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Letters to the Editor

Recurrent acute pancreatitis as a long-term complication of congenital choledochal cyst surgery

Key words: Congenital choledochal cyst. Choledochal remnant. Acute pancreatitis.

Dear Editor,

Recurrent acute pancreatitis (RAP) as a long-term complication of congenital choledocal cyst (CCC) surgery is a rare clinical entity whose aetiology and treatment are currently being debated.

Case report

We report the case of a 55-year-old woman who underwent surgery for type IC (as classified by Todani) in 2002. Since 2006, she was hospitalized eight times for acute pancreatitis (Balthazar A-E). She also suffered episodes of recurrent abdominal pain. The CT scan showed pancreatic inflammatory signs and the presence of a residual terminal common bile duct, confirmed by MRCP (Fig. 1). On three occasions, endoscopic papillotomy with curative intent was performed, but it was ineffective. With the emergence of a new episode in early 2011, it was decided to perform surgery. Electively, it was done a complete resection of the intrapancreatic cyst and trans-duodenal sphincteroplasty. Intracystic amylase concentration was 15,420 IU/L. The medical discharge was given on the sixth postoperative day without incident. Histopathological study confirmed

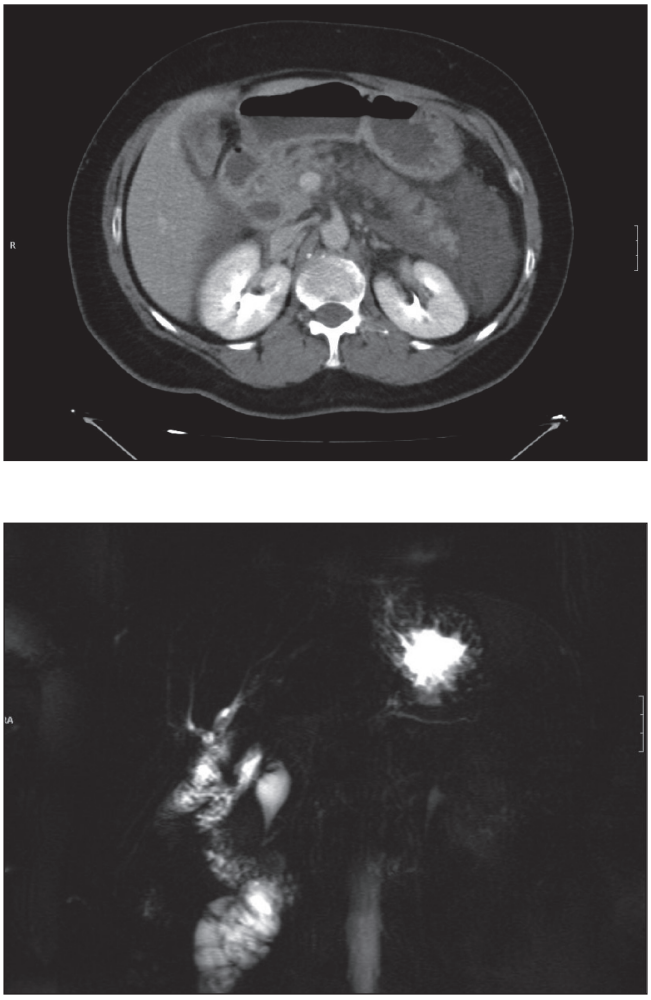

Fig. 1. Abdominal CT scan shows the pancreas with signs of pancreatitis and retroperitoneal exudate and a residual cystic remnant in the head of pancreas. MRCP showing the residual cyst and its adhesion to the Wirsung duct. It also shows the jejunum anastomosed to the bile duct, laterally to the cyst.

chronic inflammation of wall and mucosa with areas of necrosis and foci of carcinoma "in situ".

The patient remains asymptomatic two years after the operation.

Discussion

The CCC is a disease with a low prevalence in the West (1,2). The high concentration of intracystic amylases in our patient supports the Babbitt's theory about its genesis. Its treatment is surgical. The treatment of choice in the type I is the complete resection of the bile duct, from its bifurcation until its intrapancreatic portion plus cholecystectomy and Roux-en-Y hepaticojejunostomy. Postoperative morbidity is below 10 %.

The series with long-term follow-up are limited (2-6), almost all retrospectives. They have shown that once operated, patients are not free of adversity such as RAP, cholangitis, recurrent abdominal pain, portal hypertension and intestinal ulcer, with a re-operative rate of up to 17 %.

The RAP has an incidence ranging between 0-57 %. Its pathogenesis and treatments are controversial. The considered causes are the appearance of protein plugs or pancreatic stones in the duct of Wirsung, or the presence of a residual cystic stump. According to Cho et al. (5), the latter would be the main cause, having one of the following origins (7):

1. Incomplete resection of the intrapancreatic portion of the common bile duct, advised by some surgeons to avoid iatrogenic disease.
2. Hyperpressure in the pancreatic duct due to sphincter of Oddi dysfunction.
3. Obstruction by protein plugs or pancreatic stones.

It is noteworthy the potential risk of malignant degeneration (8).

The review of casuistry shows that the therapeutic experience of this entity is limited and it varies among conservative treatment, endoscopic irrigation to clean protein plugs or stones, endoscopic or surgical papillotomy, residual cyst excision or resection of the head of pancreas with or without duodenal preservation.

The first reference found to cure RAP associated to residual cyst is Yamataka et al. (8) who made an excision of terminal intrapancreatic common bile duct in two patients. This has been the most used option by different authors (4,6,7,9,10).

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