1. Malignant tumors of thyroid gland (clinical features, diagnosis, surgical and non-surgical treatment).
2. Benign diseases of thyroid gland, goiter (classification, pathogenesis, clinical features, diagnosis, TNM classification, surgical treatment and non-surgical treatment).
5. Benign and malignant tumors of small intestine (clinical features, diagnosis, surgical treatment).
8. Malignant tumors of the gallbladder and the bile ducts.
10. Malignant tumors of the liver (clinical features, diagnosis, surgical treatment).
11. Mediastinal tumors (clinical features, diagnosis, surgical treatment).
15. Thrombophlebitis and phlebothrombosis, ileofemoral phlebothrombosis, phleqmasio alba dolens, phleqmasio coerulea dolens (clinical features, diagnosis, surgical treatment).
17. Acute ischemic limb syndrome (traumatic and non-traumatic causes, clinical features, diagnosis, surgical and non-surgical treatment).
18. Parenteral nutrition (principles of indications, preparations, complications).
23. Pulmonary embolism (types, signs and symptoms, diagnosis, surgical and non-surgical treatment, prevention).
24. Malignant tumors of the rectum (clinical features, diagnosis, surgical treatment).
25. Inguinal hernia, femoral hernia, umbilical hernia, linea alba hernia (hernia complications, symptoms, diagnosis and treatment).
26. Diaphragmatic hernia, hiatal hernia, gastroesophageal reflux disease (clinical features, diagnosis, surgical treatment).
28. Premedication and general anesthesia.
29. Inflammatory diseases of the fingers and hand - panaritium (clinical features, diagnosis, surgical treatment).


32. Hemostasis disorder in surgical patients during preoperative and postoperative period and after injury.


34. Anaesthesiology and resuscitation – past and present basic medical profession.

35. Oesophageal diverticula, achalasia, oesophageal strictures (clinical manifestation, diagnostics, surgical treatment).


37. Anorectal fistula, perianal abscess. (clinical manifestation, diagnostics, surgical treatment).


41. Cardiopulmonary resuscitation. Safar scheme of resuscitation procedures.

42. Brain death. Indications and contraindications for removal of organs from cadavers.

43. Chronic pancreatitis and its complications (clinical manifestation, diagnostics, treatment).

44. Occlusive disorders of aortic arch branches (extracranial part of cerebral circulation, steal syndrome), signs and symptoms, diagnostic and therapeutic procedures.

45. Acute abdomen, definition. classification. Basic differential diagnostics characteristics.

46. Mechanical intestinal obstruction - obturation, strangulation. (clinical manifestation, diagnostics, surgical and non-surgical treatment).

47. Ileus of large intestine. (clinical manifestation, diagnostics, surgical treatment).

48. Acute peritonitis (primary and secondary peritonitis, causes, symptomatology diagnostics and treatment).


52. Bleeding from upper part of GIT (causes, symptomatology, differential diagnosis, diagnostic procedures, treatment).

53. Pylorostenosis (congenital, acquired, homeostatic disorders, treatment).

55. Meckel’s diverticulum, duodenal diverticulum, diverticular disease of the large intestine (symptomatology, diagnostics, treatment).

56. Bleeding from lower part of GIT (cause, symptomatology, differential diagnosis, diagnostic procedures, treatment).


58. Cholecystolithiasis and choledocholithiasis (clinical manifestation, diagnostics, complications, surgical treatment).


61. Cholecystitis, cholangitis (causes, signs and symptoms, treatment).

62. Pelveoperitonitis (causes, signs and symptoms, diagnosis, treatment).


64. Differential diagnosis of acute appendicitis in childhood and adulthood. Appendicitis in elderly and gravidity.


67. Retroperitoneal bleeding (traumatic and non-traumatic causes, diagnosis, treatment).


69. Intestinal obstruction – differential diagnosis of different types of intestinal obstruction (signs and symptoms, clinical presentation, diagnosis).


71. Fractures of the ribs, pneumothorax, haemothorax, lungs contusion, subcutaneous and mediastinal emphysema.

72. Multiple injury (definition, first aid, diagnostic principles, priority of therapeutical measures).

73. Traumatic and haemorrhagic shock (pathophysiology, prevention, treatment).

74. Bacteraemia, SIRS, sepsis, septic shock (causes, forms of septic shock, pathophysiology, hemodynamic changes, treatment).

75. Body responses to injury and surgery (metabolic and endocrine changes).

76. Burns (causes, classification, burn shock, burns complications, treatment).

77. Haematoperitoneum (liver and spleen injury).

78. Wounds, classification, phases of the healing. Factors affecting wound’s healing. Principles of wound management. Per primam, per secundam, per tertiam intentionem healing.

79. Blast syndrome, Crush syndrome (clinical manifestation, diagnostics, treatment).

80. Malignant melanoma (classification, treatment).


82. Brain injury (primary and secondary brain injury, diffuse and focal injury, open and closed head trauma, mechanisms of injury, biomechanics and pathophysiology, intracranial hypertension).

83. Posttraumatic intracranial bleeding (epidural haematoma, acute and chronic subdural haematoma).

84. Fractures of skull base and calvarian fractures (types of fractures, frontobasal and temporobasal injuries, fissures and impressive calvarina fractures).
85. Fractures of cervical spine (classification, clinical symptoms, diagnostics, treatment).
86. Fractures of thoracic and lumbar spine (classification, clinical symptoms, diagnostics, treatment).
87. Peripheral nerves injuries (classification, clinical symptoms, diagnostics and treatment).
88. Tumors of spine (primary and secondary, clinical symptoms, diagnostics, treatment).
89. Spinal intradural tumors (classification, clinical symptoms, diagnostics, treatment).
90. Pediatric neurosurgery (hydrocephalus, craniosynostosis, spinal dysraphisms).
91. Nerve compression syndromes of upper extremity.
92. Primary brain tumors (classification, clinical symptoms, diagnostics, treatment).
93. Secondary brain tumors (classification, clinical symptoms, diagnostics, treatment).
94. Intracranial aneurysms (classification, spontaneous subarachnoid bleeding, clinical symptoms, principles of neurointensive care, principles of surgical and endovascular treatment).
95. Arteriovenous malformations of brain (classification, clinical symptoms, diagnostics, principles of treatment).
96. Spontaneous intracerebral and intracerebellar bleeding (causes, clinical symptomatology, diagnostics and treatment).
97. Infectious diseases of brain and calva (meningitis, epidural and subdural empyema, brain abscess).
98. Investigation of the urological patients (Urological history, examination of the patient, laboratory investigations, ultrasound in urology, excretory urography, urodynamic examinations, other imaging modalities in urology).
100. Trauma of the genitourinary tract.
102. Upper urinary tract obstruction (etiology and pathophysiology, diagnosis and treatment).
103. Lower urinary tract obstruction (pathophysiology, examinations, BPH, acute urinary retention, chronic urinary retention, pharmacological treatment of BPH, surgery for BPH).
104. Incontinence of urine (etiology and pathophysiology, urodynamic examination, treatment of incontinence).
105. Neurogenic disorders of the bladder (etiology, pathophysiology, treatment, incontinence in the elderly).
106. Acute scrotum (torsion of the testis, epididymitis, orchitis).
107. Carcinoma of the kidney.
108. Carcinoma of the prostate.
110. Testicular cancers.
111. Acute and chronic renal failure.
112. Urinary diversion, the basic methods.
113. Tumors of the adrenals.
115. Disorders of the scrotum (hydrocele, varicocele, cysts of epididymis).
116. Erectile dysfunction and male infertility.
117. Acute urological events (renal colic, hematuria).
118. Developmental dysplasia of the hip (pathophysiology, diagnosis, clinical features, treatment and prevention).
119. Congenital systemic diseases of the skeleton - Achondroplasia, Osteogenesis imperfecta, Osteopetrosis, Arthrogryposis (clinical signs, diagnosis and treatment).
120. Obtained systemic skeletal diseases - osteoporosis and rachitis, Paget's disease (clinical signs, diagnosis and treatment).
121. Osteoarthritis and aging of the tissue (clinical signs, diagnosis and treatment).
122. Aseptic bone necrosis (clinical signs, diagnosis and treatment).
123. Benign bone, muscle and tendon tumors – (clinical signs, X-ray findings, diagnosis and treatment principles).
124. Malignant tumors of the bones, muscles and tendons – osteosarcoma, chondrosarcoma, Ewing's sarcoma, secondary bone tumors (clinical signs, X-ray finding, diagnosis and treatment principles).
125. Degenerative diseases of the shoulder and elbow joint – bursitis, damage to the rotator cuff and biceps tendon, frozen shoulder, tendinopathies in the area of the elbow.
127. Knee joint diseases – axial deviations, meniscal damage and knee ligament injury, knee osteoarthritis (clinical signs, diagnosis and treatment).
128. Congenital and acquired deformities of the foot – flat feet, bunion, hammer toe, club foot, calcaneovalgus foot (clinical symptoms, diagnosis and treatment).
129. Basic operative methods in orthopedics – osteosynthesis, osteotomy, arthroplasty, amputation (principles, indications).
130. Non-specific inflammation of the bones and joints – osteomyelitis, septic arthritis (classification, clinical presentation, diagnosis and treatment).
131. Injuries and inflammation of muscles and tendons – rupture, tendinopathy (classification, clinical signs, diagnosis and treatment).
132. Fractures in general (classification, pathophysiology, diagnostics, bone healing, principles and types of osteosynthesis).
134. Fractures and luxation of the shoulder joint, scapula and humerus (classification, clinical symptoms, diagnosis and treatment).
135. Fractures of the elbow, forearm and hand (classification, clinical features, diagnosis and treatment).
136. Fractures of the pelvis and the pelvic ring (classification, clinical features, diagnosis and treatment).
137. Proximal femur fractures (classification, clinical features, diagnosis and treatment).
138. Femur shaft fractures and fractures of the knee joint (classification, clinical features, diagnosis and treatment).
139. Fractures of the tibia, ankle and foot bones (classification, clinical features, diagnosis and treatment).
140. Children's fractures (specificities, clinical features, diagnosis and treatment).
141. Fractures in elderly patients (specificities, clinical features, diagnosis and treatment).
142. Chest wall malformations (pectus excavatum, pectus carinatum ...).
143. Malrotation and volvulus.
144. Congenital anomalies of bile ducts and pancreas.
145. Hirschsprung disease and anorectal malformations
146. Congenital abdominal wall defects (omphalocele, gastroschisis, prune belly syndrom, umbilical hernia)
147. Abdominal emergencies in children

149. Local anesthesia.