



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.

ACUTE NECROTIZING PANCREATITIS CLINICAL OUTCOMES AND PROGNOSTIC SIGNIFICANCE OF EXTENT AND LOCATION OF NECROSIS

*Department of General Surgery
Bukovinian State Medical University*

Three subtypes of acute necrotizing pancreatitis (ANP) are defined based on the anatomic area of necrotic involvement: isolated pancreatic necrosis (IPN), peripancreatic necrosis (PPN) and combined pancreatic and peripancreatic necrosis (CPN).

The purpose of our study was to compare clinical outcomes of patients with ANP depending on the extent and location of necrosis. A retrospective analysis of database consisting of 91 patients treated for ANP in the period from 2017 to 2019 was performed. Morphologic features of ANP were assessed according to the Revised Atlanta Classification. Patients were allotted to IPN, PPN and CPN groups depending on the extent and location of necrosis on the computerized tomography according to RAC. Organ failure (OF) was determined using Marshall scoring system. Endpoints of the study were defined as OF, need for open surgical intervention, intensive care unit length of stay (LOS) and mortality.

A total of 22 patients (24.2%) were allotted to IPN group, 16 patients to PPN group (17.6%) and 53 patients (58.2%) to CPN group. OF was diagnosed in 49.1% of patients with CPN, with persistent OF occurring in 26.4% and multiorgan failure developing in 30.2% of patients in the group. In IPN and PPN groups, OF occurred in 13.6% and 31.3% of patients. Open surgical intervention was necessary in 4 patients (18.2%) with IPN, 4 patients (25%) with PPN and 27 patients (50.9%) in CPN group. Relaparotomy was required in 13 patients (24.5%) with CPN, no repeated surgery was required in patients with IPN and PPN. ICU LOS was 1.3 (95% CI, 0.49-3) days for IPN, 3 (95% CI, 1-5) days for PPN and 7.2 (95% CI, 4.1-10.3) days for CPN group ($p=0.022$). Mortality rate was 18.9% in CPN group, no mortality was recorded in IPN and PPN groups.

IPN and PPN yield better clinical outcomes when compared to CPN with significantly lower frequency of OF (13.6% and 31.3% vs 49.1%, $p=0.012$), lower number of operated patients (18.2% and 25% vs 50.9%, $p=0.04$) and mortality rate (0% vs 18.9%, $p=0.015$). Early identification of IPN and PPN may guide therapy choices or serve as a prognostic tool.

Solovay Yu.M.

METHODS AND MEANS OF VECTOR-PARAMETRIC POLARIZATION MICROSCOPY OF POLYCRYSTALLINE FILMS OF RAT BLOOD IN DIFFERENTIAL DIAGNOSIS SEPSIS SEVERITY

*General Surgery Department
Bukovinian State Medical University*

Development and experimental testing of a new digital technique for objective differential diagnosis of septic process severity by statistical analysis of vector-parametric polarization images of laboratory rat blood films. To achieve this goal, we used a set of methods of Stokes polarimetric microscopic examination, parametric, statistical and information analysis of septic changes in the polycrystalline structure of blood films of laboratory rats. An experimental measurement of the coordinate distributions of the fourth parameter of the Stokes vector (crystallization parameter - CP) of digital microscopic images of blood films of laboratory rats was carried out at the location of a laser micropolarimeter, the optical scheme of which is given in scientific papers is presented in our work.

For the purpose of a more detailed study of the polycrystalline structure of rat blood films, we used the following information selection method. From the entire calculated coordinate set of