

## The Role of Intraluminal Endoscopy in the Diagnosis and Treatment of Fluid Collections in Patients With Acute Pancreatitis

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**Abstract :** Introduction: Acute pancreatitis (AP) is a socially significant problem for public health and continues to be one of the most common causes of hospitalization of patients with pathology of the gastrointestinal tract. It is characterized by high mortality rates, which reaches 62-65% in infected pancreatic necrosis. Aims & Methods: The study group included 63 patients who underwent transluminal drainage (TLD) fluid collection (FC). All patients were performed transabdominal ultrasound, computer tomography of the abdominal cavity and retroperitoneal organs and endoscopic ultrasound (EUS) of the pancreatobiliary zone. The EUS was used as a final diagnostic method to determine the characteristics of FC. The indications for TLD were: the distance between the wall of the hollow organ and the FC was not more than 1 cm, the absence of large vessels on the puncture trajectory (more than 3 mm), and the size of the formation was more than 5 cm. When a homogeneous cavity with clear, even contours was detected, a plastic stent with rounded ends ("double pig tail") was installed. The indication for the installation of a fully covered self-expanding stent was the detection of nonhomogeneous anechoic FC with hyperechoic inclusions and cloudy purulent contents. In patients with necrotic forms after drainage of the purulent cavity, a cystonasal drainage with a diameter of 7Fr was installed in its lumen under X-ray control to sanitize the cavity with a 0.05% aqueous solution of chlorhexidine. Endoscopic necrectomy was performed every 24-48 hours. The plastic stent was removed in 6 month, the fully covered self-expanding stent - in 1 month after the patient was discharged from the hospital. Results: Endoscopic TLD was performed in 63 patients. The FC corresponding to interstitial edematous pancreatitis was detected in 39 (62%) patients who underwent TLD with the installation of a plastic stent with rounded ends. In 24 (38%) patients with necrotic forms of FC, a fully covered self-expanding stent was placed. Communication with the ductal system of the pancreas was found in 5 (7.9%) patients. They underwent pancreaticoduodenal stenting. A complicated postoperative period was noted in 4 (6.3%) cases and was manifested by bleeding from the zone of pancreatogenic destruction. In 2 (3.1%) cases, this required angiography and endovascular embolization a. gastroduodenalis, in 1 (1.6%) case, endoscopic hemostasis was performed by filling the cavity with 4 ml of Hemoblock hemostatic solution. The combination of both methods was used in 1 (1.6%) patient. There was no evidence of recurrent bleeding in these patients. Lethal outcome occurred in 4 patients (6.3%). In 3 (4.7%) patients, the cause of death was multiple organ failure, in 1 (1.6%) - severe nosocomial pneumonia that developed on the 32nd day after drainage. Conclusions: 1. EUS is not only the most important method for diagnosing FC in AP, but also allows you to determine further tactics for their intraluminal drainage. 2. Endoscopic intraluminal drainage of fluid zones in 45.8% of cases is the final minimally invasive method of surgical treatment of large-focal pancreatic necrosis. Disclosure: Nothing to disclose.

**Keywords :** acute pancreatitis, fluid collection, endoscopy surgery, necrectomy, transluminal drainage

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