A histological examination of the cervical lymph node revealed complete blood and swelling of the cortical layer, a large number of plasma cells, a decrease in the number of lymphocytes, and a significant macrophage reaction were found in the brain substance. Name the nature of changes in the lymph node?

- Acute lymphadenitis
- Lymphogranulomatosis
- Lymphoma

• Antigenic stimulation of lymphoid tissue

• A 58-year-old patient was admitted to the thoracic department with hemoptysis: during bronchoscopy, narrowing of the right trunk bronchus due to the growth of grayish-white tissue was revealed. During the biopsy, a tumor was found, consisting of small oval and round cells with hyperchromic nuclei and insignificant cytoplasm, the cells give the impression of "bare nuclei". Tumor cells grow in layers, strands. The histological structure of the tumor indicates that the patient has?

- Transitional cell cancer
- Squamous cell non-keratinous cancer
- Basal cell cancer
- Squamous cell keratinous cancer

• Undifferentiated cancer

A lesion with the following characteristics was found on the surface of the skin of the left corner of the scapula of the patient: 5-7 mm in diameter, spherical in shape, solid consistency, which has a wide base and a papillary surface. Histologically: cells of flat epithelium. which grow unevenly, the number of layers is increased, the excess number of blood vessels. Specify the pathological process?

- Adenoma
- Hydroadenoma
- "Cancer in place"
- Adenocarcinoma

• Papilloma

 After surgery to remove a cancerous tumor of the breast and regional lymph nodes, the patient developed swelling of the hand, which was associated with lymphatic insufficiency.
 What is the type of lymphatic insufficiency according to the mechanism of occurrence?

- Akinetic
- Resorption
- Spastic
- Dynamic

• Mechanical

 A brain tumor was diagnosed in a patient with rapidly increasing intracerebral hypertension. During the operation, a tumor of the parietaltemporal lobe, soft consistency, variegated on the section, was removed. Histologically, the tumor is composed of polymorphic hyperchromic cells with the formation of pseudorosettes and a large number of vessels, areas of necrosis and hemorrhages. Make a diagnosis?

- Arachnoidendothelioma
- Astrocytoma
- Meningioma
- Oligodendroglioma

• Glioblastoma

• The patient was diagnosed with a tumor of the head of the pancreas, a violation of venous outflow from some organs of the abdominal cavity. Which venous vessel was compressed by the tumor?

- Renal vein
- Renal vein
- Renal vein
- Right gastric vein

• Portal vein of the liver

 At the autopsy of the body of a woman suffering from chronic dysentery, in the course of a histological examination of the internal organs in the stroma and parenchyma of the myocardium, kidneys, in the mucous membrane of the stomach and in the connective tissue of the lungs, amorphous deposits of purple color were found, giving a positive reaction according to Koss. What complication developed in the patient?

- Metabolic calcification
- Amyloidosis
- Dystrophic calcification
- Hyalinosis

• Metastatic calcification

• The autopsy of a 52-year-old woman who died due to lung failure revealed the following changes in the lungs: both lobes of the left lung were enlarged, dense, and airless. On the cross-section, large yellowish foci with a dull, slightly crumbling surface are identified in different sections, and there are grayish-colored membranous deposits on the pleura. During the histological examination, it is observed: the lumens of the alveoli are filled with serous-fibrinous and fibrinous exudate with the presence of structureless areas in the exudate and lung tissue. Fragments of cores are identified among the structureless areas. What disease is characterized by such changes in the lungs?

- Lung lymphogranulomatosis
- Pneumonia-like lung cancer
- Caseous pneumonia
- Infiltrative-pneumonic tuberculosis

• Croupous pneumonia

During the autopsy of the corpse of a 48-year-old man, it was found that the bone marrow of flat bones, diaphyses and epiphyses of tubular bones is juicy, gray-red or gray-yellow purulent (pyoid bone marrow). The spleen weighs 7 kg. On crosssection, it is dark red in color, with ischemic heart attacks. All lymph nodes are enlarged, soft, grayred in color. Fatty dystrophy and leukemic infiltrates in the liver. What is the most likely diagnosis?

- Acute lymphoid leukemia
- Acute myeloid leukemia
- Lymphogranulomatosis
- Myeloma disease

• Chronic myeloid leukemia

• An autopsy of a 63-year-old woman suffering from rheumatism and combined mitral valve disease revealed that the leaflets of the mitral valve were sharply thickened, fused together, and had a stony density. A crunch is detected during cutting. What pathological process caused the stony density of the heart valve?

- Metabolic calcification
- Amyloidosis
- Fibrinoid
- Metastatic calcification

• Dystrophic calcification

• After the third course of radiation therapy, the patient developed bilateral abscess pneumonia, which led to his death. During the microscopic examination of the spleen and lymph nodes, a sharp decrease in the size of the lymphatic follicles with depletion of predominantly Bdependent lymphocyte zones was revealed. Which of the following immunopathological processes is the most likely?

- Organ non-specific autoimmune disease
- Primary immunodeficiency syndrome
- Autoimmune disease of the intermediate type
- Organ-specific autoimmune disease

• Secondary immunodeficiency syndrome

• A woman was diagnosed with a mammary gland tumor during a preventive examination.

The results of the biopsy confirmed the presence of a malignant tumor. What is the main mechanism of infiltrative growth of a malignant tumor?

- Increasing the activity of keylons in the cell
- The ability of tumor cells to amoeboid movement
- Increase in enzymatic activity of lysosomes
- Increased adhesiveness of tumor cells

Violation of contact braking

• An enlarged lymph node of metastatic origin was found in a man during a preventive examination on the medial wall of the left axilla. Specify the most likely location of the primary tumor?

- Thyroid gland
- Stomach
- Lung
- Submandibular salivary gland

• Mammary gland

• Macroscopically, a mobile tumor was found in the thickness of the skin. Microscopically, randomly arranged bundles of collagen fibers with a small number of spindle-shaped cells are observed. What tumor was detected?

- Melanoma
- Glomus angioma
- Lipoma
- Leiomyoma

• Fibroma

• The patient was diagnosed with cervical cancer. In which regional lymph nodes is it possible to spread metastases?

- Peripheral and lumbar
- Peripheral and lumbar
- _
- Upper and lower mesentery

• Inguinal and iliac

 The woman developed kidney failure over the course of a year, which led to her death. During the autopsy of the deceased's body, large variegated kidneys with small red drops in the yellow-gray cortical layer were found. During histological examination, "crescents" from proliferating nephrothelium are observed in the glomeruli. For which disease are these research results typical?

- Kidney cancer
- Amyloidosis
- Purulent jade
- Hemorrhage in the kidneys

• Rapidly progressive glomerulonephritis

• A 52-year-old woman with a diagnosis of breast cancer underwent radiation therapy. The size of the tumor has decreased. What mechanism of cell damage is most likely responsible for the effectiveness of radiation therapy?

- Hyperthermia
- Vascular thrombosis
- Mutagenesis
- Lysis by NK cells

• Formation of free radicals

A man has an abdominal tumor compressing the inferior vena cava. Which cava-caval anastomosis on the front wall of the abdomen will ensure the outflow of venous blood?

- Between the umbilical and upper epigastric veins
- Between the superior and inferior rectal veins
- Between the vertebral and umbilical veins
- Between odd and semi-odd veins

• Between the upper and lower epigastric veins

During the autopsy of the body of a 48-year-old man, it was found that the bone marrow of flat bones, diaphyses and epiphyses of tubular bones is juicy, gray-red or gray-yellow purulent (pyoid bone marrow). The spleen weighs 7 kg, is dark red in cross-section, with ischemic heart attacks. All lymph nodes are enlarged, soft, gray-red in color. Fatty dystrophy and leukemic infiltrates in liver hepatocytes. What is the most likely diagnosis?

- Acute myeloid leukemia
- Acute myeloid leukemia
- Lymphogranulomatosis
- Acute lymphoid leukemia

• Chronic myeloid leukemia

• A 75-year-old patient was operated on for prostate cancer. He died suddenly on the 4th day after surgery. During the autopsy of the man's body, in the lumen of the main trunk and the bifurcation of the pulmonary artery, dark red brittle masses with a dull surface were found and easily removed. The same masses were in the cavity of the right ventricle of the heart. What circulatory disorder caused the patient's sudden death?

- Tissue embolism
- Paradoxical embolism
- Thrombosis of the pulmonary artery
- Myocardial infarction

• Thromboembolism of the pulmonary artery

 A woman was found to have a lump in her mammary gland. In which direction during the operation should the surgeon make an incision to reduce injury to the lobule?

- _
- Transversely
- Vertically
- Vertically

Radially

An autopsy of a 3-year-old child revealed a tumor in the cerebellum that did not have clear borders with the surrounding tissue, histologically composed of atypical small cells with hyperchromic nuclei. Is this most likely?

- Glioblastoma
- Medullosarcoma
- Sarcoma metastasis
- Cancer metastasis

Medulloblastoma

A 27-year-old patient underwent sectoral resection of breast tissue. A macroscopic examination revealed a clearly limited nodule of white color with a diameter of 4 cm and a dense consistency. In urgent histological examination, the tumor consists of a large amount of fibrous stroma with its growth around small tubules, the epithelium of the tubules lies on the basement membrane and preserves polarity. Make a diagnosis?

- Pericanalicular fibroadenoma
- Adenocarcinoma
- Cancer
- Sarcoma

• Pericanalicular fibroadenoma

During the autopsy of the body of a 29-year-old man who had been suffering from duodenal ulcer for a long time, signs of peritonitis, multiple steatonecrosis of extraperitoneal fatty tissue and pancreas were found. During the autopsy of the body of a 29-year-old man who had been suffering from duodenal ulcer for a long time, signs of peritonitis, multiple steatonecrosis of extraperitoneal fatty tissue and pancreas were found.

- Malignancy
- Stenosis
- Duodenitis
- Bleeding

Penetration

During the operation, the patient was diagnosed with a stomach tumor in the primary focus of malignancy (within the mucous membrane). Metastases in the lymph nodes and distant metastases are absent. What stage of tumor pathogenesis is observed in the patient?

- Immune suppression of the tumor
- Initiation
- _
- Transformation

• Promotion