Treatment of acute pancreatitis with minimally invasive surgery
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**Introduction.** There is a worldwide trend of using of minimally invasive techniques in abdominal surgery. These interventions can significantly reduce the intensity of surgical trauma, avoid the negative aspects of anaesthesia and more economically justified. In patients with acute pancreatitis these operations allows to eliminate liquid collections with minimal risk.

**Materials and methods.** Minimally invasive operations under ultrasound control were performed in 74 patients with acute destructive pancreatitis. Interventions were performed with ultrasound scanners Philips HD-11 XE, Radmir Ultima Pro-30 and Simens Sonoline Sl-50 (convex transducer 2.5 MHz). Fine needle aspirations were run with needles 16-20 G, drainage - with transdermal drainage sets 6-16 F.

**Results.** Puncture-draining intervention in patients with liquid formations of up to 4 weeks were performed in 40 patients over 4 weeks - 34 (signs of infection had 30 of them). Intervention always was performed by "hands free" technique. That allowed achieving covered formations by a curved path. Puncture was performed in liquid formation of small and medium size (24 patients), the content was aspirated and the cavity was washed with an antiseptic solution. In case of more than 500 ml cavity, and purulent contents preference was given to percutaneous drainage. Cavities which contained a large amount of necrotic debris were washed at least 4 times a day. In postoperative period was checked the amount pouring liquid, were run bacteriological and cytological tests, ultrasound monitoring of the cavity.

Drainage time was determined strictly individual and depended on the amount of liquid, term of cavity clearing and the volume of the residual cavity.

This approach allowed to eliminate the cavity in 66 patients in the period from 3 to 9 weeks. In the postoperative period in 5 (6.8%) patients drainage translocated, which required redrainage. Open surgery was performed in 8 (7.9%) patients. There was no lethality.

**Conclusion.** Minimally invasive operations in patients with acute pancreatitis eliminate negative aspects of open surgery, remove toxic effects of liquid formations and lead to elimination of cavernous structures in 89.2%.