

QUESTIONS IN SURGERY

General Surgery (3rd year)

1. Bleeding: definition, classification. Physiological mechanisms of compensation and pathological mechanisms of decompensation in case of hemorrhage. Physiologic hemostasis: phases, pathways of blood coagulation. Methods of hemostasis.
2. Current rules and consequence of physicians' action during blood transfusion. Transfusion report. Blood components and derivatives. Complications of blood transfusion.
3. Wounds: definition, local symptoms and classification. Wound healing process: definition, phases, their clinical and morphological characteristics.
4. Types of wound healing. Treatment of contaminated and purulent wounds. Primary surgical processing of wound. Kinds of suture for wound closure.
5. Surgical infection of soft tissues: concept, classification, pathogenesis. Furuncle, carbuncle, abscess, phlegmon, mastitis, erysipelas, hydradenitis, lymphangitis: definition, symptoms and treatment.
6. Felon and phlegmon of hand: definition, classification, symptoms, diagnosis and treatment.
7. Sepsis: definition, classification, systemic inflammatory response syndrome (SIRS). Pathophysiology of surgical sepsis. Clinical signs, diagnosis and treatment of surgical sepsis.
8. Anaerobic clostridial infection of soft tissues (gas gangrene): characteristics of microorganisms, pathophysiology, classification, clinical signs, diagnosis, and treatment.
9. Anaerobic non-clostridial surgical infection: causative organisms, clinical manifestations, diagnosis, and treatment.
10. Diabetic foot: pathogenesis, classification, symptoms, clinical and instrumental diagnosis. Principles of treatment and ways for prevention.
11. Assessment of surgical patient's nutritional status. Enteral feeding and parenteral nutrition: indications, types, products and complications.
12. Syndrome of acute limb ischemia: definition, classification, the concept of thrombosis and embolism, symptoms and signs, diagnosis and treatment.

Surgery nr.1 (4th year)

13. Acute appendicitis: etiopathogenesis, classification, clinical signs, surgical tactics.

14. Differential diagnosis of acute appendicitis. Rationale for paraclinical methods of examination.
15. Complications during the acute appendicitis: diagnosis, surgical tactics. Postoperative complications of acute appendicitis: diagnosis, surgical tactics.
16. Particularities of acute appendicitis in children, pregnant and elderly patients, and depending on the localization of appendix.
17. Surgical tactics in acute appendicitis. Appendectomy: anesthesia, surgical approaches, operative procedures. Chronic appendicitis: differential diagnosis and surgical tactics.
18. Hernia, eventration, and evisceration: definitions, pathological anatomy, classification, local status.
19. Strangulated hernia: mechanisms and types of strangulation, clinical signs, surgical tactics.
20. Rare forms of hernias strangulation: Richter, Littre, Maydl, Brock, and Amyand hernias. Morphological and clinical characteristics, features of surgical treatment.
21. Inguinal uncomplicated hernia: clinical signs, differential diagnosis. Treatment: methods of hernias repair.
22. Femoral uncomplicated hernia: clinical signs, differential diagnosis. Treatment: methods of hernias repair.
23. Umbilical hernias, hernias of the linea alba, and of rare location: clinical signs, differential diagnosis. Treatment: methods of hernias repair.
24. Breast diseases: classification, diagnostic methods. Dishormonal hyperplasia of breast (mastopathies), fibroadenoma, gynecomastia: clinical presentation, diagnosis, differential diagnosis with the breast cancer, treatment.
25. Breast cancer: incidence, risk factors, symptomatology, clinical and instrumental diagnosis, treatment.
26. Complications of peptic ulcer disease. Surgical treatment of chronic gastroduodenal ulcer: indications and common surgical procedures.
27. Gastroduodenal ulcer perforation: classification, clinical signs, methods of diagnosis, and treatment. Atypical and sealed perforation of the gastroduodenal ulcer.
28. Gastroduodenal ulcer hemorrhage: classification, symptoms, diagnosis, and differential diagnosis. Conservative, endoscopic and surgical treatment of chronic gastroduodenal bleeding ulcer.

29. Pyloroduodenal stenosis due to peptic ulcer disease: classification, symptoms, diagnosis, and treatment.
30. Gastroduodenal ulcer penetration and malignancy: particularities of presentation, diagnosis, and treatment.
31. Zollinger-Ellis syndrome: etiopathogenesis, symptoms, diagnosis, and treatment.
32. Calculous biliary disease: common definitions, etiology and pathogenesis. Cholelithiasis: symptoms depending on the clinical form, differential diagnosis, methods of examination.
33. Complications of cholelithiasis: mechanical, infectious, and degenerative. Bouveret and Mirizzi syndromes. Prevention of complications.
34. Acute cholecystitis: etiology and pathogenesis, classification, symptoms, diagnosis, and surgical management. Cholecystectomy: types, surgical approaches, and complications.
35. Acute pancreatitis: etiology and pathogenesis, classification, symptomatology, and methods of examination.
36. Principles of treatment of acute pancreatitis depending on the clinical period.
37. Early and late complications of acute pancreatitis: diagnosis and treatment.
38. Intestinal obstruction: definition, etiopathogenesis, pathophysiological disturbances. Classification of intestinal obstruction,
39. Acute mechanical bowel obstruction: clinical presentation, diagnostic methods, differential diagnosis, and surgical management.
40. Different forms of acute mechanical intestinal obstruction (by adhesions, tumoral, volvulus, intussusception): clinical presentation, diagnostic methods, differential diagnosis, and treatment.
41. Principles of treatment in acute intestinal obstruction: preoperative preparation, restore of protein and water-electrolyte metabolism. Volume of surgical procedure for intestinal obstruction.
42. Peritonitis: common definitions, etiology and pathogenesis, classification. Acute peritonitis: phases of clinical evolution, symptoms, differential diagnosis.
43. Complex surgical and medical treatment of generalized peritonitis: preoperative care, anesthesia, surgical approaches, particularities of surgical intervention, methods of peritoneal lavage and drainage.
44. Abdominal abscesses (subhepatic, subdiaphragmatic, interintestinal, of Douglas' pouch): etiology, pathomorphology, clinical signs, diagnosis, and treatment.

45. Varicose vein disease: etiology and pathogenesis, symptoms, clinical and instrumental diagnosis, methods of treatment. Superficial thrombophlebitis.
46. Deep venous thrombosis of lower limbs: etiology and pathogenesis, clinical findings, diagnosis, and treatment. Pulmonary artery thromboembolism. Postthrombotic disease of lower limbs.
47. Abdominal trauma: general concepts, classification, clinical symptoms, diagnosis depending on the patient's hemodynamic status.
48. Traumatic injuries of the hollow viscus (stomach and intestine): symptoms, clinical and paraclinical diagnosis, treatment.
49. Traumatic injuries of the solid organs (liver and spleen): clinical presentation, algorithm of examination, curative management.
50. Chest injuries: general concepts, classification, clinical presentation, diagnosis, and treatment. Pneumothorax and hemothorax: pathophysiology, classification, diagnosis and treatment.

Surgery nr.2 (5th year)

51. Surgical pathology of thyroid gland: classification, physical and instrumental methods of examination.
52. Hyperthyroidism: epidemiology, classification, diagnosis, and treatment. Features of pre-and postoperative management, complications.
53. Riedel and Hashimoto chronic thyroiditis: etiology and pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
54. Acute mediastinitis: etiopathogenesis, classification, clinical manifestations, diagnosis, and treatment.
55. Achalasia: etiopathogenesis, classification, symptoms, diagnosis, differential diagnosis, treatment.
56. Chemical injuries of esophagus: pathophysiology, classification, clinical manifestations, diagnosis, early and late complications, treatment. Esophagoplasty: indications and methods.
57. Diverticulas of esophagus: etiopathogenesis, classification, clinical manifestations, diagnosis, and treatment.
58. Gastro-esophageal reflux disease: pathophysiology, classification, symptoms, diagnosis. Surgical treatment. Barrett's esophagus.

59. Congenital heart disease: classification (patent ductus arteriosus, septal defects, Fallot's tetralogy), pathophysiology, symptoms, diagnosis, treatment, complications.
60. Acquired heart disease. Mitral failure and mitral stenosis: classification, phases of hemodynamic disturbances, symptoms, diagnosis, indications and contraindications for surgical treatment. Methods of treatment.
61. Coronary heart disease: etiopathogenesis, classification, clinical signs, diagnosis, and surgical treatment.
62. Peripheral obliterative arterial diseases of lower limbs (obliterative arteriosclerosis, thromboangiitis): etiopathogenesis, classification, clinical presentation, diagnosis. Leriche's syndrome. Medical and invasive treatment.
63. Acute mesenteric ischemia: etiopathogenesis, classification, symptoms, diagnosis, and treatment. Abdominal angina: positive and differential diagnosis, treatment.
64. Lung abscess and gangrene: etiopathogenesis, classification, clinical presentation, diagnosis, differential diagnosis, and treatment.
65. Bronchiectasis: etiopathogenesis, classification, clinical signs, diagnosis, differential diagnosis, and surgical treatment.
66. Hydatid cyst of the lung: etiopathogenesis, classification, symptoms, complications, diagnosis, and treatment.
67. Acute and chronic nonspecific purulent pleural diseases: etiopathogenesis, classification, clinical signs, diagnosis, differential diagnosis. Medical and surgical treatment.
68. Diaphragmatic hernia: classification, symptoms, diagnosis, and treatment.
69. Postgastrectomy syndromes: classification. Peptic ulcer of gastroenterostomy, dumping syndrome, afferent loop syndrome: etiopathogenesis, clinical signs, diagnosis. Medical and surgical treatment.
70. Cholangitis: etiology and pathogenesis, classification, symptomatology, diagnosis. Complex (medical, minimally invasive and surgical) treatment.
71. Post-cholecystectomy syndrome: etiology and pathogenesis, classification, diagnosis. Minimally invasive and surgical treatment.
72. Posthepatic (mechanical) jaundice: etiology and pathogenesis, classification, symptoms, methods of examination, differential diagnosis. Combined treatment of mechanical jaundice.

73. Differential diagnosis of posthepatic (mechanical) jaundice depending on the cause and level of obstruction. Differential diagnosis of mechanical jaundice with parenchymal and hemolytic jaundice.
74. Hydatid hepatic cyst: etiopathogenesis, classification, clinical features, complications, diagnosis, and treatment.
75. Portal hypertension: etiology and pathogenesis, pathophysiological decompressive porto-systemic shunts, classification. Dependence of clinical evolution of disease on the level of portal occlusion.
76. Portal hypertension: classification, symptomatology, diagnosis, conservative and surgical treatment.
77. Upper gastrointestinal hemorrhage: etiopathogenesis, classification, clinical features, diagnosis, differential diagnosis. Conservative, endoscopic and surgical treatment.
78. Lower gastrointestinal hemorrhage: etiopathogenesis, classification, clinical features, diagnosis, differential diagnosis. Conservative, endoscopic and surgical treatment.
79. Chronic pancreatitis: etiopathogenesis, classification, clinical features, diagnosis. Conservative, endoscopic and surgical treatment.
80. Pancreatic pseudocysts and fistulas: etiology and pathogenesis, classification, clinical signs, diagnosis, differential diagnosis. Medical and surgical treatment.
81. Crohn's disease: etiopathogenesis, classification, clinical features, complications, diagnosis, differential diagnosis, and treatment.
82. Ulcerative colitis: etiopathogenesis, classification, clinical features, complications, diagnosis, differential diagnosis, and treatment.
83. Diverticulosis of the colon: etiopathogenesis, classification, symptomatology, complications, diagnosis, and surgical treatment.
84. Enterocutaneous fistulas: etiology, classification, clinical findings, management.
85. Acute and chronic paraproctitis: etiology and pathogenesis, classification, clinical features, diagnosis, and treatment.
86. Hemorrhoids: etiopathogenesis, classification, clinical findings, diagnosis, and treatment.
87. Syndrome of acute abdomen: general concepts, causes, clinical presentation, methods of examination, treatment.

88. Esophageal atresia: definition, epidemiology, embryology, pathologic anatomy, classification, clinical presentation, diagnosis, differential diagnosis. Surgical and postoperative treatment.
89. Pediatric hypertrophic pyloric stenosis: definition, epidemiology, etiology and pathogenesis, pathologic anatomy, clinical presentation, diagnosis, differential diagnosis, treatment, complications.
90. Congenital duodenal atresia and stenosis in children: definition, etiology and pathogenesis, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment.
91. Pediatric congenital small bowel obstruction: definition, etiology and pathogenesis, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment.
92. Pediatric congenital large bowel obstruction: definition, etiology and pathogenesis, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment. Meconium ileus in newborn.
93. Colonic and anorectal congenital malformations, Hirschsprung disease in children: embryology, pathologic anatomy, classification, clinical presentation, diagnosis, differential diagnosis, treatment. Associated malformations.
94. Pediatric omphalocele and laparoschisis: definition, embryology, pathologic anatomy, classification, differential diagnosis, conservative and surgical treatment.
95. Congenital bronchopulmonary malformations in children. Pediatric congenital lobar emphysema: epidemiology, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment.
96. Congenital diaphragmatic hernia in children: definition, etiopathogenesis, classification, clinical presentation, diagnosis, differential diagnosis. Modern therapeutic approach.
97. Biliary atresia in children, congenital choledochal cyst: epidemiology, etiology, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment.
98. Acute appendicitis in newborn, infant, toddler, and school child: epidemiology, classification, clinical presentation, diagnosis, differential diagnosis, surgical treatment, complications.
99. Acute bowel intussusception in children: definition, pathology, etiology, clinical presentation, diagnosis, differential diagnosis, medical and surgical treatment, complications.

100. Acute hematogenous osteomyelitis in newborn, infant and older child: etiology, clinical presentation, diagnosis, differential diagnosis, treatment, complications.