

SURGERY – STATE BOARD EXAMINATION

A: 1 – 27 B: 28 – 69 C: 70 - 131

1. Wounds, classification, phases of the healing. Factors affecting wound's healing. Principles of wound management. Per primam, per secundam, per tertiam intentionem healing.
2. Parenteral nutrition (principles of indications, preparations, complications).
3. Blood transfusion, indications, complications. Algorithm for applying a blood transfusion. Blood derivatives.
4. Donor and transplant program in surgery.
5. Diabetic foot (macroangiopathy and microangiopathy, neuropathy, osteopathy, infection). Principles of prevention and treatment.
6. Pulmonary embolism (types, signs and symptoms, diagnosis, surgical and non-surgical treatment, prevention).
7. Inflammatory diseases of the fingers and hand – paronychia (clinical features, diagnosis, surgical treatment).
8. Antibiotics and chemotherapeutics in surgery. Indications, principles of application. dosing. Bacteriological monitoring. Prophylactic and therapeutic use of antibiotics.
9. Asepsis and antisepsis, definition. Surgical infections. Nosocomial infections in surgery- definition, types, bacteriological monitoring. Treatment. Complications in surgical wound from infection.
10. Hemostasis disorder in surgical patients during preoperative and postoperative period and after injury.
11. Preoperative surgical patient examination. Risk factors, polymorbidity. Preparation of patient before the operation and general anesthesia.
12. Cardiopulmonary resuscitation (BLS, ALS)
13. Brain death. Indications and contraindications for removal of organs from cadavers.
14. Multiple injury (definition, first aid, diagnostic principles, priority of therapeutical measures).
15. Traumatic and haemorrhagic shock (pathophysiology, prevention, treatment).
16. Pain in acute abdomen – characteristics, differential diagnosis. Visceral pain, somatic pain (causes, examples).
17. Postoperative complications (cardiovascular, pulmonary, kidney function disorders).
18. Postoperative complications of the GIT. Complications in the surgical wound, bedsores.
19. Bacteraemia, SIRS, sepsis, septic shock (causes, forms of septic shock, pathophysiology, hemodynamic changes, treatment).
20. Burns (causes, classification, burn shock, burns complications, treatment).
21. Blast syndrome and Crush syndrome (clinical picture, diagnosis, surgical treatment).
22. Acute and chronic renal failure.

23. Benign and malignant tumors, precancers. Growth and spread of malignant tumors, diagnosis, treatment, primary and secondary prevention of tumors. Tumor classification. Basics of oncological surgery.
24. The body's reaction to injury, surgery and general anesthesia (metabolic, endocrine, immunological and ventilation changes).
25. Anaesthesiology and resuscitation (history, anaesthesiology as medical speciality)Premedication and general anesthesia.
26. Premedication and general anesthesia.
27. Regional anesthesia

B

28. Breast diseases (tumor diseases, benign and malignant tumors, clinical features, diagnosis, TNM classification, surgical and non-surgical treatment).
29. Malignant tumors of large intestine (clinical features, diagnosis, surgical therapy. TNM classification, staging and grading, Complications of the colon cancer. Precancerosis of the colon).
30. Benign and malignant tumors of small intestine (clinical features, diagnosis, surgical treatment).
31. Precancerosis and malignant tumors of the stomach, Ca in situ, early cancer and other stages of carcinoma (clinical features, diagnosis, surgical treatment).
32. Benign and malignant tumors of the pancreas (clinical features, diagnosis, surgical treatment).
33. Malignant tumors of the gallbladder and the bile ducts.
34. Benign tumors of the liver (clinical features, diagnosis, diagnosis, surgical treatment).
35. Malignant tumors of the liver (clinical features, diagnosis, diagnosis, surgical treatment).
36. Ulcerative colitis. Crohn's disease (signs and symptoms, diagnosis, differential diagnosis, indications for surgical treatment).
37. Hemorrhoids, anal fissure, rectal prolaps (clinical features, diagnosis, surgical and non-surgical treatment).
38. Malignant tumors of the rectum (clinical features, diagnosis, surgical treatment).
39. Inguinal hernia, femoral hernia, umbilical hernia, linea alba hernia (hernia complications, symptoms, diagnosis and treatment).
40. Diaphragmatic hernia, hiatal hernia, gastroesophageal reflux disease (clinical features, diagnosis, surgical treatment).

41. Peptic ulcer disease of gastroduodenum. Indications for surgical treatment. Postoperative complications.
42. Anorectal fistula, perianal abscess. (clinical manifestation, diagnostics, surgical treatment).
43. Principles of minimally invasive surgery. Indications and risks.
44. Surgical procedures for colorectal cancer. Complications of colostomy.
45. Chronic pancreatitis and its complications (clinical manifestation, diagnostics, treatment).
46. Acute abdomen, definition. Classification. Basic differential diagnostic characteristics.
47. Mechanical intestinal obstruction - obstruction, strangulation. (clinical manifestation, diagnostics, surgical and non-surgical treatment).
48. Ileus of large intestine. (clinical manifestation, diagnostics, surgical treatment).
49. Acute peritonitis (primary and secondary peritonitis, causes, symptomatology, diagnostics and treatment).
50. Intraabdominal abscesses (subphrenic, intermesenteric, Douglas abscess). Causes, symptomatology, diagnostics and treatment.
51. Portal hypertension and its consequences (causes and diagnostics). Bleeding in portal hypertension (diagnostics, treatment).
52. Bleeding from upper part of GIT (causes, symptomatology, differential diagnosis, diagnostic procedures, treatment).
53. Pylorostenosis (congenital, acquired, homeostatic disorders, treatment).
54. Meckel's diverticulum, duodenal diverticulum, diverticular disease of the large intestine (symptomatology, diagnostics, treatment).
55. Bleeding from lower part of GIT (cause, symptomatology, differential diagnosis, diagnostic procedures, treatment).
56. Acute pancreatitis (types of acute pancreatitis, symptomatology, pathophysiological homeostatic changes, diagnostic procedures, differential diagnosis, treatment). Complications of acute pancreatitis and their treatment.
57. Cholelithiasis and choledocholithiasis (clinical manifestation, diagnostics, complications, surgical treatment).
58. Obstructive jaundice (causes, diagnosis, treatment). Differential diagnosis of jaundice.
59. Cholecystitis, cholangitis (causes, signs and symptoms, treatment).
60. Pelvic peritonitis (causes, signs and symptoms, diagnosis, treatment).
61. Acute appendicitis. Acute appendicitis complications, complications after appendectomy. Appendicitis subacuta. (clinical manifestation, diagnostics, treatment).
62. Differential diagnosis of acute appendicitis in childhood and adulthood. Appendicitis in elderly and pregnancy.
63. Chest diseases mimicking acute abdomen symptomatology. Acute upper abdominal pain (causes, differential diagnosis).

64. Acute abdominal pain syndrome of right and left hypogastrium (causes, differential diagnosis).
65. Retroperitoneal bleeding (traumatic and non-traumatic causes, diagnosis, treatment).
66. Intestinal obstruction – differential diagnosis of different types of intestinal obstruction (signs and symptoms, clinical presentation, diagnosis).
67. Acute abdomen in elderly – causes, specialities, symptoms, diagnosis, treatment.
68. Haemoperitoneum (liver and spleen injury).
69. Metabolic syndrome. Bariatric surgery (type of operations, indications, complications).

C

70. Chronic ischemic limb syndrome (clinical features, diagnosis, surgical treatment).
71. Thrombophlebitis and phlebothrombosis, iliofemoral phlebothrombosis, phlegmasia alba dolens, phlegmasia coerulea dolens (clinical features, diagnosis, surgical treatment).
72. Primary and secondary varicose veins of the lower extremities, postphlebotic limb syndrome. Varicose veins complications (clinical features, diagnosis, surgical treatment).
73. Acute ischemic limb syndrome (traumatic and non-traumatic causes, clinical features, diagnosis, surgical and non-surgical treatment).
74. Occlusive disorders of aortic arch branches (extracranial part of cerebral circulation, steal syndrome), signs and symptoms,
75. Imaging Modalities in Thoracic Surgery, Bronchoscopic Procedures.
76. Video-Assisted Thoracic Surgery. Thoracic Incisions.
77. Diagnostic Surgical Procedures, Mediastinoscopy, Mediastinotomy. Pulmonary Resections.
78. Chest Tube Thoracostomy, Thoracentesis, Mediastinal Drainage.
79. Spontaneous Pneumothorax, Pleural Effusions.
80. Empyema, Lung abscess.
81. Mediastinitis, Esophageal Perforation.
82. Chest Wall Deformities - Pectus Excavatum, Pectus Carinatum.
83. Benign Tumors of the Lung. Secondary Tumors of the Lung.
84. Lung Cancer – Etiology, Epidemiology, Screening, Diagnosis and Staging.
85. Non-Small-Cell Lung Cancer, Carcinoid Tumors, Small-Cell Lung Cancer - Principles of Surgical Therapy.
86. Mediastinal Tumors.
87. Carcinoma of the Esophagus.

88. Tumors of the Pleura, Mesothelioma. Chest wall tumors.
89. Rib Fractures. Posttraumatic Pneumothorax and Hemothorax.
90. Diagnostic methods in cardiac surgery, operative risk stratification
91. Cardiopulmonary bypass – principles, myocardial protection, cerebral protection during arch surgery
92. Complications in cardiac surgery and postoperative care
93. Cardiothoracic surgical incisions, basics principles of open-heart surgery, types of procedures in cardiac surgery
94. Coronary artery disease – coronary artery bypass grafting
95. Structural complications of acute myocardial infarction – surgical therapy
96. Cardiogenic shock, short-term mechanical circulatory support
97. Aortic valve disease – aortic valve replacement and aortic valve repair
98. Mitral and tricuspid valve disease – primary (degenerative) mitral valve regurgitation, functional mitral valve regurgitation, mitral valve stenosis, tricuspid valve regurgitation – mitral valve replacement, mitral and tricuspid valve repair
99. Infective endocarditis – indications and principles of surgical therapy
100. Choice of valve prosthesis in young adults
101. Ascending aorta and aortic arch aneurysm
102. Aortic dissection
103. Cardiac tumors, cardiac injury
104. Heart failure – surgical therapy, long term ventricular assist devices, heart transplantation
105. Malignant melanoma (classification, treatment).
106. Skin flaps and transplants
107. Burns and burn shock (clinical picture, diagnosis, surgical treatment).

108. Deformities of the chest wall: pectus excavatum, pectus carinatum and others (clinical picture, diagnosis, surgical treatment)
109. Congenital lung developmental defects: cystic adenomatoid lung malformation, congenital lobar emphysema, lung sequestration (clinical picture, diagnosis, surgical treatment).
110. Congenital diaphragmatic hernia (clinical picture, diagnosis, surgical treatment)
111. Congenital defects of the abdominal wall: omphalocele, gastroschisis, diastasis of rectus abdominis muscles, prune belly syndrome (clinical picture, diagnosis, surgical treatment).
112. Esophageal atresia (clinical picture, diagnosis, surgical treatment).
113. Esophageal reflux disease (clinical picture, diagnosis, surgical treatment).
114. Hypertrophic pylorostenosis in children (clinical picture, diagnosis, surgical treatment).

115. Congenital anomalies of the bile ducts and pancreas (clinical picture, diagnosis, surgical treatment).
116. Duodenal atresia (clinical picture, diagnosis, surgical treatment).
117. Atresia of the small and large intestine (clinical picture, diagnosis, surgical treatment).
118. Malrotation and volvulus (clinical picture, diagnosis, surgical treatment).
119. Hirschprung's disease (clinical picture, diagnosis, surgical treatment).
120. Anorectal malformations (clinical picture, diagnosis, surgical treatment).
121. Sudden abdominal events in childhood (clinical picture, diagnosis, surgical treatment).
122. Necrotizing enterocolitis in newborns (clinical picture, diagnosis, surgical treatment).
123. Intussusception (clinical picture, diagnosis, surgical treatment).
124. Hernias in childhood: inguinal, umbilical, femoral, in the linea alba (complications of hernias, symptoms, diagnosis and treatment).
125. Birth injuries (clinical picture, diagnosis, surgical treatment).
126. Children's fractures (characteristics, clinical symptoms, diagnosis and treatment) – traumatology
127. Chest injuries in children: pneumothorax, hemothorax, lung contusion, subcutaneous and mediastinal emphysema (clinical picture, diagnosis, surgical treatment).
128. Abdominal injuries in children (clinical picture, diagnosis, surgical treatment).
129. Injury of parenchymatous organs of the abdomen in children - liver, spleen, kidneys (clinical picture, diagnosis, surgical treatment).
130. Foreign bodies in the gastrointestinal tract in children (clinical picture, diagnosis, surgical treatment).
131. Lymphangiomas and hemangiomas in childhood (clinical picture, diagnosis, surgical treatment).