North Ossetian State Medical Academy

Department of Pathological Anatomy and Forensic Medicine

Examination Questions

For Students of Third Year Education

1. Distrophies. Classification. Characteristic and pathomorphology of different types of dystrophies. Morphogenesis mechanisms.

2. Protein dystrophy. Parenchymal and stromal-vascular protein dystrophy. Reasons and mechanisms of occurrence, morphological characteristic.

3. Hydropic dystrophy. Etiology, macroscopic changes, morphological characteristics.

4. Hyaline droplet dystrophy. Etiology, macroscopic changes, morphological characteristics.

5. Stromal-vascular dystrophy. (Mucoid swelling, fibrinoid swelling). Etiology, macroscopic changes, morphological characteristics.

6. Hyalinosis. Mechanisms and conditions of its occurrence.

7. Amyloidosis. Mechanisms and conditions of its occurrence. Morphological characteristics. Histochemical reactions on amyloid.

8. The main theories of amyloidosis occurrence.

9. Stromal-vascular fat dystrophy. Obesity and lipoidosis. Mechanisms and conditions of its occurrence. Macroscopic and microscopic characteristics.

10. Lipid metabolism disorder. Types of dystrophies. Macroscopic characteristics, diseases, in which they are observed.

11. Carbohydrates metabolism disorder. Types of dystrophies. Macroscopic characteristics, diseases, in which they are observed.

12. AIDS. Etiology, pathogenesis, morphological characteristic of AIDS.

13. Hemoglobin metabolism disorder. Characteristic of organs in which pigment of hemoglobin accumulate

14. Disorder of bilirubin metabolism. Types of icterus (jaundice) etiology, pathogenesis.

15. Calcium metabolism disorder. Hyper- hypocalcaemia. Types of calcinosis.

16. Reasons and mechanism of stones occurrence. Diseases associated with stone formation.

17. Clinical and morphological causes of death. Concept of biological and clinical death.

18. Necrosis. Definition, reasons of occurrence. Classification, macro- microscopic characteristic.

19. Clinical – anatomical forms of necrosis (coagulative, colliquative, gangrene, infarction). Morphological characteristic.

20. Hemodynamic disorder. Classification, reasons. Diseases in which they are observed.

21. Pathological anatomy of local ischemia, etiology, organs alteration. Consequences.

22. Arterial hyperemia. Etiology, types. Histological characteristic, possible outcome.

23. Venous hyperemia, etiology, morphology.

24. Hemosiderosis, general and local. Morphological characteristic, reasons. Diseases, syndromes in which it is observed.

25. Bleeding and hemorrhages. Types, causes, pathomorphology.

26. Thrombosis. Reasons and mechanism of thrombosis formation. Types of thrombosis, consequences, outcomes.

27. White, red, mixed thrombosis. Conditions of occurrence, histological features of the structure.

28. Stasis. Definition. Reasons of occurrence. Morphological characteristic.

29. Embolism. Types of embolism. Reasons, consequences. Morphological changes in organs and tissues with a sudden stopping of blood supply.

30. Direct, retrograde, paradoxical embolism.

31. Edema. Causes and mechanisms of development. Morphological changes in organs and tissues.

32. Inflammation as protective reaction of organism. Main tissue (alteration, exudation, proliferation) morphological characteristic and significance.

33. Morphological forms of inflammation. Classification, characteristic.

34. Serous inflammation. Characteristic, diseases in which this type of inflammation observed.

35. Purulent inflammation. Pathological anatomy of boils, carbuncles, abscesses, phlegmons.

36. Exudative inflammation. Types of exudation. Histological characteristic of changes in organs and tissues.

37. Fibrinous inflammation. Types of fibrinous inflammation. Organs and in what diseases and syndromes it can be observed.

38. Productive inflammation. Morphology. Types. Outcomes.

39. Sclerosis. Reasons, types, examples.

40. Incapsulation, organization. Definition, nature of the process,

41. Regeneration. Types, biological significance. Intracellular regeneration. Extracellular regeneration. Histological characteristic of granulation tissue.

42. Pathological regeneration and metaplasia. Reasons

43. Hypertrophy. Types and reasons. Morphological characteristic.

44. Hyperplasia. Nature of the process. Morphological characteristic.

45. Hypertrophy and hyperplasia. Similarities and differences of this processes.

46. Hypertrophy of myocardium. Reasons, disease in which hypertrophy can be observed, morphological characteristic.

47. Hypertrophy of heart, stomach, bladder. Macro- and microscopic characteristic.

48. Atrophy. Reasons and condition of occurrence, macroscopic characteristic. Microscopic signs.

49. Theories of tumor growth.

50. Histological classification of tumors.

51. tumors of connective tissues.

52. Definition of tumor growth. Types of growth, ways of metastatic dissemination of tumor.

53. Epithelial tumors. Classification. Morphological characteristic of benign and malignant tumors.

- 54. Tumors of mammary gland.
- 55. Classification and morphological characteristic of tumors of nervous tissue.
- 56. Benign tumors of connective tissue.
- 57. Malignant tumor of epithelial tissue. Classification, morphological
- 58. Esophagus cancer. Morphological characteristic, complications.
- 59. Stomach cancer. Forms, localization, metastasis.
- 60. Cancer of the bronchi and lung. Forms and ways of metastasis.
- 61. Melanoma. Histogenesis, ways of metastasis.
- 62. Prostate adenoma. Pathomorphology, complications.

63. Pathological anatomy of leukemia. Forms and complications.

64. Myeloid leukemia. Forms, morphological characteristics of changes in hematopoietic and parenchymal organs.

65. Hodgkin's lymphoma. Pathological anatomy.

66. Classification of anemia. Morphological characteristic of anemia because of bleeding.

67. Atherosclerosis. Changes in vessel's wall. Stages of the process, changes in organs.

68. Clinical – anatomical forms of atherosclerosis.

69. Hypertension. Definition. Pathogenesis, characteristic of vessels.

70. Ischemic heart disease. Definition, forms, pathological anatomy, outcomes.

71. Acute form of ischemic heart disease. Morphological changes in heart and other organs. Causes of death.

72. Chronic form of ischemic heart disease. Morphological changes in heart and other organs. Causes of death.

73. Heart aneurism. Types, reasons of occurrence, morphological characteristic, outcomes.

74. Infarction of myocardium. Reasons and mechanisms of occurrence, pathological anatomy.

75. System disease of connective tissue (rheumatism, rheumatoid arthritis, vasculitis). Pathogenesis, pathological anatomy.

76. Pathological anatomy of acute rheumatism.

77. Heart valve failure. Classification. Reasons of occurrence, outcomes.

78. Endocarditis. Forms of endocarditis, diseases in which they are observed.

79. Cardiosclerosis. Forms, morphological characteristic, diseases in which they are observed.

80. Heart failure. Acute and chronic. Macroscopic and microscopic characteristic of the heart.

81. Aneurism of aorta. Types, pathomorphology, diseases in which it can observed, causes of death.

82. Disease of respiratory system. Classification, general characteristic.

83. Pathological anatomy of pneumonia, complications.

84. Carnification and formation of abscess, as pneumonia complications. Reasons and mechanisms of occurrence.

85. Pathological anatomy of chronic bronchitis.

86. Lung emphysema. Definition, etiology, pathological anatomy, outcomes.

87. Liver disease. Classification, morphological characteristics.

88. Acute and chronic hepatosis. Causes, morphological characteristics.

89. Acute toxic degeneration of the liver. Causes, histopathology, stages, outcomes.

90. Pathological anatomy of Botkin's disease. (hepatitis A).

91. Cholecystitis. Forms, pathomorphology, complications.

92. Cholelithiasis. Etiology, pathogenesis, patanatomy, complications, outcomes.

93. Cirrhosis. Etiology, types, pathology, cause of death.

94. Gastritis. Etiology, pathogenesis, morphological characteristics.

95. Gastric ulcer and duodenal ulcer. Etiology, pathogenesis, pathological anatomy, cause of death.

96. The main complications of peptic ulcer disease.

97. Appendicitis. Classification, pathomorphology, complications.

98. Kidney disease. Classification. Hereditary and acquired glomerulopathy and tubulopathy. General morphological characteristics.

99. Diffuse glomerulonephritis. Etiology, pathogenesis. The role of immune factors in its development, classification, patanatomy.

100. Morphological characteristic of acute glomerulonephritis.

101. Pyelonephritis. Etiology, pathogenesis, stages, morphology of renal and extrarenal changes.

102. Disease with a primary lesion of the glands of internal secretion. Classification, General characteristics.

103. Thyroid disease. Classification of goiter on the etiological and morphological characteristics.

104. Pathological anatomy of diabetes.

105. Pathological anatomy of cerebro - pituitary diseases.

106. Ectopic pregnancy. Its types, complications, histological diagnostic criteria.

107. Cervical erosion. Causes, histological characteristics, complications.

108. Rickets.

109. Influenza. Etiology, pathogenesis, forms, patanatomy. complications.

110. Pathological anatomy of measles.

111. Morphological features of measles pneumonia, complications, outcomes.

112. Pathomorphology of scarlet fever.

113. Pathological anatomy of diphtheria, its complications.

114. Pathological anatomy of typhus, its complications.

115. Typhoid fever. Etiology, pathogenesis, morphology of local and General changes.

116. Stages of typhoid fever.

117.Intestinal and non-intestinal complications of typhoid fever.

118. Pathological anatomy of bacterial dysentery, its complications.

119. Pathomorphology of General and local complications of dysentery.

120. Cholera. Etiology, pathogenesis, pathological anatomy, causes of death.

121. Tuberculosis. Etiology. Pathogenesis, the main clinical and anatomical forms, General morphological characteristics.

122. Primary tuberculosis. Primary tuberculosis complexes, their outcomes.

123. Hematogenous tuberculosis. Morphology of its clinical varieties.

124. Secondary pulmonary tuberculosis. Morphology of its clinical varieties.

125. Pathological anatomy of extrapulmonary tuberculosis. The main forms and complications.

126. Syphilis. Stages, morphological characteristics at different stages.

127. Morphological features of the primary affect of syphilis.

128. Plague. Clinical and anatomical forms. Pathomorphology.

129. Definition of sepsis. Types, causes, morphological characteristics, consequences.

130. Pathological anatomy of sepsis. Causes, types, clinical and anatomical characteristics.

131. Pathological anatomy of shock

132. Pathological anatomy of disseminated intravascular coagulation syndrome.

133. Necrosis, apoptosis. Their difference.