CASE REPORT

Laparoscopic Transgastric Gastrocystostomy Pancreatic Pseudocyst

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Article presents a laparoscopic cystogastrostomy of pancreatic pseudocysts. Pancreatic pseudocyst is a common complication of acute or chronic pancreatitis. It is treated by drainage. Until the development of laparoscopic method, the only surgical type of treatment was a drainage of pseudocyst into the stomach or intestine by the open surgery. In a recent years, a new procedures of laparoscopic treating of pseudocysts pancreatic were published. Despite of the small number of cases it is legible that this certain method of operative treatment has clear benefits for the patient. Herewith, we present a laparoscopic transgastric cystogastrostomy of the 44-year old woman who was admitted because of acute biliary pancreatitis. She was operated six months after the acute attack. Key words: acute pancreatitis, pseudocyst of pancreatic, transgastric laparoscopic cystogastrostomy.

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1. INTRODUCTION
Pancreatic pseudocysts occur as a complication of acute or chronic pancreatitis (1, 2). Clinical overview and outcome is defined by the Atlantic classification from 1992 (3). Despite to a clear definition, it is still exclusive the most appropriate treatment procedure. Until the development of laparoscopic techniques, surgical drainage of pseudocysts by open surgery was the only method of treatment. In the last few years there are various laparoscopic approaches described in treating of pseudocysts (4, 5, 6). Herewith we present the first transgastric laparoscopic cystogastrostomy of pancreatic pseudocysts done in 2009, in General Hospital “Dr. Josip Bencevic” Slav. Brod.

2. CASE REPORT
Patient 44 years old female, was admitted to the department of surgery under the clinical diagnosis of acute pancreatitis. The laboratory analysis of blood, ultrasound and CT confirmed the acute necrotic body pancreatitis of biliary etiology. She was conservatively treated for 6 weeks and then was treated with the laparoscopic cholecystectomy, performed without complications. Upon postoperative CT of abdomen it was found in the area of pancreatic body and tail, the oval hypodense zone in size of 7.5 x 4.5 cm, of unclear edges, which prevails in favor of the formation of pseudocyst (Figure 1). Beside of occasionally nausea, fatigue, bloating and constipation the patient was in good general condition. Upon the additional CT control of abdomen after 6 monts, it confirms the existence of formed pseudocyst in size of 12.2 x 8.3 cm in the pancreatic body and tail, which compresses the surrounding structures. The patient is recommended for elective surgery.

The operation was performed laparoscopically with general endotracheal anesthesia with complete muscle relaxation and controlled ventilation. The patient was placed in supination position. The operation was done through 3 ports. The first 10 mm trocar through which the laparoscope was brought, was set supraumbilical, right above the navel. Upon that, the second trocar 10/12 mm was set in the right medioclavicular line. The third 5 mm trocar was placed in the left medioclavicular line. After exploration, harmonicus scalpel an incision was performed on the front wall of the stomach with a length of 3-4 cm (Figure 2).

After gastrostomy, prominence of pseudocysts through the back wall of stomach was evident. The ultrasonic scalpel then makes an incision in the back of the stomach edge and adherenced wall of pseudocyst. The content

Figure 1. Pseudocyst of body and tail pancreatis
The formation of gastrocystostomy is described in order (Figure 4).

The size of pseudocysts and its place of occurrence, thickness, presence of water communication with the pancreas and many other factors affect the drainage process (10, 11). By the development of laparoscopic surgery, reducing complications, faster recovery and better outcomes of such surgeries, laparoscopic methods are increasingly replacing conventional surgery. By laparoscopic methods the transgastric cystostomy or retrogastric cystojejunostomy can be performed (12, 13). This type of transgastric drainage is possible in case of pseudocyst with formed edges, which are located along the stomach, and is therefore made safe. Since there is no extensive experiences in laparoscopic treatment of pancreatic pseudocyst, it is still a subject of debate which is a subject of described techniques is safer and have advantages in relation to open surgery (14, 15).

In addition to this type of treating pseudocyst, the minimally invasive approach is an advantage, avoiding laparotomy, which is itself a major surgery (16). Peroral intake of food was started in the second postoperative day. Her stay in the hospital was minimal.

Despite of the growing number of laparoscopic procedures on all intra-abdominal organs, review of recent literature administrate that laparoscopic cystogastrostomy requires a large surgical experience and techniques, but first experiences, as well as our case, demonstrates that laparoscopic surgeries are possible and safe for the patient.

REFERENCES