

STEP-1 TESTS FOR UKRAINIAN STUDENTS (IN ENGLISH)

A patient suffering from thrombophlebitis of deep veins suddenly died. The autopsy has shown freely lying red friable masses with dim crimped surface in the trunk and bifurcation of the pulmonary artery. What pathologic process was revealed by the morbid anatomist?

- + Tromboembolism
- Thrombosis
- Tissue embolism
- Embolism with foreign body
- Fat embolism

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

- + Lipoma
- Melanoma
- Hamartoma
- Adenocarcinoma
- Lymphoma

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

squamous epithelium with hair follicles, cartilage, and dense connective tissue. What type of tumour is it?

- + Teratoma
- Squamous cell carcinoma of ovary
- Melanoma
- Sarcoma of ovary
- Metastase of cervical carcinoma

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

- + Diphtheritic
- Catarrhal
- Ulcerative
- Chronic
- Gangrenous

A patient has undergone an amputation of lower extremity. Some time later painful nodules appeared in a stump. Amputations neuromas were found out at the microscopic examination. To what pathological processes do those formations relate?

- + Regeneration
- Dystrophy
- Inflammation
- Hyperemia
- Metaplasia

A 22-year-old patient was admitted to the hospital with complaints of heavy nasal breathing. During the examination of her nasal cavity the doctors found thickened mucous membrane, a lot of mucus and nodular infiltrates without erosions in the nose. The nasal rhinoscleroma was diagnosed. The biopsy was taken. What typical morphological changes may be found?

- + Granulomas with Mikulicz's cells
- Granulomas with Virchow's cells
- Granulomas with Langhan's cells
- Granulomas with foreign body cells
- Interstitial inflammation

The pulmonalis embolism has suddenly developed in a 40 year-old patient with opened fracture of the hip. Choose the possible kind of embolism.

- + Fat
- Thrombus-embolus
- Air
- Tissue
- Foreign body

Autopsy of the 58-year-old man had revealed that mitral valve is deformed, thickened, does not totally close. Microscopically: centers of collagen fibers are eosinophilic, have positive fibrin reaction. The most probable diagnosis is:

- + Fibrinoid swelling
- Fibrinoid inflammation
- Muroid swelling
- Hyalinosis

- Amyloidosis

An intraoperational biopsy of mammal gland has revealed the signs of atypical tissue with disorder of parenchyma stroma proportion with domination of the last, gland structures of different size and shape, lined with singlelayer proliferative epithelium. What is the most probable diagnosis?

+ Fibroadenoma

- Papilloma

- Noninfiltrative cancer

- Infiltrative cancer

- Mastitis

A young man has an unpainfull formation without marked borders in the soft tissues of his thigh. On the tissue bioptate the formation lookes like flesh of fish and consists of immature fibroblastlike cells with multiple mitosis growing through the muscles. What is the most likely

diagnosis?

+ Fibrosarcoma

-Myosarcoma

- Fibroma

- Cancer

- Myoma

Autopsy of a man who died from chronic cardiacvascular collapse revealed "tiger heart". Sidwards of endocardium a yellowish-white banding can be seen; myocardium is dull, dark-yellow. What process caused this pathology?

+Fatty parenchymatous degeneration

- Carbohydrate degeneration
- Hyaline degeneration
- Fatty vascular-stromal degeneration
- Amyloidosis

A 17-year-old boy fell seriously ill, body temperature rose up to 38, 50_, there is cough, rhinitis, lacrimation, nasal discharges. What kind of inflammation is it?

- + Catarrhal inflammation
- Serous inflammation
- Fibrinous inflammation
- Suppurative inflammation
- Hemorrhagic inflammation

Autopsy of a patient who suffered from croupous pneumonia and died from pneumococcal sepsis revealed 900 ml of turbid greenish-yellow liquid in the right pleural cavity. Pleural leaves are dull, plephoric. Name the clinicopathological form of inflammation in the pleural cavity:

- + Empyema
- Fibrinous inflammation
- Phlegmon
- Chronic abscess
- Acute abscess

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

- + Chorioepithelioma
- Squamous cell nonkeratinous carcinoma
- Adenocarcinoma
- Fibromyoma
- Vesicular mole

Histological examination of a 40 y. o. man's thymus revealed decreased share of parenchymatous gland elements, increased share of adipose and loose connective tissue, its enrichment with thymus bodies. The organ's mass was unchanged. What phenomenon is it?

- +Age involution
- Accidental involution
- Hypotrophy
- Dystrophy
- Atrophy

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

- +Ulcerophlegmonous
- Phlegmonous
- Gangrenous
- Superficial
- Apostematous

A 45 y. o. patient consulted a doctor about plaque-shaped formation on his neck. Histological examination of biopsy skin material revealed tumourous cells of round and

oval form with thin ring of basophilic cytoplasm that resemble of cells of basal epidermal layer. What tumour is it?

- +Basalioma
- Epidermal cancer
- Hydradenoma
- Trichoepithelioma
- Syringoadenoma

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

- + Serous diffuse
- Interstitial proliferative
- Serous focal
- Purulent
- Granulomatous

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

- + Lepra
- Tuberculosis
- Syphilis

- Rhinoscleroma
- Glanders

6 months after labour a woman had uterine hemorrhage. Gynaecological examination of uterine cavity revealed a dark-red tissue with multiple cavities resembling of a "sponge". Microscopic examination of a tumour revealed in blood lacunas atypic light epithelial Langhans cells and giant cells of syncytiotrophoblast. What tumour is it?

- +Chorioepithelioma
- Squamous cell nonkeratinous carcinoma
- Adenocarcinoma
- Fibromyoma
- Cystic mole

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

- +Lipoma
- Fibroma
- Angioma
- Liposarcoma
- Fibrosarcoma

A 45 year old man consulted a doctor about a plaque-like formation on his neck. Histological examination of a skin biopate revealed clusters of round and oval tumour cells with a narrow border of basophilic cytoplasm resembling of cells of basal epidermal layer. What tumour is it?

- + Basal cell carcinoma
- Epidermal cancer
- Hydroadenoma
- Trichoepithelioma
- Syringoadenoma

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

- +Fat embolism
- Gaseous embolism
- Microbal embolism
- Thromboembolism
- Air embolism

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

- + Neurinoma
- Malignant neurinoma
- Ganglioneurinoma
- Neuroblastoma
- Ganglioneuroblastoma

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

- + Stromal-vascular carbohydrate
- Stromal-vascular adipose
- Stromal-vascular proteinaceous
- Parenchymatous proteinaceous
- Parenchymatous adipos

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

- +Fibroma
- Myoma
- Histiocytoma
- Dermatofibroma
- Desmoid

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

underlies the described alterations?

- + Reagin reaction

- Inflammatory
- Autoimmune
- Immune complex
- Immune cytolysis

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

- +General chronic venous congestion
- Arterial hyperaemia
- General acute venous congestion
- Acute anaemia
- Chronic anaemia

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

- +Mammary gland
- Submandibular salivary gland
- Lung
- Stomach
- Thyroid gland

Examination of the anterior abdominal wall of a pregnant woman revealed a tumour-like formation that arose on the spot of a tumour that was removed two years ago. The neoplasm was welldefined, dense, 2 cm large. Histological examination revealed that

the tumour was composed of differentiated connective tissue with prevailing collagen fibres. What tumour might be suspected?

- +Desmoid
- Lipoma
- Fibrosarcoma
- Hibernoma
- Leiomyoma

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

- +Metaplasia
- Hypoplasia
- Hyperplasia
- Necrosis
- Sclerosis

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

- +Rhinoscleroma
- Glanders
- Tuberculosis
- Leprosy

- Syphilis

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

+Inflammation

- Dystrophy

- Necrosis

- Metaplasia

- Organization

A patient ill with thrombophlebitis of his lower limbs had chest pain, blood spitting, progressing respiratory insufficiency that led to his death. Autopsy diagnosed multiple lung infarctions. What is the most probable cause of their development?

+Thromboembolism of pulmonary artery branches

- Thrombosis of pulmonary artery branches

- Thrombosis of bronchial arteries

- Thromboembolism of bronchial arteries

- Thrombosis of pulmonary veins

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

+ Hard fibroma

- Fibromyoma

- Soft fibroma
- Desmoma
- Fibrosarcoma

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

- +Syphilis
- Tuberculosis
- Scleroma
- Sarcoma
- Lepros

Autopsy of a 75-year-old man with a long history of atherosclerosis revealed a grey irregular-shaped focus of loose consistency in the right parietotemporal region of brain. What is the most likely cause of this process?

- +Thrombosis of the right medial cerebral artery
- Thrombosis of the right anterior cerebral artery
- Thrombosis of the right posterior cerebral artery
- Thrombosis of basilar artery
- Thrombosis of tomentum cerebri

A 46-year-old man had a bulging dark macula on skin that caused no discomfort. With time it began to increase in size and became painful. It turned dark brown and there was a nodule on palpation. Histological examination of tissues revealed spindle and

polymorphous cells with multiple mitoses. Their cytoplasm contained brown pigment. What tumour is it?

- +Melanoma
- Basalioma
- Hemangioma
- Nevus

Medical examination of a 20-yearold woman revealed a dense encapsulated node 1 cm in diameter that was palpated in the mammary gland. The postoperative biopsy revealed connective tissue overgrowth around the mammary ducts and glandular components of different diameter that didn't make lobules and bore no signs of cellular abnormality. What diagnosis will be made?

- +Fibroadenoma
- Fibroma
- Metastatic cancer
- Adenoma
- Fibrocarcinoma

A 49-year-old patient with croupous pneumonia died from pneumococcal septicemia. Autopsy revealed up to 700 ml of turbid greenish-yellow foul-smelling liquid in the left pleural cavity. The pleural leaflets were dull and plethoric. What form of pleural inflammation is it?

- +Empyema
- Chronic abscess
- Acute abscess
- Phlegmon
- Fibrinous inflammation

Chronic inflammation and transformation of the one-layer ciliated epithelium into multiple-layers flat epithelium was revealed in the thickened mucous membrane of the bronchus biopate of the patient with smoke abuse. Which of

the processes is the most likely?

- +Metaplasia
- Hyperplasia of the epithelium
- Squamous cancer
- Leucoplacia
- Epithelium hypertrophy

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 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

Microscopy of the coronary artery of a dead 53-year-old patient revealed luminal occlusion due to a fibrous plaque with some lipids. The most likely form of atherosclerosis in this case is:

- +Liposclerosis
- Lipidosis
- Prelipid stage
- Atheromatosis
- Ulceration

A 60-year-old patient with a long history of atherosclerosis and a previous myocardial infarction developed an attack of retrosternal pain. 3 days later the patient was hospitalized and then died of progressive cardiovascular insufficiency. At autopsy a white fibrous depressed area about 3 cm in diameter with clear boundaries was found in the posterior wall of the left ventricle and interventricular septum. The dissector evaluated these changes as:

- +Focal cardiosclerosis
- Myocardial ischemia
- Myocardial infarction
- Myocarditis
- Myocardial degeneration

At autopsy the occipital lobe of brain was found to have a cavity 2, 5x1, 5 cm large filled with a transparent liquid. The cavity had smooth brownish walls. What process had developed in the brain?

- +Cyst on the site of a hemorrhage
- Softening of the cerebrocortical grey matter

- Brain abscess
- Paracephalia
- A cyst on the site of the softening of the cerebrocortical grey matter

Study of the biopsy material revealed a granuloma consisting of lymphocytes, plasma cells, macrophages with foamy cytoplasm (Mikulicz cells), many hyaline globules. What disease can you think of?

- +Rhinoscleroma
- Leprosy
- Syphilis
- Tuberculosis
- Actinomycosis

Autopsy of a 78-year-old patient revealed that retroperitoneal tissue was soaked with blood, the abdominal aorta had a sacciform protrusion including a defect with irregular edges. The wall of the aorta was here and there of stone-like

density. This is the complication of the following disease:

- +Atherosclerosis
- Essential hypertension
- Systemic vasculitis
- Visceral syphilis
- Marfan syndrome

Examination of the removed stomach revealed a deep roundish defect with regular edges at the lesser curvature of the antrum. The defect reached the muscular tunic and was 1, 5 cm in diameter. Within the defect floor there was a translucent dense area resembling of a hyaline cartilage. What process had developed in the floor of the stomach defect?

- +Local hyalinosis
- Amyloidosis
- Muroid swelling
- Fibrinoid alterations
- General hyalinosis

A patient underwent biopsy of the soft palate arches for a suspected tumor (macroscopy revealed an ulcer with a dense floor). Study of the biopsy material revealed mucosal necrosis with infiltration of lymphocytes, epithelioid cells, plasma cells, single neutrophils in the submucosa. There were also apparent signs of endovasculitis and perivasculitis.

The described changes are typical for:

- +Primary syphilis
- Aphthous stomatitis
- Ulcerative stomatitis
- Necrotizing ulcerative Vincent stomatitis
- Pharyngeal diphtheria

A patient died from progressive heart failure. Autopsy revealed that the heart was enlarged in diameter, flabby. The muscle section exhibited irregular blood supply. Histological study of myocardium revealed hyperemia, the stroma was found to have lymphohistiocytic infiltrates with degeneration of cardiomyocytes. The revealed morphological changes are indicative of:

- +Non-purulent interstitial myocarditis
- Venous plethora
- Cardiomyoliposis
- Cardiosclerosis

- Myocardial infarction

Histological examination of the removed skin neoplasm revealed clusters and cords of atypical cells of stratified squamous epithelium, growing into the underlying tissue. What diagnosis can be assumed?

- +Non-keratinizing squamous cell carcinoma
- Keratinizing squamous cell carcinoma
- Carcinoma in situ
- Papilloma
- Adenoma

Autopsy of a 62-year-old woman revealed a dense well-circumscribed node of 6 cm in diameter in the cranial cavity. The node was attached to the dura mater and histologically consisted of clusters and micro-concentric structures of endothelial cells, psammoma bodies. What kind of tumor was found at autopsy?

- +Meningioma
- Glioblastoma
- Medulloblastoma
- Melanoma
- Cancer metastasis

At the post-mortem examination the stomach of a patient with renal failure was found to have a yellow-brown coating on the thickened mucosa. The coating was firmly adhering to its surface and had significant thickness. Microscopy revealed congestion and necrosis of mucosal and submucosal layers, fibrin presence. What is the most likely diagnosis?

- +Fibrinous gastritis
- Croupous gastritis

- Gastric abscess
- Esogastritis
- Corrosive gastritis

A 65-year-old male suddenly lost the vision in one eye due to the retinal detachment. The patient underwent enucleation. Histological examination of the removed eye retina and choroid revealed clusters of atypical cells with marked polymorphism of cells and nuclei, with a moderate number of mitoses including the pathological ones. The cell cytoplasm and intercellular medium contained brown pigment giving a positive DOPA reaction. Perls' reaction was negative. What is the most likely diagnosis?

- +Melanoma
- Pigmented mole
- Hemorrhage
- Cysticercosis
- Wilson's disease

As a result of a mechanical injury an over 10 cm long portion of a peripheral nerve was damaged. This led to the impairment of the upper limb activity. The patient was offered nerve transplantation. What glial cells will participate in regeneration and provide the trophism of the injured limb?

- +Schwann cells
- Fibrous cells
- Protoplasmic cells
- Microglia
- Ependymal cells

A 35-year-old female patient underwent biopsy of the breast nodules. Histological examination revealed enhanced proliferation of the small duct epithelial cells and acini,

accompanied by the formation of glandular structures of various shapes and sizes, which were located in the fibrous stroma. What is the most likely diagnosis?

- +Fibroadenoma
- Adenocarcinoma
- Cystic breast
- Invasive ductal carcinoma
- Mastitis

Histological examination of the biopsy material obtained from the lower third of the esophagus of a 57-year-old male with the symptoms of continuous reflux revealed the change of the stratified squamous epithelium to the singlelayer columnar glandular epithelium with signs of mucus production. Specify the pathological process in the mucous membrane:

- +Metaplasia
- Hyperplasia
- Hypertrophy
- Organization
- Regeneration

A 22-year-old female student consulted a physician about fever up to 38oC, weakness, sore throat. Objectively: there is white coating of the tongue. What histological structures of the tongue are involved in the formation of this coating?

- + Epithelium of the filiform papillae
- Epithelium of the foliate papillae
- Epithelium of the fungiform papillae
- Epithelium of the circumvallate papillae
- Connective-tissue base of all the lingual papillae

Autopsy of a 50-year-old male who had tuberculosis revealed a dense gray-white nidus in form of a nodule 2 cm in diameter in the subpleural portion of the upper right lobe. The pleura in this region was thickened, in the pleural cavity there was a small amount of serous hemorrhagic fluid. Histological study of the region revealed some glandular structures with signs of cellular atypia and abnormal mitoses, which were found within the fibrous connective tissue. What other pathology had developed in the lungs?

- +Adenocarcinoma
- Squamous cell carcinoma
- Adenoma
- Fibrosarcoma
- Fibroma

Histological examination of biopsy samples taken from the thickened edges of a gastric ulcer revealed small clusters of small, markedly atypical hyperchromatic epithelial cells that were localized in the overdeveloped stroma. Specify the tumor:

- +Scirrhus undifferentiated carcinoma
- Medullary carcinoma
- Adenocarcinoma
- Undifferentiated sarcoma
- Adenoma

A 54-year-old female was brought to the casualty department after a car accident. A traumatologist diagnosed her with multiple fractures of the lower extremities. What kind of embolism is most likely to develop in this case?

- +Fat
- Tissue
- Thromboembolism

- Gaseous
- Air

A patient underwent surgical removal of a cavitory liver lesion 2 cm in diameter. It was revealed that the cavity wall was formed by dense fibrous connective tissue; the cavity contained muddy, thick, yellowishgreenish fluid with an unpleasant odor. Microscopically, the fluid consisted mainly of polymorphonuclear leukocytes. What pathological process are these morphological changes typical for?

- +Chronic abscess
- Acute abscess
- Phlegmon
- Empyema

A 7-year-old child has acute onset of disease: temperature rise up to 38°C, rhinitis, cough, lacrimation, and large-spot rash on the skin. Pharyngeal mucosa is edematous, hyperemic, with whitish spots in the buccal area. What kind of inflammation causes the changes in the buccal mucosa?

- +Catarrhal inflammation
- Suppurative inflammation
- Fibrinous inflammation
- Hemorrhagic inflammation
- Serous 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 yellow-greenish films, the peritoneal cavity contained 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

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

- + Medulloblastoma
- Meningioma
- Glioblastoma
- Astrocytoma
- Oligodendroglioma

During intravenous saline transfusion a patient's condition deteriorated drastically, and the patient died from asphyxiation. Autopsy revealed acute venous congestion of internal organs with sharp right heart dilatation. When the right ventricle was punctured underwater, the bubbles escaped. What pathological process occurred in the patient?

- + Air embolism
- Gaseous embolism
- Adipose embolism
- Tissue embolism
- Thromboembolism

A 54-year-old woman was brought to a casualty department after a car accident. A traumatologist diagnosed her with multiple fractures of the lower extremities. What kind of embolism is most likely to develop in this case?

- +Adipose
- Tissue
- Thromboembolism
- Gaseous
- Air

A 25-year-old patient complains of increasing pain in his leg muscles occurring during walking and forcing him to make frequent stops. Objectively: skin of legs is pale, no hair-covering, toenails are with trophic changes, no pulsation of pedal arteries. The most probable cause of these changes is:

- +Ischemia
- Venous hyperemia
- Arterial hyperemia
- Embolism

A 53-year-old man suffering from diabetes mellitus has developed a painful conical induration, bluish-red with yellow center, on the skin of his neck. Such changes are characteristic of:

- +Furuncle
- Abscess
- Carbuncle
- Phlegmon
- Empyema

During pathomorphological kidney investigation of a patient, who for a long time had been suffering from osteomyelitis and died from progressing renal failure, the following was revealed: deposits of homogeneous eosinophilic masses in glomerular mesangium, arterial and arteriolar walls, and stroma, which became red when stained with Congo red. What pathological process is this?

- +Amyloidosis
- Mucoïd swelling
- Calcinosis
- Carbohydrate degeneration
- Hyalinosis

A patient with femoral neck fracture, who for a long time had to remain in bed in a forced (supine) position, has developed dark-brown lesions along the backbone; soft tissues are swollen, in the areas of maceration there is a foul-smelling liquid. Name the clinicopathologic type of necrosis:

- +Bedsore
- Infarction
- Sequestrum
- Coagulation necrosis
- Dry gangrene

A patient has hoarseness of voice. During laryngoscopy a gray-white larynx tumor with papillary surface has been detected. Microscopic investigation has shown the following: growth of connective tissue covered with multilayer, strongly keratinized pavement epithelium, no cellular atypia. What is the most likely diagnosis?

- +Papilloma
- Fibroma
- Polyp

- Angioma
- Angiofibroma

A man is 28 years old. Histological investigation of the cervical lymph node revealed a change of its pattern due to proliferation of epithelioid, lymphoid cells and macrophages with horseshoe-shaped nuclei. In the center of some cell clusters there were non-structured light-pink areas with fragments of nuclei. What disease are these changes typical of?

- +Tuberculosis
- Hodgkin's disease
- Actinomycosis
- Tumor metastasis
- Syphilis

A patient, having suffered a thermal burn, developed painful boils filled with turbid liquid in the skin. What morphological type of inflammation has developed in the patient?

- +Serous
- Proliferative
- Croupous
- Granulomatous
- Diphtheritic

During autopsy of a man, who died of acute transmural cardiac infarction, the following has been detected on the pericardium surface: fibrous whitish-brown deposit connecting parietal and visceral pericardial layers. What kind of inflammation occurred in the pericardium?

- +Croupous

- Diphtheritic
- Serous
- Suppurative
- Granulomatous

A patient died of cancerous cachexia with primary localization of cancer in the stomach. Autopsy revealed acutely enlarged liver with uneven surface and numerous protruding nodes; the nodes had clear margins in the section, rounded shape, gray-pink color, varying density, sometimes contained necrotic foci. Histologically: there are atypical cells in the nodes. What pathologic process occurred in the liver?

- +Cancer metastases
- Abscesses
- Regenerative nodes
- Infarction
- Hepatic cancer

A man has suffered multiple bone fractures of his lower extremities during a traffic accident. During transportation to a hospital his condition was further aggravated: blood pressure decreased, there were signs of pulmonary artery embolism. What kind of embolism is the most likely in the given case?

- +Fat embolism
- Air embolism
- Gas embolism
- Tissue embolism
- Thromboembolism

Autopsy of a 28-year-old patient, who had been suffering from rheumatism and died of heart failure, revealed pancarditis. Histological investigation of myocardium of the left ventricle posterior wall and interventricular septum detected perivascular cellular focal infiltrates composed of macrophages and creating palisade structures surrounding areas of fibrinoid necrosis. Determine the type of myocarditis:

- +Granulomatous
- Diffuse interstitial productive
- Diffuse interstitial exudative
- Focal interstitial exudative

Histological investigation of the uterine scrape of the 45-year-old woman with disturbed ovarian menstrual cycle revealed increased number of endometrial glands, some of which are serrated, while others are dilated and cyst-like. Make the diagnosis:

- +Endometrial cystic glandular hyperplasia
- Placental polyp
- Atypical endometrial hyperplasia
- Glandular endometrial polyp
- Endometrial adenocarcinoma

A patient with chronic heart failure presents with increased blood viscosity. Capillaroscopy detected damage to the vessel walls of the microcirculation system. What disorder is possible in the given case?

- + Blood "sludge" phenomenon
- Thrombosis
- Embolism
- Arterial hyperemia
- Venous hyperemia

A 63-year-old man suffers from esophageal carcinoma, presents with metastases into the mediastinal lymph nodes and cancerous cachexia. What pathogenetic stage of neoplastic process is observed in the patient?

- + Progression
- Promotion
- Transformation
- Initiation

A 67-year-old patient with clinical diagnosis of chronic bronchitis, pneumosclerosis, and cardiopulmonary decompensation has the biopsy material taken from the suspicious area in his right bronchus mucosa. Cellular and tissue atypism along with pearly bodies can be histologically detected. What pathologic process is characterized by the described histological changes?

- + Squamous cell carcinoma of bronchus with keratinization
- Polypoid chronic bronchitis
- Bronchiectasis
- Acute bronchitis
- Squamous cell metaplasia of bronchial Mucosa

Histological specimen demonstrates a parenchymal organ with cortical and medullary substances. The cortical substance is composed of bands of epithelial cells with capillary blood vessels between them. The bands form three zones. The medullary substance consists of ñromaffin cells and venous sinusoids. What organ can be characterized by these morphological features?

- + Adrenal gland
- Kidney
- Lymph node

- Thymus
- Thyroid gland

During autopsy of a man, who had been suffering from mitral stenosis, the lungs are revealed to be dense and brown-colored. What pathologic process had occurred in the lungs?

- + Hemosiderosis
- Hemochromatosis
- Jaundice
- Hemomelanosis
- Lipofuscinosis

A 37-year-old man, who was working in a caisson, after being lifted to the surface suddenly developed signs of acute cerebral circulation disturbance and loss of consciousness. Several days later he died. On autopsy in the left cerebral hemisphere there was detected a gray soft irregular focus 5-6, 5 cm in size. What process had occurred in the brain?

- + Ischemic stroke
- Hemorrhagic infarction
- Abscess
- Cyst
- Tumor

Autopsy of a patient, who died of bilateral bronchopneumonia, shows in the left lung lower lobe a cavity 5 cm in diameter, filled with liquid yellowish-white substance. What complication of the patient's pneumonia had developed?

- + Abscess

- Gangrene
- Granuloma
- Sequestrum
- Tuberculoma

A patient with obliterating atherosclerosis has undergone sympathectomy of the femoral artery in the area of femoral triangle. What type of arterial hyperemia was developed in the patient due to this surgery?

- +Neuroparalytic
- Reactive
- Metabolic
- Neurotonic
- Functional

On bronchoscopy there is a polypoid growth 1, 0 cm in diameter with ulcer in its center in the upper lobe of the right lung. Histological investigation revealed a tumor composed of lymphocyte-like cells with hyperchromic nuclei, the cells form layers and bands. What is the most likely tumor type?

- +Undifferentiated small cell carcinoma
- Undifferentiated large cell carcinoma
- Squamous cell carcinoma
- Adenocarcinoma
- Glandular squamous cell carcinoma