1. What does the general pathophysiology study?

2. What does the special pathophysiology study?

3. What does the clinical pathophysiology study?

4. What is the definition of general etiology?

5. Which factors cause the disease?

6. What are the exogenous factors of the disease?

7. What are the endogenous factors of the disease?

8. What are the necessary conditions for the disease onset?

9. What conditions are favorable for the body?

10. What conditions are unfavorable for the body?

11. What are the exogenous conditions?

12. What are the endogenous conditions?

13. What is the role of the cause in the disease onset?

14. What does the injury represent?

15. What are the pathways of generalization of local injuries?

16. On what depends the localization of general injuries?

17. What are the possible variants of interrelation between general and local injuries?

18. What do the pathogenic factors represent?

19. What does the cause-effect chain in disease pathogenesis represent?

20. What is the main link of pathogenesis?

21. What is the etiotropic treatment of the disease?

22. What is the pathogenetic treatment of the disease?

23. What is the symptomatic treatment of the disease?

24. What is the specific prophylaxis of the disease?

25. What is nonspecific prophylaxis of the disease?

26. What is the physiologic reaction?

27. What is characteristic for pathologic reaction?

28. What is the normoergic reaction?

29. What is the hypoergic reaction?

30. What is the hyperergic reaction?

31. What is the adaptive reaction?

32. What is the compensatory reaction?

33. What is the protective reaction?

34. What is the reparative reaction?

35. What are the typical periods of the disease?

36. What is characteristic for the prodromal period of the disease?

37. What is characteristic for the period of complete disease manifestation?

38. What does include the pathologic process?

39. What does the disease represent?

40. What does the vicious circle in pathogenesis represent?

41. What are the causes of primary cell injuries?

42. What are the causes of secondary cell injuries?

43. Which injuries of cytoplasmic membrane components will lead to cellular disintegration?

44. What intracellular dyshomeostasis develop when the function of membrane ionic pumps ceases?

45. What intracellular dyshomeostasis develop at uncontrolled opening of membrane ionic pumps?

46. What are the consequences of decreasing intra- and extracellular gradient of Na+ ions?

47. What are the consequences of decreasing intra- and extracellular gradient of K+ ions?

48. What are the consequences of decreasing transmembranar gradient of Ca2+ ions?

49. What are the consequences of nonspecific activation of intracellular phospholipases?

50. What are the consequences of intracellular ATP-ase activation?

51. What are the consequences of intracellular protease activation?

52. What are the consequences of intracellular nucleoproteases activation?

53. What is the role of increasing intracellular enzymes activity in the blood?

54. What processes does include the dystrophy of desmodontal structures?

55. What are the consequences of dystrophy?

56. What is the definition of apoptosis?

57. What is the biologic significance of apoptosis?

58. What are the general consequences of apoptosis for the body?

59. What types of the cells undergo apoptosis?

60. What are the positive signals of apoptosis initiation?

61. What are negative signals of apoptosis initiation?

62. What are the necessary conditions for disease development?

63. What are the consequences of dysregulated apoptosis?

64. What are the general consequences of cellular necrosis for the body?

65. What is the pathogenetic role of free radicals in necrobiosis?

66. What is the pathogenetic role of intracellular calcium in necrobiosis?

67. What is the pathogenetic role of hypoxia in necrobiosis?

68. What is the pathogenetic role of ATP deficiency in necrobiosis?

69. What are the manifestations of cellular necrosis?

70. What are the local consequences of necrosis?

71. What factors lead to necrosis of oral cavity?

72. What disorders lead to oral cavity ulceration?

73. What type of regeneration is homeostatic?

74. What type of regeneration is adaptive?

75. What type of regeneration is homeostatic?

76. What type of regeneration is protective?

77. What type of regeneration is reparative?

78. What regeneration is pathologic?

79. What is characteristic for the physiologic regeneration?

80. What is characteristic for pathologic regeneration?

81. What does the hypertrophy mean?

82. What is the biologic characteristic of sclerosis?

83. What are the trigger factors of sclerosis?

84. What is the mechanism of action of sclerosis factor?

85. What is the physiologic mechanism of decreasing the collagenogenesis process?

86. What pathological processes lead to progressive sclerosis?

87. What are the consequences of sclerosis?

88. Which are the examples of physiologic atrophy?

89. What are the pathogenetic factors for atrophy?

90. What disorders are characterized by atrophy of oral cavity?

91. What are the causes of pathological dental attrition?

92. Which endocrine gland disorders lead to dental abrasion?

93. Which hormones are responsible for cellular regeneration?

94. Which structures have high regenerative potential?

95. What are the triggers of hypertrophy?

96. What disorders lead to the symptomatic gingival hypertrophy?

97. What vessels are included in microcirculatory system?

98. What factors determine the blood flow in the organs?

99. Which ions have vasoconstrictive action?

100. Which ions have vasodilatory action?

101. What factors cause the constriction of peripheral vessels?

102. What factors cause the dilatation of peripheral vessels?

103. What factors cause the arterial hyperemia?

104. What is the main link in arterial hyperemia?

105. What is the correlation between influx and reflux of the blood in arterial hyperemia?

106. What are the pathogenetic mechanisms of neurotonic arterial hyperemia?

107. What are the pathogenetic mechanisms of neuroparalytic arterial hyperemia?

108. What are the pathogenetic mechanisms of functional arterial hyperemia?

109. What are the manifestations of arterial hyperemia?

110. What are the metabolic tissular changes of arterial hyperemia?

111. What are the external manifestations of arterial hyperemia?

112. What are the consequences of arterial hyperemia?

113. What does the venous hyperemia represent?

114. What is the pathogenesis of venous hyperemia?

115. What is the main link in the pathogenesis of venous hyperemia?

116. What processes can decrease venous reflux?

117. What are the manifestations of venous hyperemia?

118. What pathological processes reduce the aspiration force thoracic cavity?

119. What changes appear in venous hyperemia?

120. Which are external manifestations of venous hyperemia?

121. Which processes increase the organ volume in venous hyperemia?

122. Which process decrease local temperature in venous hyperemia?

123. What are the local consequences of venous hyperemia?

124. What are the general consequences of venous hyperemia?

125. What pathological processes can lead to development of ischemia?

126. What are the pathogenetic mechanisms of ischemia?

127. What processes can trigger angiospasm?

128. What are the hemodynamic disorders in ischemia?

129. What are the metabolic disorders in ischemia?

130. What are the exterior manifestations in ischemia?

131. What processes lead to diminished volume of tissue in ischemia?

132. What are the local consequences in venous hyperemia?

133. On what depends the development of necrosis in ischemia?

134. What types of arterial collaterals exist from functional aspect?

135. What does represent embolism?

136. What are the types of exogenous embolism?

137. What are the types of endogenous embolism?

138. The injuries of what vessels can lead to air embolism?

139. When can develop gaseous embolism?

140. What are the local consequences of embolism?

141. What are the types of blood stasis?

142. What are the main pathogenetic factors of capillary stasis?

143. What are the characteristics of prestasis?

144. What are the manifestations of stasis?

145. What are the consequences of stasis?

146. What are the required conditions for development of parietal thrombus?

147. What are the mechanisms of primary hemostasis?

148. What are the main stages of secondary hemostasis?

149. What is the physiological role of fibrinolytic system?

150. What are the effects of fibrinolytic system?

151. What factors contribute to blood hypercoagulability?

152. What is the main component of fibrinolytic system?

153. What substances in the blood have pro-coagulant activity?

154. When can develop insufficiency of anticlotting system?

155. What pathological processes lead to heparin deficiency?

156. What does represents thrombosis?

1. In what blood vessels can develop more frequently thrombosis?
2. What are the consequences of thrombus development in arteries with their obstruction?
3. What are the pathological evolution of thrombus?
4. What factors lead to vascular purpura?
5. What are the characteristics of thromocytopathy?
6. What are the characteristics of hemorrhagic syndrome of plasmatic origin?
7. What are the manifestations of cellular injuries in the inflammatory focus?
8. What are the biological effects of prostaglandins PGD2, PGE2, PGF2α?
9. What are the biological effects of thromboxane?
10. What are the biological effects of prostacyclin?
11. What are the biological effects of leukotrienes?
12. What are the inflammatory mediators released from neutrophils?
13. What are the inflammatory mediators released from eosinophils?
14. What are the inflammatory mediators released from basophils?
15. What inflammatory mediators are released from mast cells?
16. What are the biological effects of interleukin IL1?
17. What are the inflammatory mediators released from thrombocytes?
18. What are the inflammatory mediators released from lymphocytes?
19. What are the biological effects of activated compliment factors?
20. What are the effects of kinins in inflammation?
21. What are the mechanisms of phagocytosis?
22. What is the pathogeny of proliferation of inflammatory focus?
23. What are the cellular sources of proliferation in inflammatory focus?
24. What is the sequence of vascular reactions in inflammatory focus?
25. What factors lead to development of inflammatory arterial hyperemia?
26. What are the characteristics of inflammatory arterial hyperemia?
27. What are the mechanisms of increased vascular permiability in inflammatory focus?
28. What are the pathogenetic mechanisms of inflammatory venous hyperemia?
29. What is the biological significance of venous hyperemia in inflammatory focus?
30. What are characteristics of inflammatory stasis?
31. What is the distinct criterion of serous exudate?
32. What is the distinct criterion of fibrinous exudate?
33. What is the distinct criterion of purulent exudate?
34. What is the distinct criterion of hemorrhagic exudate?
35. What is the biological significance of leucocyte emigration into inflammatory focus?
36. What does involve regeneration in inflammatory focus?
37. What are the mechanisms of leucocyte migration into inflammatory focus?
38. What is the sequence of leucocyte emigration into inflammatory focus?
39. What is the result of proliferation in the inflammatory focus?
40. In what conditions occurs hyperergic inflammation?
41. In what conditions occurs hypoergic inflammation?
42. What are the general changes during inflammatory reaction?
43. What are the hormones with direct anti-inflammatory effects?
44. What is the sequence of phenomena in inflammation?
45. What are the systemic manifestations in inflammation?
46. What is the definition of fever?
47. What are the mechanisms of increased thermogenesis in fever?
48. What are the mechanisms of reduced thermolysis in the first period of fever?
49. What are the mechanisms of enhanced thermolysis in the last stage of fever?
50. What is fever pathogenesis?
51. What are the exogenous infectious pyrogenic factors?
52. What are the exogenous non-infectious pyrogenic factors?
53. What are the endogenous primary pyrogenic factors?
54. What are the endogenous secondary pyrogenic factors?
55. What does represent the resetting of thermoregulatory center in the hypothalamus in the first stage of fever?
56. What are the mechanisms of thermogenesis in fever?
57. What is the body temperature in subfebrile reactions?
58. What is the body temperature in hyperpyretic reactions?
59. What are the characteristics of metabolism in the second period of fever?
60. What are the cardiovascular changes in the second stage of fever?
61. What are the cardiovascular changes in the third stage of fever?
62. What are the digestive changes in fever?
63. What is the biological significance of fever?
64. In what cases the pyrotherapy is justified?
65. In what cases the anti-pyretic therapy is justified?
66. What are the characteristics of immediate hypersensibility?
67. What are the characteristics of delayed hypersensibility
68. What does represent endoallergen?
69. What are the characteristics of type I allergic reactions?
70. What antigens can trigger anaphylactic reactions?
71. What are the mediators produced in the mast cell by cycloxygenase pathway?
72. What are the mediators produced in the mast cell by lipoxygenase pathway?
73. What are the characteristics of type II allergic reaction?
74. What does represent the III type allergic reaction?
75. What pathological processes underlie on the basis of III type of allergy?
76. What antigens can trigger delayed hypersensibility?
77. What does represent type IV allergic reaction?
78. What are the mediators of pathochemical stage in delayed hypersensibility?
79. What is the final result in type IV allergic reaction?
80. What disorders underlie on delayed hypersensibility?
81. What does represent autoimmune reaction?
82. What factors can trigger autoimmune reactions?
83. What are the characteristics of complete antigens?
84. What are the characteristics of incomplete antigens (haptens)?
85. How can be diminished the pathochemical processes in anaphylactic reaction?
86. How can be diminished the physiopathological processes in anaphylactic reaction?
87. What is the final effect of type II allergic reactions?
88. What anatomical structures are more frequently involved in type III allergic reaction
89. What are the local manifestations in type III allergic reaction?
90. What is pathogeny of physiopathological stage in delayed hypersensibility?

**Experiments**

1. How has been modeled experimental hypervolemia?
2. What are the compensatory reactions in experimental hypervolemia?
3. What is the method of measurement of blood pressure in the rabbit during experimental hypervolemia?
4. How blood pressure (BP) and breathing rate (BR) change in painful stimulation?
5. What are the mechanisms of increased blood pressure in painful excitation?
6. What is the mechanism of restoration of blood pressure following painful stimulation?
7. What is the mechanism of restoration of blood pressure in hypercatecholaminemia?
8. What are the causes of death in rats exposed to reduced atmospheric pressure?
9. What manifestations develop in rats exposed to reduced atmospheric pressure?
10. What absorber for CO2 was used for model of normobaric hypoxia without hypercapnia?
11. What manifestations develop in the mouse in condition of normobaric hypoxia?
12. What metabolic disorders can be attested in the mouse exposed to normobaric hypoxia without hypercapnia?
13. What endogenous factors lead to different effects of hypoxia and hypobaria on rats?
14. What animals are more sensible to action of hypobaric hypoxia?
15. How reactivity and resistance to hypobaric hypoxia will change in a rat with excited CNS?
16. How reactivity and resistance to hypobaric hypoxia will change in a rat with inhibition of CNS?
17. What are the microcirculatory changes on frog’s tongue in arterial hyperemia?
18. What are the microcirculatory changes on frog’s tongue in venous hyperemia?
19. By what experimental method venous hyperemia has been modeled on frog’s tongue?
20. By what experimental method stasis has been modeled on frog’s tongue?
21. By what experimental method ischemia has been modeled on frog’s swimming membrane?
22. What are the microcirculatory changes on frog’s tongue in prestasis?
23. By what experimental method has been modeled the development of white thrombus in mesenterial vessels in the frog?
24. By what experimental method has been modeled the development of red thrombus in mesenterial vessels in the frog?
25. What are the causes for thrombus development?
26. What are stages of white thrombus development?
27. How has been modeled experimental fat embolism in the mesenterial vessels in the frog?
28. How alteration has been modeled on frog’s tongue?
29. What is the mechanism of primary alteration on frog’s tongue after administration of AgNO3 crystals?
30. What structures are primarily affected after administration of AgNO3 crystals on frog’s tongue?
31. What substance was used to color the focus of primary alteration on frog’s tongue?
32. What are the mechanisms of dyeing of dead cells in the focus of primary alteration?
33. What are the mechanisms of secondary alteration on frog’s tongue?
34. What is the sequence of vascular reactions in inflammatory focus on frog’s tongue?
35. What factors cause arterial hyperemia in the inflammatory focus on frog’s tongue?
36. What factors cause venous hyperemia in inflammatory focus on frog’s tongue?
37. What are the pathogenetic mechanisms of inflammatory venous hyperemia?
38. What are the manifestations of venous hyperemia on frog’s tongue?
39. What microcirculatory disorders lead to development of stasis on frog’s tongue?
40. What are the consequences of long-lasting stasis in the inflammatory focus?
41. How anaphylactic shock has been triggered in the experimental rabbit?
42. What are the pathogenetic mechanisms of pathologic phenomena observed in experimental anaphylactic shock?
43. How long is the period of sensitization of experimental animal in anaphylactic shock?
44. What was the dose of antigen used for triggering the experimental anaphylactic shock in rabbit?
45. What are the manifestations of experimental anaphylactic shock in the rabbit?
46. What are the respiratory changes in the rabbit in experimental anaphylactic shock?
47. What are the pathogenetic mechanisms of respiratory changes in the rabbit in experimental anaphylactic shock?
48. What are the pathogenetic mechanisms of bronchial spasm in experimental anaphylactic shock?
49. What neurological disturbances developed in experimental anaphylactic shock in the rabbit?
50. What are the causes of death of the rabbit in experimental anaphylactic shock?