At the necropsy: the lungs are large, bright gray-red foci of pneumonia change into dark-red areas of plethora, and also separate areas of lungs with plural petite hemorrhages, do not deflate on the discission, in the bronchi of different calibers – panbronchitis with the areas of inflammatory infiltration, lysis and necrosis. Name the most firm diagnosis.

- + Influenza virus pneumonia
- Aggravation of chronic bronchitis
- Myocardial infarction
- Typhus fever
- Salmonellosis
- ?

A man with a wound of his limb that nad 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?

- Brucellosis
- Chernogubov's syndrome
- Septicemia
- Septicopyemia
- + Chroniosepsis
- ?

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

- Syphilis
- Rhinoscleroma
- + Lepra
- Glanders

–Tuberculosis

?

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?

+ Spotted fever

– Nodular periarteritis

– Enteric fever

– Q fever

– HIV

?

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?

– Hemorrhagic shock

– Septicemia

+ Septicopyemia

– Viral hepatitis type A

– Chroniosepsis