For the research purpose we used bioptates of hernia tissues of 24 patients (aged 60-83,mean 67.47±2.54 yrs.),obtained during the inguinal hernioplasty. Special attention was paid to evaluation of the muscular tissue atrophy and development of cicatrize and inflammatory changes. The following tissues were evaluated:hernia sac, subcutaneous cellular tissue, muscular tissue and, in some cases, preperitoneal cellular fat. Fragments of tissues were preserved and processed in accordance to histological standards.

Principal sings of chronic inflammation of the hernia sac in all 24 patients were studied. In 8 (33.3%) patients isolated inflammation of hernia sac tissues were found, and in 16 (66.7%) patients it was associated with chronic inflammatory changes of hernia-surrounding tissues. In 6 (25.0%)patients with the recurrent inguinal hernias the inflammatory changes of hernia sac and hernia-sarrounding tissues were very pronounced and associated with their cicatrize changes. In all patients pronounced atrophic changes of the muscular tissues were determinated. Use of ʼsuture-freeʼ techniques in elderly patients may greatly reduce inflammatory changes impact on healing, though not providing complete protection.

Inflammatory and cicatrize changes after the suture methods of hernioplasty cause ischemia,atrophic and cicatrize changes in muscles during postoperative period,making these methods of surgery not sufficiently effective.

Rotar O.V.

CHANGES OF INTESTINAL MICROBIOTA AT ACUTE PANCREATITIS

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Gut is recognized as main source of bacterial translocation during severe acute pancreatitis (SAP). Besides other factors changes of intestinal microbiota directly influence on rate of microorganisms spreading from intestine and may serve as prognostic factor of severity pancreatic infection.

To investigate the changes of luminal and mucosal microbiota of gut during SAP. In 70 Wistar rats SAP was induced by intraperitoneal injection of 250 mg/100 g of 20% L-arginine solution twice during 1 hour. Concentration of luminal and mucosal bacteria in colon and distal ileum were investigated during 24-120 hours by bacteriological methods.

In colon amount of autochtonous physiologically useful microflora decreased during all period of SAP: after 72 hours E. feacalis eliminated, after 120 hours Bifidobacteria spp. disappeared and Lactobacteria spp. were found only in 2 from 7 animals. In such condition concentration of autochtonous facultative and allochthonous microorganisms Staphylococcus spp., Clostridia spp., Enterobacteria spp. and Candida spp. reached 3,5-4,5 log CFU/g. In distal ileum concentration of Lactobacteria spp., Bifidobacteria spp., E. feacalis felt from 6,51-6,81 log CFU/g till 3,57-4,8 log CFU/g after 24 hours, and they absolutely disappeared after 48 hours until 7 day. Due to profound deficit of physiologically useful microflora amount of Peptococcus spp., Staphylococcus spp., Clostridia spp. and especially Enterobacteria spp. (Klebsiela, Edvardsiela, Proteus, toxic strains of E. coli.) reached higher level than in colon.

During SAP changes of distal ileal microbiota, especially mucosal, were more significant than in colon. Thus bacterial translocation from distal ileum may occur in a higher level.

Shutka V.Ya.

MODERN METHODS OF TREATMENT OF BRAIN TUMORS

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Brain tumors account for 6 to 8.6% of the total number of human tumors. The aim of our work was to study additional methods of treating brain tumors, namely, modern non-invasive technology of radiation therapy Cyber-knife. Cyber-knife is a modern non-invasive technology of radiation therapy, which allows to provide an alternative to surgery for the localization of gliomas in the median parts of the brain. Although the very name of the method may be associated with a