Topographic anatomy and operative surgery of the anterolateral wall of abdominal wall.

- 1) Topographic anatomy of anterolateral abdominal wall. Projection of organs peritoneal cavity. Types of laparotomies, their anatomical explanation. Laparoscopic surgeries on organs of peritoneal cavity.
- 2) Topographic anatomy of umbilical region. Linea alba, umbilical ring. Topographic and anatomical explanations of medial laparotomies. Surgeries on umbilical hernias and linea alba hernias.
- 3) Topographic anatomy of inguinal region. Groin gap. Inguinal canal. Types of inguinal hernias. Anatomical preconditions of straight and oblique hernia appearance. Steps of inguinal hernia surgical treatment.
- 4) Surgical anatomy of direct and oblique inguinal hernias. Main principles of inguinal canal plastics., possible complications and mistakes.
- 5) Anatomical preconditions for strangulated hernia. Main steps in surgical treatment of strangulated inguinal and femoral hernias. Danger and possible complications. Specific features of treatment of inborn and sliding inguinal hernias.

Topographic anatomy and operative surgery of peritoneal cavity

- 1) Peritoneum, its features. Peritoneum and peritoneal cavity: parts, connection with lesser pelvis. Main marks of peritoneal cavity. Great omentum bordering of inflammatory processes of peritoneal cavity. Revision of peritoneum in case of penetrating wounds.
- 2) Upper part of peritoneal cavity. Excavations and their connections with lower part and their meaning in inflammatory processes and hematomas. Lesser omentum, its content, omental bursa. Surgical approaches to omental bursa and their explanations.

- 3) Lower part of peritoneal cavity. Mesenteric sinuses, lateral canals, their connection with upper part and lesser pelvis. Pouches of lower part. Their meaning in inflammatory processes, hematomas, internal hernias. Gubarev method to find duodenojejunal flexure.
- 4) Surgical anatomy of liver.. Intraorgan topography of blood vessels and biliary ducts (lobar and segmental). Surgical approaches to the liver. Hemostatic suture of liver. Suturing of hepatic wounds. Typical and atypical hepatic resection.
- 5) Surgical anatomy of gallbladder. Surgical approaches to gallbladder. Cholecystectomy, cholecystotomy: indications, methods, steps. Possible complications and danger.
- 6) Surgical anatomy of extrahepatic biliary ducts. Variants of anatomical correlations of common hepatic duct and pancreatic duct. Methods of external and internal drainage of biliary ducts because of obstructive jaundice (cholecysto- and choledochotomy, cholecystojejunostomy, choledochoduodenostomy).
- 7) Surgical anatomy of portal vein. Porto-caval anastomosis. Meaning of splenoportography and transumbilical portography in diagnostics of hepatic disease. Understanding of surgical treatment of portal hypertension.
- 8) Surgical anatomy of stomach. Surgical approaches to stomach. Suturing of perforating ulcers. Understanding of selective vagotomy with draining surgeries in treatment of gastric and duodenal ulcers.
- 9) Gastrotomy. Gastrostomy: indications, types (Vitzel, Stamm-Cader, Toprover, Jukhtin), main steps. possible complications. Gastroenteroanastomosis: types, variants.
- 10) Stomach resection: indications, types. Defining of proximal border in case of minimal resection. Modern modifications of Billroth-1 and Billroth-2.

- 11) Surgical anatomy of duodenum. Usage of duodenum during internal draining surgery on biliary ducts. Meaning of papillosphincterotomy.
- 12) Surgical anatomy of pancreas. Surgical approaches. Operations due to acute pancreatitis, cysts and cancer of caput of pancreas.
- 13) Surgical anatomy of lesser intestine. Resection of lesse intestine. Types of intestinal anastomosis, their clinical and physiological explanation. Usage of intestine in plastic and reconstructive surgeries.
- 14) Surgical anatomy of ileocecal angle. Variants of placement of vermiform process and their clinical meaning. Types of surgical approaches to appendix. Methods to find the caecum and appendix. Appendectomy: methods, steps and possible complications.
- 15) Surgical anatomy of the colon. Colon resection. Colostomy. Imposing artificial anus.
- 16) Surgical anatomy of celiac trunk, superior and inferior mesenteric arteries. Blood supply disorders in organs of peritoneum. Selective angiography and surgeries in case of acute disorder of mesenteric blood supply.
- 17) Intestinal suture. Main types, requirements, features of intestinal sutures. Lamber, Pirogov-Cherni, Albert, Mateshuk, Mikulich, Schmitten, single row uninterrupted sutures. Suturing of gastric and intestinal wounds.

Topographic anatomy and operative surgery of lumbar region and retroperitoneal space

1) Topographic anatomy of lumbar region: borders, layers, weak places. Surgical approaches to kidneys and ureter, their topographic and anatomical meaning.

- 2) Topographic anatomy of retroperitoneal space. Surgical anatomy of lumbar part of aorta, inferior vena cava, nerves, nerve plexuses. Cellular spaces and routes for inflammation spreading and hematoma. Surgery in case of purulent paranephritis.
- 3) Surgical anatomy of kidneys. Types of surgical approaches to kidney. Nephrotomy. Nephrectomy: indications, technique, possible complications.
- 4) Surgical anatomy of ureter. Ureter suture, indications, technique and requirements. Reconstructive and plastic surgeries of ureter.
- 9. Topographic anatomy and operative surgery of lesser pelvis.
 - 1) Topographic anatomy of lesser pelvis. Lateral walls and bottom of lesser pelvis. Openings, canals and their content. Urogenital diaphragm and pelvic diaphragm. its meaning for organ fixation.
 - 2) Topographic anatomy of peritoneal part of lesser pelvis. Anatomical correlations of peritoneum with organs of male and female pelvis, folds and excavations. Clinical meaning of excavations, opening and draining of abscesses of peritoneal part of lesser pelvis.
 - 3) Topographic anatomy of subperitoneal part of lesser pelvis. Fascia and cellular space, routes of inflammatory and urine spreading. Draining of phlegmon of lesser pelvis.
 - 4) Topographic anatomy of subcutaneous part of lesser pelvis (perineum region). Pubic region. Surgical anatomy of testis. Surgery because of cryptorchism and testis hydropsy.
 - 5) Surgical anatomy of urinary bladder and prostate. Puncture of urinary bladder, cystotomy. Types of surgical approaches to prostate.
 - 6) Surgical anatomy of pelvic part of ureter. Anatomical correlation of ureter with organs of lesser pelvis and blood vessels, meaning in case of surgery on lesser pelvis. Surgical approaches to pelvic part of ureter.

- 7) Surgical anatomy of uterus, fallopian tubes, ovaries. Operative approaches to uterus. Tubectomy ectopic pregnancy. Supravaginal uteral amputation.
- 8) Surgical anatomy of rectum: skeletotopy, syntopy, clinical meaning of curves. Fascial sheath of rectum. Anatomical localization of paraproctitis. Incisions in case of paraproctitis.
- 9) Surgical anatomy of rectum. Venous blood drainage, venous plexuses, submucous venous plexus of hemorroidal region. Anatomical predisposition of hemorrhoid arise. Hemorrhoidectomy by Martynov-Rhyzhih.
- 10) Surgical anatomy of rectum. Rectal closure apparatus. Cancer metastasis. Radical surgeries in rectal cancer.