

Questions for the oral survey for the midterm control in the 2nd section on pathological anatomy, clinical pathological anatomy for 3rd year students of the international faculty

1. The essence of adaptation (adaptation) and compensation. Biological and medical significance. Phases of formation (emergency), consolidation (compensation) and exhaustion (decompensation), their morpho functional characteristics. Types of compensatory-adaptive processes: definitions, general characteristic.
2. Hypertrophy and hyperplasia: definitions. Types of hypertrophy: working (compensatory), vicarious, neurohumoral, hypertrophic growths. Myocardial hypertrophy: causes, diseases in which myocardial hypertrophy develops in various parts of the heart, the mechanism of development, morphological characteristics of the myocardium in various stages of hypertrophy, outcomes. Significance for the patient.
3. Hypertrophy and hyperplasia: definitions. Nodular prostatic hyperplasia and glandular endometrial hyperplasia: causes, mechanisms of development, morphological characteristics, outcomes. Significance for the patient.
4. Atrophy: definition. Types of atrophy. Causes and mechanisms of development, morphological characteristics. Significance for the patient.
5. Tissue rearrangement and metaplasia: definitions. Causes, morphological characteristics, significance for the patient. Organization and Encapsulation: Definitions. Mechanisms of development, morphological characteristic.
6. Regeneration: definition, types, outcomes, cellular and intracellular forms of regeneration (D.S. Sarkisov). General and local conditions that determine the nature of the regenerative process. Age characteristic.
7. Granulation tissue: morphological characteristics. Wound healing. Regeneration of individual tissues. Pathological aspects of regeneration.
8. The Doctrine of Inflammation. Determination of inflammation (according to I.V. Davydovsky). The concept and biological essence of inflammation. Principles of classification of inflammation. Terminology.
9. Exudative inflammation: definition. Causes, mechanisms of development, types, morphology, outcomes and clinical significance of serous and fibrinous inflammations.
10. Exudative inflammation: definition. Causes, mechanisms of development, types, morphology, outcomes and clinical significance of purulent and putrefactive inflammation.
11. Exudative inflammation: definition. Causes, mechanisms of development, types, morphology, outcomes and clinical significance of catarrhagic and hemorrhagic inflammation.
12. Productive inflammation: definition. Causes, developmental mechanisms, morphology, outcomes, and clinical significance of interstitial inflammation. Granulomatous inflammation: definition, causes, mechanisms of development, classifications, outcomes.
13. Granulomatous inflammation: definition, causes, mechanisms of development, classifications, outcomes. Specific granulomas: etiology, mechanisms of development, morphological characteristics, features of the course, outcomes.
14. Morphology of the immune response. Humoral and cellular immune response. Changes in thymus and lymphoid tissue. Accidental involution (transformation) of the thymus. Pathological conditions of the immune system.
15. Morphology of hypersensitivity reactions. The concept of autoimmunization and autoimmune diseases. Immunodeficiency syndromes: classification, clinical and morphological characteristics, causes of death.
16. Tumor: definition of the concept. The essence and features of the tumor process. Modern theories of tumor growth. Structure of the tumor, properties of the tumor cell.
17. Tumor atypism: definition, types. Morphological atypism of tumors, its types. The concept of tumor progression. Principles of tumor classification.

18. Morphological signs of benign and malignant tumors. The concept of tumor recurrence. Tumor metastasis, its types, patterns. Precancerous conditions, their essence, morphology. The effect of a tumor on the body.
19. Benign and malignant tumors from multilayered squamous and transitional epithelium, their varieties, definitions. Benign and malignant tumors from the glandular epithelium, their varieties, definitions.
20. Benign and malignant tumors of mesenchymal origin: definitions. Sarcoma. Histogenetic classification.
21. Esophageal carcinoma. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
22. Stomach carcinoma. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
23. Colon cancer. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
24. Lung cancer. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
25. Breast cancer. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
26. Cervical carcinoma. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
27. Carcinoma of the uterine body. Epidemiology, background diseases and precancerous conditions, histogenetic and clinical-anatomical classification of tumors (staging system TNM), morphological characteristics, features of metastasis, complications, causes of death.
28. Tumors of the nervous system, meninges: classification, definitions, histogenesis, morphological characteristics, complications, prognosis.
29. Tumors of melanin-forming tissue. Nevi: definition, species, morphological characteristics, prognosis. Malignant melanoma: definition, melanogenic factors, clinical manifestations, localization, morphological characteristics, growth features, prognosis.
30. Childhood tumors. Differences between pediatric tumors and tumors in adults. Principles of classification of pediatric tumors. Characteristics of the 3 main types of childhood tumors.
31. Anemia: definition, classification, etiology, pathogenesis, clinical and morphological characteristics, causes of death. Significance for the patient.
32. Tumors of hematopoietic and lymphoid tissue. Leukemias: definition of the concept, etiology and pathogenesis, classification of leukemias. Acute and chronic leukemias, morphological characteristics. Features of childhood leukemia. Complications and causes of death in leukemias.
33. Tumors of hematopoietic and lymphoid tissue. Lymphomas: definition, etiology and pathogenesis, classification of lymphomas. Hodgkin's lymphoma (lymphogranulomatosis): histopathological types, clinical stages, clinical and morphological characteristics, prognosis, causes of death. Non-Hodgkin's lymphomas: morphological characteristics, localization, typing and classification, features in children, prognosis, causes of death.

34. Radiation sickness: definition, sources and mechanisms of biological action of ionizing radiation. Acute and chronic radiation sickness: pathogenesis, classification, stages, morphology, complications and causes of death.