Surgical Aspects in the Treatment of Purulent Necrotic Complications of Destructive Pancreatitis

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I. Introduction

In 1952, the Soviet Union surgical schools had single monitoring of acute pancreatitis at their disposal. At this period 400 cases of acute pancreatitis were described. With the development of suppurative-necrotic complications of destructive pancreatitis at the time there was no single tactical and technical approach in treatment programs. But exactly these complications make the greatest difficulty in treatment and are accompanied by high postoperative mortality.

II. Materials And Methods Of Study

Treatment of patients with suppurative-necrotic complications of destructive pancreatitis should be individualized and depend on the mechanisms of development of lesions of the abdominal wall and retroperitoneum, signs of inflammatory response syndrome overall considering prognostic risks of the disease course. Unfortunately, the recommendations of the American medical schools and in accordance with classification of acute pancreatitis in Ukraine (Atlanta, 1992), present a reference to localized forms of acute pancreatitis (infected pancreatic necrosis, pancreatic pseudocyst, and infected abscesses) (1,2).

All complicated forms of acute pancreatitis (with susceptibility to the process spreading) in this reference are absent, although just they are the main problem of the destructive pancreatitis.

Results of surgical treatment of 221 patients operated on suppurative-necrotic complications of destructive pancreatitis are analyzed. Own methods of treatment protected by copyright were applied to 15 patients with various forms of suppurative-necrotic complications of destructive pancreatitis.

III. Results And Their Discussion

Over the last decade a comprehensive program of surgical treatment of suppurative pancreatitis and its suppurative-necrotic complications undergone significant changes, namely, most surgeons abandoned early operations (the first 8-10 days of onset), except in cases of pancreatitis combination with the destructive pancreatitis. Through the introduction into the practice of minimally invasive technologies indications for laparotomy in early periods were reduced even more.

We believe that the main cause of suppurative-necrotic complications of pancreatitis (progression of necrosis), is a secondary infection that develops 3-5 days after drainage (tamponade) of omental bursa because the old methods of "passive" drainage - drainage and the use of tubular gauze pad do not provide adequate cleaning of purulent-necrotic space both in omental bursa and retroperitoneal space.

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Past experience in the treatment of suppurative-necrotic complications of pancreatitis with installation of passive drainage tube for drainage (43.5% of cases) proved that drainage stopped functioning regardless of the extent of purulent-necrotic process. Clinical experience strongly suggests that a single surgical intervention in most cases is not enough because it fails to achieve complete elimination of all necrotic tissue, to arrest the necrotic process and finally clean the abdominal cavity, and the existing at the moment inadequate ways of necrotic foci drainage, which in 45% of cases lead to secondary infection, put a number of urgent tasks that require prompt solution. In this regard the required dynamic control over the course of inflammatory processes for timely adjustment of treatment program and prevention of secondary infection is necessary.

In recent years, in our work we developed a way to use laparoscopic control following the course of inflammation in the omental bursa and simultaneous local therapeutic effect on necrotic suppurative space and use of our own drainage design that allowed us to reduce the number of repeated surgeries and postoperative mortality from 45.2 to 24.1%. Programmable relaparotomy method was used by us in acute pancreatitis in cases
of early intra-abdominal abscesses that do not have "dense" delimited capsule, especially in cases of diffuse peritonitis (mortality - 22.9%). Methods of extended closed lavage of omental bursa are more effective in localized forms of suppurative-necrotic complications (within omental bursa) (mortality - 24.5%).

Methods of "open" treatment of acute pancreatitis through managed laparostomy is indicated for acute pancreatitis complicated by progressive phlegmon in retroperitoneal space with purulent leakage into intraperitoneal space.

IV. Conclusion

1. The imperfection of modern methods of omentalbursa drainage and retroperitoneal space in suppurative-necrotic complications of destructive pancreatitis in 45% of cases contributes to the progression of the process.

2. Surgery of suppurative-necrotic complications of destructive pancreatitis should be completed by drainage of all necrotic areas and ensure adequate removal of purulent exudate and lytic sequestering tissues both of the pancreatic and parapancreatic fibers.

References

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