IMPROVEMENT OF THE METHOD OF MINI-INVASIVE TREATMENT OF PATIENTS WITH ACUTE PANCREATITIS.

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One of the manifestations of purulent-septic complications in acute pancreatitis is the development of pancreatic and peripancreatic infected necrosis, while the prevalence and location of involved areas of fiber in different patients varies greatly [1]. For a long time in the literature there was an opinion that regardless of the form of acute pancreatitis, the timing of the disease, and the quality of preoperative topical diagnosis of complications, the best is the upper-middle laparotomy, and only after revision of the abdomen, extrahepatic bile ducts, omental sac, pancreas and retroperitoneal cell space can be performed drainage in areas depending on the specific situation [2]. However, with limited abscesses, the use of laparotomy threatens the spread of infection in the abdominal cavity with the development of bacterial-toxic shock and increase the mortality rate [3]. Therefore, in recent years, preference is given to mini-invasive interventions, which are mainly carried out under local anesthesia.

This is a well-known method of percutaneous puncture-drainage intervention under ultrasonic control, in which the drainage of the stiletto abscess is performed by a catheter under sonographic control using drainage type "pig-tail" size 6 - 12 Fr on the Charrier scale [4]. The essence of the method is that after determining the acoustic window and the optimal trajectory, the operating field is treated, under local anesthesia the skin is cut 2 cm long, a drainage channel is formed using a stylet catheter under continuous sonographic control. After removal of the mandrel, the liquid contents are evacuated for examination, and a conductor is inserted into the abscess cavity along the stylet, along which a 6 - 12 Fr "pig-tail" drainage is installed according to the Charrier scale, the cavity is washed with an antiseptic solution, while controlling the location of the drainage by the vortex movement of the liquid, the drainage is fixed to the skin with knotted sutures, apply an aseptic bandage. This method of treatment makes it possible to combine drainage of the abscess and reduce surgical trauma, which is especially important in patients with severe acute pancreatitis with multiple organ failure. The disadvantages of this method are the inability to separate the septal membranes; installation of small diameter drains, which is ineffective in the presence of dense contents in the abscess cavity; difficulties in establishing drainage of sufficient diameter with a narrow puncture route, especially in the right or central right type of pancreatic and peripancreatic
infected necrosis, when the abscess is located in the massif between the walls of the intestine, stomach, intimate location near the main vessels. In addition, according to the literature, this method has a high percentage of complications (from 8% to 35%) in the form of pancreatic fistulas, bleeding, perforation of hollow organs, injuries of the spleen and main vessels.

The proposed model was based on the task of developing a method of minimally invasive treatment of acute pancreatitis by opening and draining pancreatic and peripancreatic infected necrosis with the formation of a drainage canal using a stiletto catheter, under continuous sonographic control, cavity revision, digitoclasis of septal septa followed by installation of a trocar with a diameter of 10 mm and drainage of the abscess by tubular drainage with a diameter of 26 Fr on the Charrier scale, which allows to obtain a new technical result, which is to control the formation of the drainage channel and avoid damage to the main vessels and hollow organs, to separate the septal septa, to establish drainage of sufficient diameter, thereby ensuring adequate drainage of infected necrosis and reduce the incidence of complications in patients with acute pancreatitis.

The proposed method is as follows (Ukrainian patent for utility model #142937 "Method of minimally invasive treatment of acute pancreatitis"). After determining the acoustic window and the optimal trajectory, the treatment of the operating field, under local anesthesia cut the skin length of 2 cm, form a drainage channel using a stylet catheter under continuous sonographic control, liquid contents are evacuated for examination, the cavity is inspected and the septal digitoclasis is performed. A trocar without a mandrel with a diameter of 10 mm is inserted through the canal, a tubular drainage with a diameter of 26 Fr is introduced into the abscess cavity through the trocar according to the Charrier scale, the cavity is washed with an antiseptic solution, at the same time sonographically control the localization of the drainage by the vortex movement of the liquid, the drainage is fixed to the skin with knotted sutures, apply an aseptic bandage.

For the period from 2015 to 2022 in the clinic of the Department of Surgery No 2 Bogomolets National Medical University in 40 patients with acute pancreatitis underwent mini-invasive percutaneous puncture-drainage interventions under ultrasound control. Of these, 21 (52.5%) patients (control group) underwent mini-invasive percutaneous puncture-drainage intervention under ultrasound control, which performed drainage of the abscess with a stylet catheter under sonographic control using drainage type "pig-tail", in 19 (47.5%) patients (main group) the proposed model was used. Two (9.5%) patients of the comparison group developed postoperative complications, namely in one (4.8%) case there was postoperative bleeding, in another (4.8%) perforation of the gastric wall. No complications were observed in the main group of patients in the early and late postoperative periods.

Conclusion. The proposed model makes it possible to reduce the incidence of postoperative complications by 9.5% (p<0.05) and improve the results of surgical treatment of patients with acute pancreatitis.

References:
