



## CLOSED ABDOMINAL ORGAN TRAUMA COMPLICATED BY POST-TRAUMATIC PANCREATITIS

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**Annotation:** This article discusses the main points of the clinical course, the difficulties of diagnosis and a number of aspects of the mechanisms of development of acute pancreatitis. The issues of modern diagnosis of acute post-traumatic pancreatitis, complicated by internal bleeding, are considered.

**Keywords:** acute pancreatitis, diagnosis, treatment tactics.

**Relevance.** In recent decades, acute pancreatitis has begun to occupy a leading position in the practice of emergency abdominal surgery, second in frequency only to acute appendicitis [8, 10, 14]. However, despite the progress achieved in diagnosis and management tactics, we have not yet been able to significantly improve the results of its treatment. We can list the main and most typical reasons that cause high mortality, the frequency of complications and disability of patients, which impede tangible progress in the treatment of this disease. Reasons include: untimely detection of necrotizing pancreatitis; untimely assessment of the severity of the disease, its prognosis and untimely initiation of adequate intensive care; a high frequency of early surgical interventions due to diagnostic errors or progressive deterioration of the patient's condition; use of inadequate detoxification methods and antibacterial therapy; the difficulty of distinguishing between a systemic response to inflammation and a purulent process; late detection of purulent complications; limited use of minimally invasive drainage methods; inadequate frequency of planned sanitary relaparotomies; lack of a rehabilitation system for patients who have suffered pancreatic necrosis.

In 1992, a group of experts on the problem of acute pancreatitis adopted in Atlanta (USA) a classification of acute pancreatitis, which distinguishes edematous and necrotizing pancreatitis [1,8,21,20,23,28,32]. Necrotizing pancreatitis can be aseptic and infected. Infected pancreatic necrosis can be presented in the form of purulent pancreatitis, retroperitoneal phlegmon. As a result of an acute disease, a pseudocyst or abscess may form.

Among victims with polytrauma, post-traumatic pancreatitis develops in up to 3.5% of cases, and among people with abdominal trauma in about 20% of cases. Direct injury to the pancreas (PG) is quite rare. According to the literature, this organ is the fourth most common among parenchymal organs affected by trauma [2,11,15,23,26,30]. Most often, in 3–12% of cases, pancreatic injuries occur as a result of blunt abdominal trauma and in approximately 1% of cases with penetrating injuries of the abdominal cavity [1,4,9,13,17,24,29]. Their diagnosis can be difficult and often delayed due to the retroperitoneal localization of the pancreas, the nonspecificity of symptoms, as well as the low sensitivity and informativeness of laboratory and instrumental research methods in the first hours and days after injury [3,5,12,25,33].

In almost all cases, pancreatic necrosis is accompanied by pronounced changes in the abdominal cavity and its organs [6,9,16,27,31]. In the abdominal cavity there may be from 500 to 3000 ml of serous, serous-hemorrhagic or intensely hemorrhagic effusion containing high levels of pancreatic enzymes. The parietal and visceral peritoneum is dull, brightly hyperemic, multiple and confluent foci of fat necrosis and hemorrhages appear in the mesentery and omentum [3,7,16,19,25,29,34].

Acute pancreatitis at all stages of its course can be accompanied by general and local complications. Typical general complications include toxic encephalopathy, effusion pleurisy and pulmonary distress syndrome, acute cardiovascular failure, and hepatic renal failure. To a greater or lesser extent, in acute pancreatitis dysfunction of all these organs is observed, but only in severe forms can we talk about multiple organ failure.

Local complications of acute, mainly necrotizing pancreatitis include enzymatic and subsequently purulent peritonitis, pseudocyst or abscess of the omental bursa, obstructive jaundice, erosive bleeding, as well as external or internal pancreatic fistulas of the pancreas.

One of the severe complications of post-traumatic pancreatitis can be bleeding from vessels located near the pancreas, splenic, mesenteric, and gastroduodenal ligament vessels. It is necessary to strive to find and ligate the damaged vessel; bleeding can be successfully eliminated by endovascular methods of vascular occlusion.

We present our own clinical observations of acute post-traumatic pancreatitis and its treatment.

**The purpose of the study:** describe clinical observations of acute post-traumatic pancreatitis and its treatment.

**Results and discussion:** under our supervision was patient A.Zh., born in 1985, from the anamnesis, about an hour ago he received many blows from various parts of the body as a result of a traffic accident.

Upon admission, complaints of abdominal pain, nausea, vomiting, weakness and dizziness. The patient underwent a set of diagnostic procedures, received primary care, and received consultation from specialists.

Upon examination, the patient's general condition is grave, his consciousness is confused, and he has difficulty answering questions to the point. The skin and excreted mucous membranes are pale. Breathing is spontaneous, vesicular breathing is heard over both lungs. Heart sounds are muffled, there are no murmurs, pulse 98 per minute, A/D - 72/50 mm Hg. The skin of the abdomen in the epigastric region is red; palpation of the abdomen reveals pain throughout the entire abdomen, with a slight increase in the epigastric region. Percussion - dullness of percussion sound in sloping areas of the abdomen. Ultrasound and R-graphy show signs of fluid in the abdominal cavity.

Based on the above data, a preliminary diagnosis was established: "Closed abdominal injury. Internal bleeding. Post-hemorrhagic shock." After emergency preoperative preparation, under intubation anesthesia, an upper-median laparotomy was performed; when the abdominal cavity was opened, about 1.5 liters of blood and blood clots were released, which were evacuated with an electric suction. During the inspection, a bleeding wound was identified from the lesser curvature of the stomach, which was ligated and protected. Upon further inspection, a transverse rupture of the pancreatic parenchyma was discovered in the area of the body, reaching almost half of the organ. After debridement of this wound, a drainage tube was left in the cavity. Upon further inspection, no other pathological changes or

damage were found; after drainage of the abdominal cavity, the wound was sutured in layers. In the postoperative period, the patient received analgesics, sandostatin, antibacterial, infusion-transfusion, restorative, and symptomatic treatment. Enteral nutrition was started in small increments, starting from the 6th day. After stabilization of the somatic condition, he was discharged from the hospital on the 16th day, under the supervision of a doctor at the place of residence. In place of the drainage tube left in the bed of the rupture of the pancreatic parenchyma in the body area, a fistula formed, which closed over the next 2 months.

**Conclusion.** Thus, as a rule, post-traumatic pancreatitis can lead to the development of chronic pancreatitis due to microcirculation disorders, fibrous replacement of foci of necrosis and fistula formation. Therefore, after discharge from the hospital, patients are subject to long-term restorative treatment aimed at normalizing tissue trophism and gland function.

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