

Surgical Treatment of Destructive Pancreatitis Complications

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Key words: Obstructive pancreatitis, suppurative-necrotic complications

I. Introduction

Treatment of patients with suppurative-necrotic complications of acute destructive pancreatitis is the most challenging section of modern pancreatology. Today this fact is confirmed by high rates of mortality and the incidence of fatal complications such as infection of parapancreatic tissues, retroperitoneum, prevalent purulent peritonitis (1). The peculiarity of genesis of the disease, the topographic location of the pancreas and cellular spaces of retroperitoneal localization served as the basis for diversity of methods and putting into practice a wide range of operations (1.2). However, data on the results of different surgical schools in the treatment of necrotic complications of destructive pancreatitis remains controversial, which creates certain difficulties for the practical surgeon in selecting the appropriate method of surgical treatment (1).

II. Materials And Methods

This article reflects the 20 - years experience on the issue of clinic work on suppurative-necrotic complications of destructive pancreatitis. Crimean surgery school has experienced the era of 3 decades when new technologies have been introduced, the strict indications from excessive radicalism to absolute restraint in the treatment of destructive pancreatitis have been followed.

Now we can estimate the experience received, emphasize its positive and negative results and work out the best tactical issues for the practical surgeon. We have conducted a retrospective analysis of surgical treatment of 756 patients operated on suppurative - necrotic complications of destructive pancreatitis, including 221 patients treated in the last decade. The diagnosis was verified by the results of ultra-sonography, laparoscopy, intra-operative revision, laboratory criteria of urinalysis, serum, peritoneal exudates, and autopsy results. In recent years all patients with confirmed diagnosis of destructive pancreatitis were treated with intensive conservative therapy, which included an extracorporeal detoxification methods, antibacterial, antiferment, cytostatic therapy, blockers of pancreatic secretion including sandostatin.

The course of disease was assessed by APACHE – 11(prognostic criteria) and estimated scale of domestic surgeons in particular proposed by V. I. Filin (1994) (2,3).

Indications for emergency surgery (the first day of hospitalization, after the intensive care therapy) were: a) diffuse purulent peritonitis phenomena; b) a combination of pancreonecrosis with destructive cholecystitis; c) inability to exclude (using the whole arsenal of diagnostic methods) intra-peritoneal emergency "catastrophe" that requires immediate attention. Emergency surgery (performed in the first 24-72 hours after admission to the hospital for surgery): a) lack of the effect after comprehensive conservative therapy according to the severity of the evaluation scale. The indication for surgery in late periods (the optimal timing for the patient- 18 - 21 days from the date of disease onset): a) development of necrotic suppurative complications (abscess localized by omental bursa and extra-pancreatic area, phlegmon of retroperitoneal area, and etc.).

III. Results And Discussion

V. I. Filin and the APACHE - 11 data in the preoperative period and received objective evaluation data of the severity of the patients state allowed us to strengthen conservative therapy on time and manage patients with endotoxiosis stage (when surgery is undesirable) into the phase of suppurative septic course.

Aim of surgical intervention in suppurative- necrotic complications of destructive pancreatitis was: a)clearing of all present suppurative necrotic foci b) maximum - sparing necro sequestrectomy of destruction cells of pancreas and retroperitoneal space c) localization of adequate drainage of the inflammation foci; d) prevention of secondary contamination of the destruction foci both in the pancreas and parapancreatic and retroperitoneal spaces . To perform the tasks in our practical work we absolutely refused gauze pads that were already a "traffic jam" saturated with pus after 6 hours and installation of passive drainages which were full with necrotic tissue and fibrinous overlay in a day, which in itself led to the secondary contamination. In our practice it was noted in 30 cases out of 34, accounting for 88.2%.

For the purpose to drain purulent necrotic cells we used drainage of our own design which is a foam tubular system. The irrigation system was installed into the inflammation space and simultaneously permanently evacuated pus, besides foam basis of drainage was profusely lubricated with Nitacid ointment and tubular evacuation system was supplied with mechanism providing timely cleaning of drainage passages from sequestration. This technique was used in 15 patients with suppurative-necrotic complications of destructive pancreatitis, limited by omental bursa (10 patients) and spread beyond the retroperitoneal space (5 cases).

In the postoperative period, repeated operations were performed in the absence of positive dynamics in treatment, preservation of endogenous intoxication, multiple organ failure, inadequate drainage of suppurative-necrotic space.

Three of ten patients in the first group needed re-operation, accounting for 30%, and only at the beginning of testing drainage of our own design. The tactics of the patients' management in the second group due to the prevalence of phlegmon in the retroperitoneal space was slightly different - programmable (step-by-step) necro sequestrectomies were performed up to visual assurance of suppurative necrotic spaces being clean. Two surgeries were performed in 4 patients, three operations - in 3 patients and four ones - in 5 patients. Postoperative mortality of 15 patients - 11 survived, 4 died, accounting for 26.6%. The cause of mortality in almost all cases was progressive multiple organ failure on a background of severe concomitant pathology in patients.

IV. Conclusion

1. The sparing surgery at suppurative- necrotic complications of destructive pancreatitis, adequate drainage of inflammation foci on the background of modern intensive therapy allows us to approach relatively acceptable results in postoperative period nowadays.
2. The best solution of the problem in the retroperitoneal phlegmon is programmable (step-by-step) necro sequestrectomies.

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