A 7-year-old child suffers from acute disease. A pediatrician observed the following during examination: pharynx mucosa is hyperemic, edematous, swollen, covered with large amount of mucus. Buccal mucosa has whitish discoloured spots. On the next day the child came out in rash with large spots covering the skin of his face, neck and torso. What kind of inflammation causes changes in pharynx mucosa?

+ Catarrhal
- Serous
- Serofibrinous
- Fibrinous
- Hemorrhagic

A 25-year-old woman has died when giving birth. The histological study of her kidneys has revealed the following in the epithelium of nephron tubules: condensation of nucleus chromatin, nuclei breaking down into lumps, and lysis, along with plasmorrhexis and cytolysis. What pathologic process was revealed in the epithelium of kidney tubules?

+ Necrosis
- Hydropic degeneration
- Amyloidosis
- Fatty degeneration
- Hyalinosis

A 38-year-old man died all of a sudden. Autopsy revealed myocardial infarction in the posterior wall of the left ventricle. What are the most likely alterations in myocardio-ocyte structure that can be revealed microscopically in the infarction focus?

+ Karyolysis
- Adipose degeneration
- Carbohydrate degeneration
- Calcification
- Protein degeneration
Histological examination of a lymph node removed from the posterior triangle of neck of an 18-year-old patient revealed some cell agglomerations that included single multinuclear Reed-Sternberg cells, major Hodgkin’s cells, minor Hodgkin’s cells and many lymphocytes, single plasmatic cells, eosinophils. What is the most likely diagnosis?

+ Lymphogranulomatosis  
− Nodular lymphoma  
− Burkitts tumour  
− Lymphocytic lymphoma  
− Chronic lymphoid leukosis

An irregular-shaped dense grey and white focus has appeared on the patient’s oral cavity mucosa, raising above mucosa surface. The patient considers it to be denture-caused damage of mucosa. Microscopy has revealed the following: hyperplasia, hyperkeratosis, parakeratosis, acanthosis of stratified epithelium of mucosa; underlaying connective tissue has lymphoplasmacytic infiltration. What pathology is it?

+ Leukoplakia  
− Candidosis  
− Ichthyosis  
− Syphilitic papula  
− Lupus erythematosus

A rounded whitish-pink tumor node with diameter of 6 cm has been removed from uterine cavity. Microscopy revealed it to consist of chaotically arranged smooth muscle fibers with large amount of stroma threaded through with nerves and blood vessels. What diagnosis is most probable?

+ Fibromyoma  
− Granular cell (Abrikosov’s) tumor  
− Desmoid  
− Hibernoma  
− Rhabdomyoma

Examination of the oral mucosa revealed a small nodule with papillary surface. Histological examination revealed conjugate papillary proliferations of stratified squamous epithelium without cellular atypism and underlying stroma represented by
thin-walled vessels and loose connective tissue. What formation has developed in a patient?

+ Papilloma
– Fibroma
– Fibrolipoma
– Epithelium hyperplasia
– Basal cell carcinoma

A 50-year-old patient has been referred for treatment of neck lymphadenitis. His individual penicillin sensitivity was tested. In 30 seconds full-body fever raised in the patient and his arterial blood pressure dropped to 0 mm Hg, followed by cardiac arrest. Resuscitation was unsuccessful. Autopsy revealed acute venous hyperemia of viscera. Histological study revealed mast cells (tissue basocytes) degranulation in the skin (at the area of injections), myocardium and lungs. What kind of hypersensitivity reaction occurred in patient?

+ Anaphylactic
– Delayed-type hypersensitivity
– Complement-mediated cytotoxic
– Immune complex-mediated

A 28-year-old patient had been diagnosed with multifragmental fracture of the right hip. On the third day after the injury he began to complain of pain in the right side of chest, difficult respiration. A day later the patient died of progressive heart and respiratory failure. Histological study of pulmonary and cerebral blood vessels revealed orange sudanophilic droplets that completely obstructed the vessels of microvasculature. What complication caused the death of the patient?

+ Fat embolism
– Gas embolism
– Drug-induced embolism
– Microbial embolism
– Thromboembolism

A 35-year-old patient complains of pain in the upper jaw, bleeding, a slight loosening of teeth. He has been diagnosed with periodontitis. What is a typical pathological process in this case?

+ Inflammation
A patient underwent radiography that revealed numerous smooth-walled roundish defects in both jaws. Histological study revealed osteolysis and osteoporosis accompanied by the phenomena of poor bone formation. The patient’s urine contained Bence-Jones protein. What is the most likely diagnosis?

+Multiple myeloma
–Chronic myelogenous leukemia
–Chronic erythroleukemia
–Acute myeloid leukemia
–Acute undifferentiated leukemia

A 31-year-old patient has deep caries of the fifth maxillary tooth on the right. Acute purulent inflammation in the region of the tooth apex has developed. There is marked edema with isolated neutrophils in the perifocal tissues and soft tissues of cheek and palate. Diagnose the pathologic process in the soft tissues of cheek and palate:

+Acute serous inflammation
–Acute suppurative periodontitis
–Acute suppurative periostitis
–Phlegmon

Microscopic examination of a skin tumor revealed that it invaded the underlying tissue, destroyed it and formed nests and cords of atypical epithelium which included some pearl-like formations. Specify the tumor:

+Keratinizing squamous cell carcinoma
–Squamous cell non-keratinizing carcinoma
–Solid carcinoma
–Adenocarcinoma
–Medullary carcinoma
The surgically excised connective tissue of the deformed mitral valve gives a basophilic reaction when stained with hematoxylin and eosin. When stained with toluidine blue, it turns purple (metachromasia). What changes of the connective tissue can be detected by these reactions?

+ Mucoid edema
- Fibrinoid necrosis of connective tissue
- Connective tissue edema
- Petrification
- Hyalnosis

During an abdominal surgery a 46-year-old patient working at a meat processing plant was found to have a very dense roundish formation 11 cm in diameter which was localized in the right lobe of the liver. The cross-section of the formation has a porous appearance due to a large number of small vesicles with layers of dense connective tissue. The surrounding tissues have visible necrotic areas and proliferation of granulation tissue including many eosinophils and foreign body giant cells. What disease can be thought of in this case?

+ Echinococcus multilocularis
- Malaria
- Hepatitis
- Hepatic rhabdomyosarcoma
- Calculous cholecystitis

Microscopic examination of the biopsy sample taken from a deformed upper jaw bone revealed areas of bone resorption and replacement of bone tissue by randomly arranged bundles of mature collagen fibers with spindle and stellate cells; primitive structure of trabeculae; myxomatous foci. What is the most likely diagnosis?

+ Fibrous osteodysplasia
- Osteoma
- Osteoblastosarcoma
- Osteoporosis
- Osteosarcoma
A 53-year-old patient with a long history of nephrolithiasis underwent nephrectomy. The kidney looks as a thin-walled sac filled with urine. Renal parenchyma is atrophied. Specify this complication of nephrolithiasis:
+ Hydronephrosis
– Pyelonephritis
– Pyonephrosis
– Multicystic kidney disease
– Nephrosclerosis

A 69-year-old male patient got a small plaque with subsequent ulceration on the skin of the lower eyelid. The formation was removed. Microscopic examination of dermis revealed complexes of atypical epithelial cells arranged perpendicularly to the basal membrane on the periphery. The cells were dark, of polygonal prismatic shape with hyperchromic nuclei with a high mitotic rate. What is the histological form of carcinoma in this patient?
+ Basal cell carcinoma
– Keratinizing squamous cell carcinoma
– Nonkeratinizing squamous cell carcinoma
– Adenocarcinoma
– Undifferentiated

A 12-year-old girl has a bleeding ulcer 5 mm in diameter which is localized on the mouth floor. The ulcer is surrounded by bright-red tissue that turns white when pressed. Microscopic examination of a biopsy sample reveals a tumor constituted by a number of large cavities filled with blood. The cavities are lined with endothelial cells. Between the cavities there is stroma represented by the loose connective tissue. What is the most likely diagnosis?
+ Ulcerated cavernous hemangioma
– Secondary rhabdomyosarcoma
– Squamous cell non-keratinizing carcinoma
– Osteoblastoclastoma
– Ulcerated melanoma

A 36-year-old patient with a several year history of chronic pulpitis had undergone tooth extraction. Microscopic examination of the pulp revealed some deep-purple structureless areas which can be interpreted as:
Autopsy of a dead man with no fixed abode revealed the aneurysm of the ascending aorta. Microscopy of the middle tunica of aorta revealed lymphocytic inflammatory infiltrates, plasma cells, fibroblast cells with some Pirogov-Langhans cells, endovasculitis. What disease should be suspected?

+Syphilis  
–Atherosclerosis  
–Rheumatism  
–Essential hypertension  
–Tuberculosis

Microscopy of colonic biopsy material revealed a tumour made up of prismatic epithelium and forming atypical glandular structures of various shapes and sizes. The basal membrane of glands was destroyed. Tumour cells were polymorphic, with hyperchromatic nuclei and a large number of pathological mitoses. What is the most likely diagnosis?

+Adenocarcinoma  
–Basal cell carcinoma  
–Solid carcinoma  
–Mucosal carcinoma  
–Undifferentiated carcinoma

Histological study of the bronchial wall and adjacent lung segments revealed sheets and strands of squamous epithelium. The cells have moderately expressed symptoms of atypia: polymorphism, nuclear hyperchromatism, mitoses. In the center of the complex there are concentric pink formations. What is the most likely diagnosis?

+Keratinizing squamous cell carcinoma  
–Non-keratinizing squamous cell carcinoma  
–Adenocarcinoma
- Scirrhus
- Undifferentiated carcinoma

A 77-year-old patient with atherosclerosis got pain in his right foot. The foot is enlarged, the skin is black and macerated, the demarcation zone is not defined clearly. What pathological process arose in the foot?

+ Wet gangrene
- Dry gangrene
- Noma
- Sequestrum
- Coagulation necrosis

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?

+ Ischemic stroke
- Multifocal tumor growth with cystic degeneration
- Multiple foci of fresh and old cerebral hemorrhage
- Focal encephalitis–Senile encephalopathy

A 14-year-old patient has been diagnosed with Hutchinson’s triad: screwdriver-shaped teeth, parenchymatous keratitis and deafness. What disease are these signs typical for?

+ Syphilis
- Toxoplasmosis
- Lepra
- Tuberculosis
- Opisthorchiasis

A 55-year-old man had been suffering from chronic glomerulonephritis. He died from chronic renal failure. Macroscopic-cal examination revealed on the surface of epicardium and pericardium some greyish-white villous depositions. After their removal dilated and plethoric vessels were uncovered. What process took place in the pericardium?

+ Fibrinous inflammation
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, plephoric, covered with massive yellowgreenish films, the peritoneal cavity contained for about 300 ml of thick yellow-greenish liquid. What pathologic process was revealed in the peritoneal cavity?

+ Fibrinous suppurative peritonitis
– Serous peritonitis
– Fibrinous serous peritonitis
– Peritoneal commissures
– Fibrinous haemorrhagic peritonitis

A 38-year-old man died all of a sudden. Autopsy revealed myocardial infarction in the posterior wall of the left ventricle. What are the most likely alterations in myocardiocyte structure that can be revealed microscopically in the infarction focus?

+ Karyolysis
– Adipose degeneration
– Carbohydrate degeneration
– Calcification
– Protein degeneration

A female patient suffering from secondary syphilis got foci of skin depigmentation in the upper parts of her back. What pathological process is it?

+ Leukoderma
– Metaplasia
– Leukoplasia
– Dysplasia
– Parakeratosis
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:

+ Glandular hyperplasia of endometrium
− Acute endometritis
− Leiomyoma
− Cystic mole
− Placental polyp

A 32-year-old patient who lives in the countryside consulted a doctor about a painful swelling and a fistula in the submandibular region. Examination revealed an infiltration with a fistula discharging thick pus and containing white granules. On dissection the infiltration tissues turned out to be dense, yellow-green and had honeycomb structure because of multiple abscesses. What is the most likely diagnosis?

+ Actinomycosis
− Tuberculosis
− Lepra
− Syphilis−Submandibular abscess

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

+ Adipose degeneration
− Hyaline drop degeneration
− Hydropic degeneration
− Carbohydrate degeneration
− Dysproteinosis

A 57-year-old patient experiences periodical uterine haemorrhages. Diagnostic biopsy of lining of uterus has revealed among the blood elements some glandular complexes of different forms and sizes made by atypic cells having hyperchromic nuclei with multiple mitoses (including pathological ones). What is the most likely diagnosis?

+ Adenocarcinoma
–Uterus fibromyoma
–Chorioepithelioma
–Glandular endometrium hyperplasia
–Endometritis

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?

+Metaplasia
–Physiological regeneration
–Reparative regeneration
–Hyperplasia
–Dysplasia

10 years ago a patient underwent extraction of his right kidney on account of a tumour. After that the volume of his left tumour grew by 50%. What process was developed in the kidney?

+Vicarious hypertrophy
–Neurohumoral hypertrophy
–Pseudohypertrophy
–Functional hypertrophy
–Hypertrophic enlargement

A 40-year-old male patient had a tumour-like formation 8x7 cm large on his neck. A surgeon removed it only partially because of close connection with large vessels. Microscopical examination revealed marked cellular and tissue atypism, lipoblast-type cells in different stages of maturity, with polymorphism and nuclear hyperchromia, pathological mitoses, necrosis foci. Specify the histological form of the tumour:

+Liposarcoma
–Lipoma
–Fibroma
–Fibrosarcoma
–Hibernoma
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?

+ Reagine reaction
– Cytotoxic reaction
– Immune complex reaction
– Lymphocyte-mediated cytolysis
– Granulomatosis

A 46-year-old inveterate smoker has a white crateriform ulcer with dense edges in the right corner of mouth. Eosin staining and microscopical examination revealed cords of atypical multilayer epithelium ingrowing into the adjacent tissues and making clusters. In the centre of these clusters some roundish pink concentric formations can be seen. What is the most likely diagnosis?

+ Keratinizing squamous cell carcinoma
– Basal cell carcinoma
– Squamous cell nonkeratinous carcinoma
– Leukoplakia
– Adenocarcinoma

While examining an extracted stomach a researcher revealed that its antral part along the lesser curvature had a deep, roundish, even-edged defect up to 1,5 cm in diameter reaching the myenteron. In the defect floor one could see a dense semitransparent area resembling of a hyaline cartilage. Specify the process observed in the floor of the mucosa defect?

+ Local hyalinosis
– Amyloidosis
– Mucoid swelling
– Fibrinoid changes
– General hyalinosis

A 57-year-old patient experiences periodical uterine haemorrhages. Diagnostic biopsy of lining of uterus has revealed among the blood elements some glandular complexes of different forms and sizes made by atypic cells having hyperchromic
nuclei with multiple mitoses (including pathological ones). What is the most likely diagnosis?

+ Adenocarcinoma
– Uterus fibromyoma
– Chorioepithelioma
– Glandular endometrium hyperplasia
– Endometritis

During anaesthetization of the oral cavity mucous tunic a patient developed anaphylactic shock (generalized vasodilatation, increase in vascular permeability along with escape of liquid to the tissues). What type of hypersensitivity has the patient developed?

+ I type (anaphylactic)
– II type (antibody-dependent)
– III type (immune complex)
– IV type (cellular cytotoxicity)
– V type (granulomatosis)

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

+ Hydropic
– Granular
– Adipose
– Keratinization
– Hyaline drop

A patient with fracture of femoral bone in the area of surgical neck got symptoms of acute dextroventricular insufficiency as a result of pulmonary embolism. What type of embolism is it?

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

+ Adipose degeneration  
- Hyaline drop degeneration  
- Hydropic degeneration  
- Carbohydrate degeneration  
- Dysproteinosis  

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

+ Recurrent verrucous  
- Diffuse  
- Acute verrucous  
- Fibroplastic  
- Polypoulcerous  

A female patient suffering from secondary syphilis got foci of skin depigmentation in the upper parts of her back. What pathological process is it?

+ Leukoderma  
- Metaplasia  
- Leukoplasia  
- Dysplasia  
- Parakeratosis  

A 40 year old male patient died from cerebral edema. In anamnesis the face carbuncle was registered. Autopsy revealed hyperemia and edema of cerebral tissue. White matter of the left hemisphere had two cavities 6x5,5 and 5x4,5 cm large filled
with yellowish-green cream-like fluid. Walls of the cavities were built up by nerve tissue with irregular rands. What complication of carbuncle was it?

+ Acute abscesses
− Chronic abscesses
− Empyema
− Colliquative necroses
− Cysts

Histological examination of a microspecimen presenting a malignant lung tumour revealed that the tumor consisted of lymphocyte-like cells forming any structures. Stroma is mildly marked, there are a lot of mitoses and necroses. What tumour is it?

+ Small cell carcinoma
− Fibroma
− Squamous cell nonkeratinous carcinoma
− Squamous cell keratinous carcinoma
− Adenocarcinoma

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

+ Syphilis
− Toxoplasmosis
− Lepra
− Tuberculosis
− Opisthorchiasis

At an altitude of 14000 m an aircraft experienced a sudden loss of cabin pressure. The pilot must have developed the following type of embolism:

+ Gaseous
− Foreign body embolism
− Thromboembolism
− Air embolism
− Fat embolism
Autopsy of a 35 y.o. woman revealed not only enlargement of many lymph nodes but also enlarged spleen weighting 600. Its incision showed that it was heterogeneous, dark red, dense with greyish-yellow necrotic areas up to 1 cm in diameter (porphyritic spleen). What disease can be assumed?

+ Lymphogranulomatosis
– Chronic lymphoid leukosis
– Chronic myeloid leukosis
– Cancer metastases
– Lymphosarcoma

Microscopic examination of periodontium revealed plethoric vessels, edema of connective tissue along with infiltration by single neutrophils. What type of exudative inflammation in the periodontium is it?

+ Serous
– Purulent
– Putrid
– Fibrinous
– Catarrhal

A 55 year old man had been suffering from chronic glomerulonephritis. He died from chronic renal failure. Macroscopic examination revealed on the surface of epicardium and pericardium some greyish-white villous depositions. After their removal dilated and plethoric vessels were uncovered. What process took place in the pericardium?

+ Fibrinous inflammation
– Organization
– Proliferative inflammation
– Haemorrhagic inflammation
– Arterial hyperemia

A 40 year old female patient has enlarged thyroid gland. On palpation the gland is dense, its surface is slightly tuberous. Histological examination of gland sample revealed diffuse infiltration of tissue by the cells, formation of lymphoid follicles. What disease is it?
+Autoimmune thyroiditis
–Endemic goiter
–Sporadic goiter
–Diffuse toxic goiter
–Riedel’s disease

A 6 year old child was delivered to the hospital because of measles pneumonia. On the mucous membrane of a cheek a dentist revealed an ill-defined greish area 2x2.5 cm large. Soft tissues are edematous and foul-smelling. The most probable diagnosis of the dentist should be:

+ Noma
– Gangrenous stomatitis
– Pustular stomatitis
– Phlegmonous stomatitis
– Ulcerous stomatitis

Examination of a tissue sample of enlarged cervical lymph nodes taken from a young woman revealed proliferation of lymphocytes, reticular cells, macrophages, big and small Hodgkin’s cells, multinuclear Sternberg-Reed cells. There were also multiple eosinophils, single foci of caseous necrosis of the node tissue. What is the most probable diagnosis?

+ Lymphogranulomatosis
– Tuberculosis
– Acute leukosis
– Lymphosarcoma
– Metastasis of lung cancer

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

+ Haematoma
– Diapedetic haemorrhages
– Ischemic infarction
– Plasmorrhagias
– Abscess
During embryogenesis the epithelial band also known as vestibular plate gives rise to development of vestibule of mouth. What biological mechanism of the programmed death of cells provides growth of buccolabial sulcus from epithelial plate?

+Apoptosis  
–Necrosis  
–Meiosis  
–Paranecrosis  
–Amitosis

A 75 year old male patient consulted a surgeon about a brown nonhealing ulcer of shin. Examination of biopsy material revealed diffuse growth of polymorphic atypic cells with brown pigment in their cytoplasm. Pearls reaction was negative. There were also a lot of pathological mitoses and foci of tissue necrosis. What is the most probable diagnosis?

+Melanoma  
–Local hemosiderosis  
–Intradermal nevus  
–Trophic ulcer  
–Skin cancer

A 60 year old patient complains of tongue burning, excessive salivation and glossalgia effects that came 5 days after he started using a metal dental bridge. Objectively: mucous membrane of oral cavity is edematous and hyperemic. What form of stomatitis is it?

+Catarrhal  
–Purulent  
–Ulcerous  
–Gangrenous  
–Fibrinous

A 42 year old patient who had been suffering from chronic granulomatous periodontitis and chronic purulent osteomyelitis of his lower jaw for 8 years died from chronic renal insufficiency. What complication of purulent osteomyelitis has developed in kidneys?
+Amyloidosis
–Hyalinosis
–Adipose degeneration
–Atrophy
–Necrosis of epithelium of convoluted tubules

Microscopical examination of a surgical specimen (an ulcered part of a lip) revealed in the connective tissue of mucous membrane near the borders and under the floor of the ulcer some epithelial complexes consisting of atypic multi-stratal epithelium with accumulations of bright pink concentric formations. What pathology is it?

+Squamous cell keratinous carcinoma
–Squamous cell nonkeratinous carcinoma
–Transitional cell carcinoma
–Basal cell carcinoma
–Papilloma

Mucous membrane of a patient’s oral cavity has a greyish-white focus, the mass is dense and protrudes above the mucous membrane. Histological examination revealed hyperkeratosis, parakeratosis and acanthosis of epithelium in this area. What pathological process was revealed in the mucous membrane?

+Leukoplakia
–Hyalinosis
–Leukoderm
–Local tumourous amyloidosis
–Focal ichthyosis

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

+Fibrinous pericarditis
–Purulent pericarditis
–Hemorrhagic pericarditis
–Proliferative pericarditis
A patient with closed fracture of humeral bone was bandaged with plaster. The next day the injured hand became swollen, cyanotic and cold. What disorder of peripheral blood circulation are these symptoms typical for?

+ Venous hyperemia
- Arterial hyperemia
- Ischemia
- Thrombosis
- Embolism

A 22 year woman has enlarged lymphatic ganglions. Histological analysis of a ganglion revealed lymphocytes, histiocytes, reticular cells, small and great Hodgkin’s cells, multinuclear Reed-Sternberg cells, solitary foci of caseous necrosis. What disease are these changes typical for?

+ Lymphogranulematosis
- Lymphosarcoma
- Chronic leukemia
- Acute leukemia
- Cancer metastasis

A diver who has been staying at the depth of 40 m for a long time fell ill with caisson disease as a result of decompression. The main pathogenetic factor is the following embolism:

+ Gaseous
- Air
- Fat
- Paradoxical
- Tissue

A 38 year old patient died during intractable attack of bronchial asthma. Histological examination revealed mucus accumulations in bronchi’s lumen, a lot of mast cells (labrocytes) in bronchi’s wall, some of these cells are degranulated, there are also many eosinophils. Name pathogenesis of these changes in bronchi:

+ Atopy, anaphylaxis
–Cytotoxic, cytolytic effect of antibodies
–Immune complex mechanism
–Cell-mediated cytolysis
–Granulematosis

Opening of a patient’s abdominal cavity revealed for about 2.0 L of purulent fluid. Peritoneum is dull, greyish, serous tunic of intestines has grayish layers that can be easily removed. It is most likely to be:
+ Fibrinopurulent peritonitis
– Hemorrhagic peritonitis
– Serous peritonitis
– Tuberculous peritonitis

Examination of a patient who had been suffering from rheumatism for a long time revealed stenosis of mitral orifice, death was caused by cardiac and pulmonary insufficiency. Autopsy has shown brown induration of lungs. What type of circulation disturbance provokes such changes in lungs?
+ Chronic left ventricular insufficiency
– Chronic right ventricular insufficiency
– Acute left ventricular insufficiency
– Acute right ventricular insufficiency
– Portal hypertension

In course of gastric endoscopy the biopsy material of mucous membrane was taken. Its histological examination revealed the following: mucous membrane is intact, thickened, edematous, hyperemic, with small droplike hemorrhages, coated with thick mucus. Name the form of acute gastritis:
+ Catarrhal
– Erosive
– Fibrinous
– Purulent
– Necrotic

Examination of a 16 year old boy revealed enlarged submandibular and cervical lymph nodes. The boy was subjected to biopsy. Microscopic examination of
lymph nodes revealed: typical structure is obliterated, cell population is heterogenous, there are big cells with multilobe nuclei, multiple big mononuclear cells, eosinophilic and neutrophilic leukocytes, lymphocytes, besides that, there are necrotic areas and foci of sclerosis. What is the most probable diagnosis?

+Lymphogranulomatosis
–Lymph node hyperplasia
–Granulomatous lymphadenitis
–Suppurative lymphadenitis
–Non-Hodgkin’s lymphoma

During the histologic lung analysis of a man who died from cardiac insufficiency the inflammation focuses were revealed. Alveoles were full of light-pink fluid, here and there with pinkish fibers that formed a close-meshed reticulum with a small number of lymphocytes. What type of exudate is present in lungs?

+Serofibrinous
–Hemorrhagic
–Serous
–Purulent
–Fibrinous

Mucous membrane of the right palatine tonsil has a painless ulcer with smooth lacquer fundus and accurate edges of cartlaginous consistency. Microscopically: inflammatory infiltrate that consists of lymphocytes, plasmocytes, a small number of neutrophils and epithelioid cells; endovasculistis and perivasculitis. What disease is in question?

+Syphilis
–Actinomycosis
–Tuberculosis
–Pharyngeal diphtheria
–Necrotic (Vincent’s) tonsillitis

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?

+Ischemic stroke
–Multifocal tumor growth with cystic degeneration
–Multiple foci of fresh and old cerebral hemorrhage
–Focal encephalitis
–Senile encephalopathy

On the 5th day of illness a 12 year old child who was treated in the infectious department on account of influenza felt severe headache, sickness, dizziness, got meningeal signs. The child died 24 hours later from increasing brain edema. Dissection of cranial cavity revealed that pia mater of brain are edematous, plethoric, saturated diffusively with bright red liquid. Convolutions and sulci of brain are flattened. What influenza complication is in question?

+ Hemorrhagic meningitis
– Cerebral hemorrhage
– Venous hyperemia of brain membranes
– Suppurative leptomenigitis
– Serous meningitis

Tissue sample of soft palate arches that was taken because a tumor was suspected (microscopic analysis revealed an ulcer with dense fundus) revealed mucous membrane necrosis, submucous layer was infiltrated by lymphocytes, epithelioid cells, plasmocytes, solitary neutrophils. There was also evident endovasculitis and perivasculitis. What disease are these changes typical for?

+ Primary syphilis
– Aphthous stomatitis
– Ulcerative stomatitis
– Vensan’s ulcerative-necrotic stomatitis
– Fauclial diphteria

A 57 year old patient has periodic uterine bleedings. Diagnostic endometrectomy was performed. Biopsy material contains among the blood elements some glandular complexes of different sizes and forms that consist of atypical cells with hyperchromic nuclei and multiple mitoses (including pathological ones). What is the most probable diagnosis?

+ Adenocarcinoma
– Fibromyoma of uterus
– Chorioepithelioma
–Glandular hyperplasia of endometrium
–Endometritis

Microscopic analysis of tissue sampling from patient’s skin reveals granulomas that consist of epithelioid cells surrounded mostly by T-lymphocytes. Among epithelioid cells there are solitary giant multinuclear cells of Pirogov-Langhans type. In the centre of some granulomas there are areas of caseous necrosis. Blood vessels are absent. What disease are the described granulomas typical for?

+Tuberculosis
–Syphilis
–Leprosy
–Rhinocleroma
–Glanders

A 7 year old child was taken to the infectious disease hospital with complaints of acute pain during swallowing, temperature rise up to 390°C, neck edema. Objective signs: tonsills are enlarged, their mucous membrane is plethoric and covered with a big number of whitishyellowish films that are closely adjacent to the mucous membrane. After removal of these films the deep bleeding defect remains. What type of inflammation is it?

+Diphtheritic
–Purulent
–Serous
–Crupous
–Hemorrhagic

A 65 year old patient suddenly died. She suffered from thrombophlebitis of deep veins of shin. Autopsy revealed: trunk and bifurcation of pulmonary artery contain red loose masses with dull corrugated surface. What pathological process did the morbid anatomist reveal in pulmonary artery?

+Thromboembolism
–Thrombosis
–Tissue embolism
–Foreign body embolism
–Fat embolism
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:

+ Glandular hyperplasia of endometrium
- Acute endometritis
- Leiomyoma
- Cystic mole
- Placental polyp

A 19-year-old girl addressed an oncologist with complaints of slowly growing tumor-like mass on the tip of her tongue. The mass was first noticed 5-6 years ago. The patient requested no medical help. Objectively: there is a pale pink round growth with wide pedicle on the tongue apex; the growth is painless, elastic; there are no changes of mucosa surrounding the pedicle. Submandibular lymph nodes cannot be palpated. What kind of tumor is it?

+ Papilloma
- Atheroma
- Fibroma
- Lipoma
- Keratoma

A 64-year-old male patient died with symptoms of acute cardiovascular failure. Autopsy results: the section of the anterior wall of the left ventricle showed a yellowish flaccid 1,5-2 cm focus surrounded by a reddish rim. The convoluted coronary arteries had lumen irregularly narrowed by 75%. The vessel intima was thickened, dense, covered with whitish plaques, crunched when cut. What disease can you think of?

+ Acute myocardial infarction
- Continuously recurrent myocardial infarction
- Postinfarction cardiosclerosis
- Microfocal cardiosclerosis
- Recurrent myocardial infarction

Preventive examination of a 55-year-old patient revealed type II diabetes mellitus. An endocrinologist revealed an increase in body weight and liver
enlargement. The man is nonsmoker and doesn’t abuse alcohol but likes to have a good meal. Histological examination by means of diagnostic liver puncture revealed that the hepatocytes were enlarged mostly on the lobule periphery, their cytoplasm had transparent vacuoles showing positive reaction with sudan III. What liver pathology was revealed?

+ Fatty hepatosis
- Acute viral hepatitis
- Chronic viral hepatitis
- Alcohol hepatitis
- Portal liver cirrhosis

An autopsy of the body of a 56-year-old man, who was suffering from secondary tuberculosis, has revealed large areas of sclerosis in the I-II segments of the right lung. Tissue surrounding affected areas is pale, soft, convex; crunches when cut; does not recede. Specify the changes occurring in the tissues surrounding sclerosis focus.

+ Focal emphysema
- Bronchiectasis
- Pneumothorax
- Atelectasis
- Abscess

A 9-year-old child has multiple lesions of the oral mucosa in form of small painful hyperemic sores with a white deposit in the center; enlarged and painful submandibular lymph nodes. Microscopic examination of the affected region revealed a superficial defect covered by fibrin; edematous and hyperemic submucosa with inflammatory infiltration. What is the most likely diagnosis?

+ Aphthous stomatitis
- Hypertrophic stomatitis
- Herpetic stomatitis
- Catarrhal gingivitis

After restoration of maxillary incisors with artificial crowns a 44-year-old female was found to have a brownish overgrowth in form of a node of 15 mm in diameter. Histological study revealed that under the stratified squamous epithelium of gingiva there was a connective tissue mass with numerous sinusoidal vessels,
ovalshaped mononuclear cells forming osteoid substance, and polynuclear giant cells that destroyed the alveolar ridge of the upper jaw. What is the most likely diagnosis?

+ Giant cell epulis
– Fibromatous epulis
– Angiomatous epulis
– Gingival fibromatosis
– Eosinophilic granuloma

Histological examination of the grayish-pink elastic nodule of 0.3 cm in diameter found by a surgeon at the root of the extracted tooth shows granulation tissue with cords of stratified squamous epithelium. What is the most likely diagnosis?

+ Granulomatous periodontitis
– Eosinophilic granuloma
– Granulating pulpitis
– Acute apical periodontitis
– Granulating periodontitis

Autopsy of a dead 6-year-old child revealed a marked edema of the soft tissues of neck and enlarged tonsils. Pharyngeal mucosa was covered with numerous dense whitish-yellow pellicles exposing deep ulcers after their removal. Histological examination of the pharyngeal mucosa revealed necrosis of the upper epithelial layers, impregnation of the mucous membrane with the fibrinous exudate and moderate leukocyte infiltration. What infectious disease caused the death of the child?

+ Diphtheria
– Parainfluenza
– Scarlet fever
– Whooping cough
– Measles

A patient was suffering from primary tuberculosis 5 years ago. Radiography has revealed a sharply margined nodular shadow with diameter of 4 cm in the 2nd segment of the right lung. Focus was surgically removed. Histological study has revealed the following: the focus of caseous necrosis surrounded by the thick capsule of connective tissue. What kind of secondary tuberculosis has occurred in patient?
A 53-year-old patient with a long history of nephrolithiasis underwent nephrectomy. The kidney looks as a thin-walled sac filled with urine. Renal parenchyma is atrophied. Specify this complication of nephrolithiasis:

+Hydronephrosis
–Pyelonephritis
–Pyonephrosis
–Multicystic kidney disease
–Nephrosclerosis

Postmortem examination of a patient with a long history of rheumatism revealed thickening and shortening of the mitral valve leaflets with abundant thrombotic deposits. Histological examination of the valve leaflets confirmed sclerosis and revealed multiple foci of connective tissue disorganization in form of mucoid and fibrinoid swelling, as well as deendothelization-on foci. Endothelium defects were covered with thrombotic deposits of 1-2 mm. What type of valvular endocarditis is the case?

+Recurrent verrucous endocarditis
–Acute verrucous endocarditis
–Fibroplastic endocarditis
–Diffuse valvulitis
–Polypous-ulcerative endocarditis

Autopsy of a man who died from intraintestinal hemorrhage revealed necrosis of grouped and solitary follicles, dead tissues imbibed with bile and blood in the ileum; sequestration and rejection of necrotic masses with defect formation in the lower segment of the intestine. Which of the following diagnoses is most likely?

+Typhoid fever, ulcerative stage
–Typhoid fever, "clean ulcer" stage
–Typhoid fever, necrosis stage
Abdominal typhoid salmonellosis
– Crohn’s disease

An autopsy of the body of an aged man, who was suffering from acute intestinal disorder during his last 2 weeks, has revealed the following change in the rectum and sigmoid colon: brown and green film covering the mucosa is detected. The intestinal wall is thickened; the cavity sharply narrows down. Microscopy reveals mucosa necrosis of varying depth, necrotic tissue is pierced through with fibrin threads, leucocytic infiltration is observed. What diagnosis is most probable?

+ Fibrinous colitis
– Catharrhal colon
– Ulcerative colitis
– Follicular colitis

Examination of a 29-year-old patient revealed a dense, immobile, illdefined tumor-like formation in the lower jaw. The overlying mucosa was pale. Biopsy of the neoplasm revealed osteoid structures lined with atypical osteoblasts; numerous pathologic mitotic figures; a great number of thin-walled vessels. What is the most likely diagnosis?

+ Osteosarcoma
– Osteoblastoclastoma
– Exacerbation of chronic osteomyelitis
– Ameloblastoma
– Primary jaw carcinoma

After restoration of maxillary incisors with artificial crowns a 44-year-old female was found to have a brownish overgrowth in form of a node of 15 mm in diameter. Histological study revealed that under the stratified squamous epithelium of gingiva there was a connective tissue mass with numerous sinusoidal vessels, oval-shaped mononuclear cells forming osteoid substance, and polynuclear giant cells that destroyed the alveolar ridge of the upper jaw. What is the most likely diagnosis?

+ Giant cell epulis
– Fibromatous epulis
– Angiomatous epulis
– Gingival fibromatosis
– Eosinophilic granuloma
A 38-year-old female patient complains of bleeding gums, halitosis, exposure of tooth necks. Objectively: the patient has gingivitis, plaque and tartar. Inflammation involves the alveolar part of gingiva with dental pockets. The bone tissue exhibits signs of bone resorption. What pathology does the patient have?

+Parodontitis
–Periostitis
–Periodontitis
–Gingivitis

Examination of a patient revealed a hard palate tumor in form of a small dense gray node without clear boundaries. Histological study of the tumor after its removal revealed the following peculiarities: the tumor was constituted by small cubic cells with hyperchromatic nucleus forming alveoli, trabeculae, solid and cribriform structures. The tumor growth could be characterized as invasive. Specify the tumor:

+Adenoid cystic carcinoma
–Malignant pleomorphic adenoma
–Mucoepidermoid carcinoma
–Adenolymphoma
–Monomorphic adenoma

Histologically, the internal wall of a maxillary cyst is lined with stratified squamous epithelium with underlying granulation tissue with infiltrating lymphocytes. The outer layer is represented by loose fibrous connective tissue surrounded by cicatrical fibrous tissue. What diagnosis can be made?

+Cystic granuloma
–Simple granuloma
–Epithelial granuloma
–Keratocyst
–Ameloblastoma

Autopsy of a dead 6-year-old child revealed a marked edema of the soft tissues of neck and enlarged tonsils. Pharyngeal mucosa was covered with numerous dense whitish-yellow pellicles exposing deep ulcers after their removal. Histological examination of the pharyngeal mucosa revealed necrosis of the upper epithelial layers, impregnation of the mucous membrane with the fibrinous exudate and
moderate leukocyte infiltration. What infectious disease caused the death of the child?

+Diphtheria  
−Parainfluenza  
−Scarlet fever  
−Whooping cough  
−Measles

A 47-year-old patient with symptoms of severe intoxication and respiratory failure died. A section of lung tissue had a mottled pattern with multiple small focal hemorrhages and foci of emphysema. Histological examination revealed hemorrhagic bronchopneumonia accompanied by abscess; the cytoplasm of bronchial epithelial cells had eosinophil and basophil inclusions. According to the section analysis, make your diagnosis:

+Influenza  
−Adenovirus infection  
−Parainfluenza  
−Respiratory syncytial  
−Staphylococcal bronchopneumonia

A 9-year-old child has multiple lesions of the oral mucosa in form of small painful hyperemic sores with a white deposit in the center; enlarged and painful submandibular lymph nodes. Microscopic examination of the affected region revealed a superficial defect covered by fibrin; edematous and hyperemic submucosa with inflammatory infiltration. What is the most likely diagnosis?

+Aphthous stomatitis  
−Hypertrophic stomatitis  
−Herpetic stomatitis  
−Catarrhal gingivitis

A 35-year-old female patient has HIV at the AIDS stage. On the skin of the lower extremities and palatine mucosa there appeared rusty red spots, bright red nodules of various sizes. One of the nodules was taken for histological study. It revealed a lot of randomly distributed thinwalled vessels lined with endothelium, the bundles of spindle cells containing hemosiderin. What kind of tumor developed in the patient?
A dentist examined a 5-year-old boy and found him to have a saddle nose, high-arched palate, natiform skull. Both front maxillary incisors are peg-shaped and have a crescent-shaped notch in the cutting edge. Lymph nodes are not changed. What is the provisional diagnosis?

+ Late congenital syphilis
– Early congenital syphilis
– Tertiary syphilis
– Fluorosis
– Rickets

A 45-year-old patient with an 8-year history of tuberculosis died in a hospital of chronic renal failure. At autopsy, the kidneys were enlarged, the cross-section surface looked greasy, histological study revealed profuse deposits of structureless homogeneous eosinophilic masses exhibiting marked metachromasia when stained with Congo red. What pathological process developed in the kidneys?

+ Secondary amyloidosis
– Hematogenous renal tuberculosis
– Acute glomerulonephritis
– Toxic nephritis against the background of antibiotic therapy
– Nephrosclerosis

Autopsy of a young man revealed some lung cavities with inner walls made up of granulation tissue with varying degrees of maturity; pronounced pneumosclerosis and bronchiectasis. Some cavities had caseation areas. What is your presumptive diagnosis?

+ Fibrous cavernous tuberculosis
– Infiltrative tuberculosis
– Caseous pneumonia
– Acute cavernous tuberculosis
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?

+ Dysentery
– Typhoid fever
– Salmonellosis
– Nonspecific ulcerous colitis
– Yersiniosis

Following the tooth extraction for acute pulpitis complicated by purulent periodontitis a patient developed osteomyelitis of mandible. 10 days later the patient died with symptoms of severe intoxication. Autopsy revealed a 2x2 cm large abscess of the right frontal lobe of brain, bilateral abscessed pneumonia, myeloid hyperplasia of spleen. What is the most likely diagnosis?

+ Pyosepticemia
– Septicemia
– Chroniosepsis
– Secondary septic endocarditis

A 42-year-old man died with symptoms of severe intoxication and respiratory failure. A slide of lung tissue was heterogenous, with multiple microfocal hemorrhages and foci of emphysema. Histological examination of lungs revealed hemorrhagic abscessing bronchopneumonia; eosinophilic and basophilic granules in the cytoplasm of epithelial cells of bronchi. What is the most likely diagnosis?

+ Influenza
– Parainfluenza
– Adenovirus infection
– Respiratory syncytial virus infection
– Staphylococcal bronchopneumonia

A patient with a long history of chronic periodontitis underwent removal of a maxillary cyst located at the root of the affected tooth. Microscopy shows that the
bone wall is made up of fibrous tissue infiltrated by lymphocytes and plasma cells. The inner surface of the cyst is covered with stratified squamous epithelium with no signs of keratinization. What is the most likely diagnosis?

+ Radicular cyst
– Follicular cyst
– Primordial cyst
– Eosinophilic granuloma
– Gingival fibromatosis

A patient with marked manifestations of exsicosis died in the infectious disease hospital. Postmortem examination results: the corpse with contracted muscles, dry skin and mucous membranes, thick and dark blood in veins, edematous plethoric mucosa, distended bowel loops, the lumen contains about 4 liters of rice-water fluid. What is the most likely diagnosis?

+ Cholera
– Enteric fever
– Dysentery
– Anthrax, intestinal form
– Yersiniosis

Vestibular surface of the left lower incisor has a pink fungoid formation up to 2 cm large which is fixed to the supra-alveolar tissue by a wide pedicle. Histological examination revealed branched capillary vessels with multiple hemorrhages and foci of hemosiderosis. What is the most likely diagnosis?

+ Angiomatous epulis
– Fibrous epulis
– Giant cell epulis
– Gingival fibromatosis
– Cavernous hemangioma

Histologically, the internal wall of a cyst localized on the upper jaw is lined with stratified squamous epithelium with underlying granulation tissue infiltrated by lymphocytes. The external layer is represented by loose fibrous connective tissue surrounded by cicatrical fibrous tissue. What diagnosis can be made?

+ Cystic granuloma
–Simple granuloma
–Epithelial granuloma
–Keratocyst
–Ameloblastoma

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

Necrotic nephrosis
+Acute pyelonephritis
–Acute glomerulonephritis
–Acute tubular-interstitial nephritis
–Lipoid nephrosis

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?

+Chronic bronchitis
–Lobar pneumonia
–Acute bronchitis
–Bronchopneumonia
–Interstitial pneumonia

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

+Recurrent verrucous
–Diffuse
–Acute verrucous
Autopsy revealed that the upper lobe of the right lung was enlarged, grey, airless; surface of incision was dripping with turbid liquid; pleura had a lot of fibrinous plicae. Microscopical examination of alveoles revealed exudate containing neutrophils, desquamated alveolocytes and fibrin fibres. Bronchus wall was intact.

What is the most probable diagnosis?

- Croupous pneumonia
- Interstitial pneumonia
- Pulmonary abscess
- Focal pneumonia
- Influenzal pneumonia

A 67-year-old patient underwent extraction of a tumour of the right parotid region. Macroscopical examination revealed a soft encapsulated node up to 35 cm in diameter, the tissue was whitish-grey and included many small cysts. Microscopical examination revealed that the duct structures of large diameter were lined with bilayer prismatic epithelium, they had eosinophilic cytoplasm, the duct lumens contained papillary structures, the stroma was infiltrated with lymphocytes, there were some solitary lymphoid follicles. Specify the kind of tumour:

- Adenolymphoma
- Pleomorphic adenoma
- Mucoepidermal tumour
- Monomorphic carcinoma
- Adenocystic carcinoma

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

- Stage of medullary swelling
- Stage of necrosis
- Stage of ulcer healing
–Stage of clean ulcers
–Stage of ulceration

Examination of a 30-year-old man’s mandible revealed in the region of his molar a dense tumour-like formation that significantly deformed the mandible. Here and there the formation wasn’t fully detached from the bone tissue. Microscopical examination of a tissue sampling revealed that stroma had some cords and follicles with odontogenous cylindric epithelial cells in peripheria and stellate cells resembling of the enamel organ pulp in the centre. What is the most likely diagnosis?

+Aneoloblastoma
–Adenomatoid tumour
–Primary intraosseal cancer
–Adenocarcinoma
–Osteoclastoma

A 35-year-old patient with chronic periodontitis underwent excision of a cyst 3 cm in diameter found at a root of the 15th tooth. Histological examination revealed that it had thin wall formed by mature connective tissue infiltrated by lymphocytes and plasmatic cells. Its internal surface was lined with multilayer pavement epithelium with no signs of keratinization; the cavity contained serous exudate. What is the most likely diagnosis?

+Radicular cyst
–Follicular cyst
–Primordial cyst
–Cherubism
–Follicular ameloblastoma

A 20-year-old patient has multiple yellow-brown and black erosions of tooth enamel. The teeth crumble and break, some of them are decayed. Make a diagnosis:

+Fluorosis
–Deep caries
–Teeth erosion
–Acidic necrosis of teeth
Preventive examination of a 55-year-old patient revealed type II diabetes mellitus. An endocrinologist revealed an increase in body weight and liver enlargement. The man is non-smoker and doesn’t abuse alcohol but likes to have a good meal. Histological examination by means of diagnostic liver puncture revealed that the hepatocytes were enlarged mostly on the lobule periphery, their cytoplasm had transparent vacuoles showing positive reaction with sudan III. What liver pathology was revealed?

+ Fatty hepatosis
– Acute viral hepatitis
– Chronic viral hepatitis
– Alcohol hepatitis
– Portal liver cirrhosis

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:

+ Atherocalcinosis
– Lipoidosis
– Liposclerosis
– Bilipid
– Atheromatosis

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

+ Pulmonary emphysema
– Multiple bronchiectasis
– Cavernous tuberculosis
– Chronic bronchitis
– Fibrosing alveolitis

Morphological examination of an amputated gangrenous extremity revealed that the lumen of femoral artery was constricted due to stony, partly ulcerated plaques with obturating thrombi. What is the most likely diagnosis?
+Atherosclerosis
–Obliterating endarteritis
–Non-specific aortoarteritiis
–Obliterating thromboangiitis

Nodular A section of pulmonary tissue has a large-meshed look due to the sacciform and cylindric dilatation of the bronchi; microscopical examination of the bronchial wall reveals a leucocytal infiltration with neutrophil prevalence; elastic, muscle fibers as well as cartilage plates are partly destroyed and replaced by the connective tissue. The adjacent pulmonary tissue has inflammation foci, fibrosis areas, vascular sclerosis and signs of emphysema. The right ventricle hypertrophy is present. What is the most likely diagnosis?

+Multiple bronchiectasis
–Pulmonary emphysema
–Interstitial pneumonia
–Pneumofibrosis
–Chronic bronchitis
–Periarthritis

A 29-year-old female patient complains of gingival haemorrhage and lower front teeth mobility she has been experiencing for the last 6 months. Objectively: the mucous membrane in the region of the front lower teeth is hyperemized, edematic, bleeds when touched. From under the gingival mucosa foul-smelling pus is discharged, tooth roots are exposed. The patient has been diagnosed with the III stage of parodontitiis. What factor allowed to establish the stage of disease progress?

+Tooth root exposure
–Mucosa inflammation
–Nature of purulent discharge
–Disease duration
–Teeth mobility

A 29-year-old female patient has moon face, upper body obesity, striae on her anterior abdominal wall, hirsutism; urine shows an increased rate of 17-oxy ketosteroids. What disease are these presentations typical for?

+Itsenko-Cushing syndrome
–Pheochromocytoma
–Conn’s syndrome
–Primary aldosteronism
–Secondary aldosteronism

A male patient consulted a dentist about an acute toothache. Examination revealed a carious cavity in the upper premolar on the right. The carious cavity reaches the pulp. What is the most likely caries complication causing the toothache?
+Pulpitis
–Periodontitis
–Parodontitis
–Tooth erosion

A 35-year-old patient with chronic periodontitis underwent excision of a cyst 3 cm in diameter found at a root of the 15th tooth. Histological examination revealed that it had thin wall formed by mature connective tissue infiltrated by lymphocytes and plasmatic cells. Its internal surface was lined with multilayer pavement epithelium with no signs of keratinization; the cavity contained serous exudate. What is the most likely diagnosis?
+Radicular cyst
–Follicular cyst
–Primordial cyst
–Cherubism
–Follicular ameloblastoma

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

+ Stage of medullary swelling
– Stage of necrosis
– Stage of ulcer healing
– Stage of clean ulcers
– Stage of ulceration

A 25-year-old man has a saucershaped ulcer 0.8 cm in diameter on the upper left surface of tongue. The ulcer's floor and edges are dense with smooth and glistening surface, painless on palpation. Microscopical examination of the ulcer floor revealed an infiltration consisting of lymphoid, plasmatic and epithelioid cells with a lot of vessels affected by endovasculitis. What is the most likely diagnosis?

+ Primary syphilis
– Decubital ulcer
– Cancerous ulcer
– Tuberculosis
– Setton’s aphtha

A 45-year-old female patient underwent an excision of 2.5x2 cm large tumour located in the region of submandibular salivary gland. Microscopic examination revealed that it consisted of glandular structures and contained solid epithelial complexes as well as mucoid, chondroid and myxoid foci. Specify this tumour:

+ Polymorphous adenoma
– Salivary gland carcinoma
– Ameloblastoma
– Osteoclastoma
– Cementoma
Examination of a kidney tissue sampling revealed leukocyte infiltration of interstitial tissue; miliary abscesses; dystrophic tubules filled with desquamated epithelium and leukocytes. What is the most likely diagnosis?

+Pyelonephritis
–Glomerulonephritis
–Pyelitis
–Necrotic nephrosis
–Nephrolithiasis

Such presentations as catarrhal conjunctivitis, pharyngitis, laryngotracheobronchitis, white spots on the buccal mucosa in the region of lower premolar teeth, maculopapular rash on face, body and extremities are typical for the following disease:

+Measles
–Spotted fever
–Scarlet fever
–Meningococcal infection
–Influenza

Autopsy of a 42-year-old man revealed a distinctly dilated lumen of small intestine filled with rice-water-like liquid. The intestine wall was edematous with lots of petechial haemorrhages on the mucosa. What infectious disease is the described enteritis typical for?

+Cholera
–Dysentery
–Salmonellosis
–Amebiasis
–Typhoid fever

Examination of a 30-year-old man’s mandible revealed in the region of his molar a dense tumour-like formation that significantly deformed the mandible. Here and there the formation wasn’t fully detached from the bone tissue. Microscopical examination of a tissue sampling revealed that stroma had some cords and follicles with odontogenous cylindric epithelial cells in peripheria and stellate cells resembling of the enamel organ pulp in the centre. What is the most likely diagnosis?

+Ameloblastoma
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?

+ Dysentery
– Typhoid fever
– Salmonellosis
– Nonspecific ulcerous colitis
– Yersiniosis

A removed vermiform appendix was sent for a histological analysis. The appendix was enlarged, with thickened walls and dull plethoric serous membrane covered by coagulated fibrin. After dissection some pus could be seen. Microscopical examination revealed vascular congestion, edema of all the layers and their diffuse infiltration with leukocytes. Specify the form of acute appendicitis:

+ Flegmonous
– Apostematous
– Simple
– Superficial
– Gangrenous

A 35-year-old patient with chronic periodontitis underwent excision of a cyst 3 cm in diameter found at a root of the 15th tooth. Histological examination revealed that it had thin wall formed by mature connective tissue infiltrated by lymphocytes and plasmatic cells. Its internal surface was lined with multilayer pavement epithelium with no signs of keratinization; the cavity contained serous exudate. What is the most likely diagnosis?

+ Radicular cyst
– Follicular cyst
– Primordial cyst
Liver puncture biopsy in a patient with hepatocellular insufficiency revealed vacuolar, balooning degeneration of hepatocytes, necrosis of single cells, Councilman’s bodies, infiltartion of portal and lobular stroma mainly by lymphocytes and macrophages with a small number of polymorphonuclear leukocytes. What is the most likely diagnosis?

+ Acute viral hepatitis
– Chronic persisting hepatitis
– Chronic active hepatitis
– Autoimmune hepatitis
– Alcoholic hepatitis

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

+ Local parodontitis
– Hypertrophic gingivitis
– Chronic catarrhal gingivitis
– Generalized parodontitis

A 40 year old female patient has enlarged thyroid gland. On palpation the gland is dense, its surface is slightly tuberous. Histological examination of gland sample revealed diffuse infiltration of tissue by the cells, formation of lymphoid follicles. What disease is it?

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

+ Stage of medullary swelling
– Stage of necrosis
– Stage of ulcer healing
– Stage of clean ulcers
– Stage of ulceration

During examination of a 36-year-old woman a dentist revealed a formation in form of a nodule up to 0.8 cm in diameter, of dark brown-red colour, soft, on a wide base. The formation was found on the buccal surface of gum in the region of the 2nd molar. Histological examination revealed that the formation had plenty of sinusoid vessels and a lot of roundish mononuclear and big multinuclear cells; in some parts accumulations of hemosiderin granules could be found. What is the most likely diagnosis?

+ Giant-cell epulis
– Root granuloma
– Angiomatous epulis
– Ameloblastoma
– Mandibular osteoclastoma

Autopsy of an aged man who had been suffering from acute intestinal upset for the last 2 weeks revealed the following changes in the rectum and sigmoid colon: mucous membrane surface was coated with brown-green film. The intestine wall was thickened, and its cavity was extremely constricted. Microscopical examination revealed variously deep penetrating necrosis of mucous membrane; necrotic masses contained fibrin fibers and bore signs of leukocytic infiltration. What is the most likely diagnosis?

+ Fibrinous colitis
– Catarrhal colitis
– Ulcerative colitis
– Follicular colitis
Examination of a 42-year-old patient suffering from paradontosis revealed some roundish calcified formations 2-3 mm in diameter in the coronal pulp. Name these structures:

+ Denticles
- Interglobular dentin
- Interglobular spaces
- Sclerotic dentin
- Dead dentin

A chemical industry worker complains about enamel wear. Objectively: generalized destruction of dental crowns along with replacing dentin formation. What is the most likely diagnosis?

+ Necrosis of hard tooth tissues
- Dental erosion
- Wedge-shaped defects
- Fluorosis
- Median caries

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

+ Pyelonephritis
- Glomerulonephritis
- Pyelitis
- Necrotic nephrosis
- Nephrolithiasis

Autopsy of a man, who died from acute posthaemorrhagic anaemia resulting from pulmonary haemorrhage, revealed the following: macroscopically - lung apexes were deformed, their section showed multiple whitish-grey foci 10-15 mm in diameter and multiple pathological cavities up to 15 mm in diameter with dense walls. Microscopically: the cavity walls presented proliferation of the connective tissue infiltrated by epithelioid cells, multicellular giant cells and lymphocytes. What is the most likely diagnosis?
Secondary fibrocavernous tuberculosis
– Primary tuberculosis without signs of progress
– Progressing tuberculosis complex
– Hematogenic disseminated pulmonary tuberculosis
– Hematogenic miliary pulmonary tuberculosis

Examination of a 30-year-old man’s mandible revealed in the region of his molar a dense tumour-like formation that significantly deformed the mandible. Here and there the formation wasn’t fully detached from the bone tissue. Microscopical examination of a tissue sampling revealed that stroma had some cords and follicles with odontogenous cylindric epithelial cells in peripheria and stellate cells resembling of the enamel oragan pulp in the centre. What is the most likely diagnosis?

+ Ameloblastoma
– Adenomatoid tumour
– Primary intraosteal cancer
– Adenocarcinoma
– Osteoclastoma

Roentgenological examination of a patient revealed a cyst enclosing a tooth in its cavity in the area of the premolar. Microscopical examination revealed that the cyst wall consisted of connective tissue and was lined with multilayer squamous epithelium. What is the most probable diagnosis?

+ Follicular cyst
– Radicular cyst
– Primordial cyst
– Eosinophilic granuloma
– Epulis

Examination of puncture biopsy material of liver revealed dystrophy of hepatocytes, their necrosis and sclerosis along with disturbance of beam and lobulous structure and formation of pseudolobules of regeneration nodes. What is the most probable diagnosis?

+ Liver cirrhosis
– Chronic hepatosis
– Chronic hepatitis
–Progressing massive liver necrosis
–Acute hepatitis

A patient has deformation of jaw bones. Histological examination revealed there growth of fibrocellular tumourlike ill-defined tissue with primitive osteogenesis. What disease are these presentations typical for?

+ Fibrous dysplasia
– Ameloblastoma
– Osteosarcoma
– Eosinophilic granuloma
– Parathyroid osteodystrophy

A dentist was examining oral cavity of a 9 year old child in the buccal surface of gingiva in the area of the lower canine he revealed a red, soft, node-like formation 1 cm in diameter that started immediately bleeding when touched. Microscopical examination revealed that this formation consisted of many small vessels like venules and capillaries separated by thin layers of connective tissue, with focal infiltration by lymphoid and plasmatic cells. Such changes are typical for:

+ Angiomatous epulis
– Capillary hemangioma
– Radicular granuloma
– Fibrous epulis
– Papilloma

Microscopical examination of coronary artery of a 53 year old dead man revealed luminal narrowing of the vessel because of fibrous plaque mixed with lipides. The most probable form of atherosclerosis is:

+ Liposclerosis
– Lipoidosis
– Atheromatosis
– Ulceration

A 5 y.o. girl has high temperature and sore throat. Objectively: soft palate edema, tonsils are covered with grey fi- lms that can be hardly removed and leave deep bleeding tissue injuries. What disease is the most probable?
+Pharyngeal diphtheria
–Vincent’s angina
–Lacunar angina
–Infectious mononucleosis
–Necrotic angina

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

+Composite granuloma
–Abscessing periodontitis
–Granulating periodontitis
–Simple granuloma
–Cystic granuloma

Microscopic examination during autopsy of a 70 y.o. man who had been ill with atherosclerosis for a long time and died from cardiovascular insufficiency revealed in the abdominal area of aorta some dense oval fibrous plaques with lime deposition in form of dense brittle plates. What stage of atherosclerosis morphogenesis is it?

+Atherocalcinosis
–Liposclerosis
–Atheromatosis
–Ulceration
–Lipoidosis

During morphological examination of pulp floor three zones can be clearly differentiated: the one of softened dentin, sclerotic dentin, replacing dentin. What stage of caries are these changes typical for?

+Median caries
–White spot stage
–Superficial caries
–Deep caries
–Chronic caries
Examination of a 10 y.o. child revealed on the alveolar submandibular process a fixed tumourous mass 1,5 cm in diameter closing premolar crown on the vestibular side. Mucous membrane of its surface is reddish-brown, it bleeds as a reaction to a slight mechanical intervention. Biopsy results: the mass consists of small size vessels separated by thin layers of connective tissue and infiltrated by plasmocytes, mucous membrane is here and there ulcered. What is the most probable diagnosis?

+Angiomatous form of epulis
–Gingival fibromatosis
–Giant cell form of epulis
–Hypertrophic gingivitis
–Fibrous form of epulis

Examination of a tooth revealed a large cavity in its crown. The floor of this cavity is formed by a thin layer of softened dentin that separates this cavity from the pulp. What is the most probable diagnosis?

+Deep caries
–Median caries
–Superficial caries
–Pulpitis
–Periodontitis

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

+Pulmonary emphysema
–Multiple bronchiectasis
–Cavernous tuberculosis
–Chronic bronchitis
–Fibrosing alveolitis

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

A patient who had been suffering from a renal disease for many years died from uremia. Autopsy revealed that the kidneys were abnormally small, dense, fine-grained, light grey. What are the kidneys with such changes called?
+ Arteriolosclerotic
- Contracted
- Mottled
- Sebaceous

A 9 y.o. child has been taking antibiotics on account of bronchopneumonia for a long time. There appeared pain and burning in the area of mucous membrane of his lips and tongue. Objectively: mucous membrane of lips and tongue has caseous and grey plaques that can be easily removed by a spatula leaving hyperemia foci on their spot. Microscopical examination of the plaques revealed mycelium. What is the most probable diagnosis?
+ Candidous cheilitis
- Exfoliative cheilitis
- Leukoplakia
- Contactant allergic cheilitis
- Manganotti’s cheilitis

Histologic examination revealed a big number of polymorphonuclear leukocytes in all layers of appendix; hyperemia, stases. What disease are these symptoms typical for?
+ Phlegmonous appendicitis
- Gangrenous appendicitis
- Superficial appendicitis
- Simple appendicitis
- Chronic appendicitis
Post-mortem examination of a 5 year old boy who died from acute pulmonary and cardiac insufficiency revealed the following: serohemorrhagic tracheobronchitis with some necrotic areas of mucous membrane, multiple foci of hemorrhagic pneumonia in lungs. What disease is in question?

+ Influenza
– Measles
– Scarlet fever
– Diphtheria
– Croupous pneumonia

Microscopic analysis of brain base vessels of a patient who died of ischemic stroke revealed that intima of cerebral vessels is irregular, with moderate quantity of yellow stains and yellowish-whitish patches that narrow lumen. What is the most probable diagnosis?

+ Atherosclerosis
– Primary hypertension
– Diabetes mellitus
– Rheumatism
– Nodular periarteritis

During the histologic examination of thyroid gland of a man who died of cardiac insufficiency together with hypothyroidism there was found the diffusive infiltration of gland by lymphocytes and plasmocytes, parenchyma atrophy and growth of connective tissue. Formulate a diagnosis:

+ Hashimoto’s thyroiditis
– Thyroid gland adenoma
– Purulent thyroiditis
– Thyrotoxic goiter

A man had an acute onset of disease, he complained of chill, temperature rise up to 40°C, headache, cough, dyspnea. On the fifth day of illness he died. Autopsy revealed: his lungs were enlarged, they had a look of "coal-miner’s lungs". What illness is such postmortem diagnosis typical for?

+ Influenza
– Adenovirus infection
–Croupous pneumonia
–Respiratory syncytial infection
–Multiple bronchiectasis

The microscopic analysis of bronch biopsy revealed a tumor that consisted of circumscribed accumulations of atypical cells of multylayer plane epithelium, here and there with typical "pearls". What is the most likely diagnosis?

+Epidermoid cancer with keratinization
–Epidermoid cancer without keratinization
–Solid carcinoma
–Mucous carcinoma
–Scirrhus

A 7 year old child had an acute onset of disease. Pediatrician stated that mucous membrane of fauces is hyperemic and covered with a lot of mucus. Mucous membrane of cheeks has whitish stains. Next day the child’s skin of face, neck, body was covered with coarsely-papular rash. What disease may be presumed?

+Measles
–Scarlet fever
–Diphtheria
–Meningococcemia
–Allergic dermatitis

A 10 year old child lives in the region where fluorine content in water is above the mark. A dentist examined the child and found teeth damage in form of chalky and also pigmentary stains and stripes. What is the most probable diagnosis?

+Fluorosis
–Median caries
–Wedge defects
–Tooth erosion
–Acidic necrosis of hard tooth tissues

Autopsy of a 5 year old child revealed that pia maters of brain are extremely plethoric, nebulous, have a look of yellowish-green "bonnet". Microscopic analysis:
pia mater of brain is very thickened, plethoric, impregnated with purulent exudate containing fibrin. What disease is meant?

+ Meningococcosis  
– Tuberculosis  
– Anthrax  
– Influenza  
– Measles

A 53 year old patient consulted a doctor about white patch on the mucous membrane of tongue. This patch sticks out from the mucous membrane, its surface is cracked. Microscopic analysis reveals thickening of multilayer epithelium, parakeratosis and acanthosis. What is the most probable diagnosis?

+ Leukoplakia  
– Geographic tongue  
– Epidermoid cancer  
– Papilloma  
– Median rhomboid glossitis

A 11-year-old child complains of pain during eating food, especially hot, in the lower right lateral tooth. On the masticatory surface of the 46 tooth there is a large carious cavity filled with softened light-brown dentin. The cavity is located within parapulpar dentin. In the projection of medial buccal pulp horn the carious cavity communicates with the pulp chamber. Deep probing is painful. Electric pulp test - 60 microamperes. Make the diagnosis:

+ Chronic gangrenous pulpitis  
– Chronic hypertrophic pulpitis  
– Acute diffuse pulpitis  
– Chronic fibrous pulpitis  
– Acute focal pulpitis

A patient consulted a dental surgeon about fever up to 37,60°C, soft tissue swelling, pain in the 47 tooth on the lower jaw on the left, the pain aggravates when the tooth is touched by its antagonist. Objectively: mucogingival fold of the alveolar process is hyperemic and flat on the vestibular side of the decayed 47 tooth. What is the most likely diagnosis?

+ Acute purulent odontogenic periostitis
–Acute serous periodontitis
–Exacerbation of chronic periodontitis
–Acute odontogenic osteomyelitis
–Periodontal abscess

A 14-year-old adolescent complains of bleeding and pain during eating occurring in the 36 tooth. Anamnesis states intense pain in the past. Objectively: the crown is severely damaged; carious cavity is large, penetrates into the tooth cavity, and is partially filled with overgrown pulp. The tissues demonstrate low sensitivity to touch, bleed upon touching. There are significant soft dental deposits on the 35 and 34 teeth. Make the diagnosis:

+ Chronic hypertrophic pulpitis
–Chronic gangrenous pulpitis
–Chronic papillitis
–Chronic simple pulpitis
–Chronic granulating periodontitis