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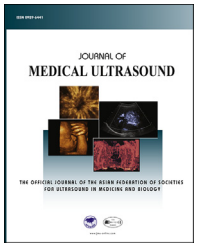

CASE REPORT

Type I Choledochal Cyst Complicated With Acute Hemorrhagic Pancreatitis: A Case Report

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Abstract Choledochal cysts rarely present with acute pancreatitis. We report a patient with type I choledochal cyst(s) who had concomitant acute frank hemorrhagic pancreatitis.

A 14-year-old male noted with a history of recurrent abdominal pain, fever and jaundice. Ultrasonography (US) of abdomen at the Emergency Department depicted distended gall bladder with wall thickening. Apparently dilated intrahepatic ducts (IHDs) and fusiform dilatation of the common bile duct (CBD), and mild dilatation of the pancreatic duct were also noted, suggesting a type I choledochal cyst( ). Computed tomography (CT) demonstrated calcifications in the uncinate process of the pancreas in addition to the similar findings on US. He subsequently underwent choledochal cyst excision with a Roux-en-Y hepaticojejunostomy. After surgical treatment, he has been doing well for 3 years.

Conflict of interest: The authors have no potential conflict of interest.

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Choledochal cyst is one of the most common congenital anomaly of the common bile duct (CBD) [1,2]. The clinical presentations of choledochal cysts vary from patient to patient, and may depend on the patients' age. The symptoms are more subtle and protean in adulthood than in childhood [2,3]. In children, the major manifestations include jaundice, right upper quadrant (RUQ) mass, and intermittent colic abdominal pain [3]. Pancreatitis, although has been described in the literature, is an uncommon complication of choledochal cyst [2—8]. Children may have subtle symptoms or acute pain, the pain can be related to relatively mild pancreatitis; however, acute pain caused by frank hemorrhagic pancreatitis is much rare [4]. We herein report such a case, his disease was diagnosed by using ultrasonography (US) and confirmed by computed tomography (CT) and the subsequent surgery.

Case report

A 14-year-old boy was brought to the emergency department (ED) by his parents, with a chief complaint of intermittent sharp abdominal pain for 2 days. According to the statement of the boy and his parents, he had past experience of frequent abdominal pain and received medication for pain control since 6 years old. Except for his episodes of abdominal pain since childhood, his past history was unremarkable: no diabetes, no hypertension, no hepatitis, no previous history of surgery or allergy. This time, he suffered from more severe sharp abdominal pain than before for two days. Due to increasing intensity of the pain, he was brought to our ED for evaluation. Physical examination revealed tenderness on the right upper quadrant of abdomen with positive Murphy's sign. His abdomen was soft on palpation with normal active bowel sounds. He had no fever, jaundice, nausea or vomiting during the past 2 days. US of abdomen at the ED was done, which depicted distended gall bladder with wall thickening. Apparently dilated intrahepatic ducts (IHDs) and fusiform dilatation of the common bile duct (CBD), and mild dilatation of the pancreatic duct were also noted, suggesting a type I choledochal cyst (Fig. 1). There were evidence of splenomegaly and intraabdominal fluid accumulation in both upper and lower abdomen. Laboratory data reported leukocytosis (WBC: 17,100/ul( ), normal: 4500—10,000/ul), CRP: 0.5 mg/dl (normal: <0.3 mg/dl), amylase: 385 IU/L (normal: 43—116 IU/L), lipase: 643 IU/L (normal: 13—60 IU/

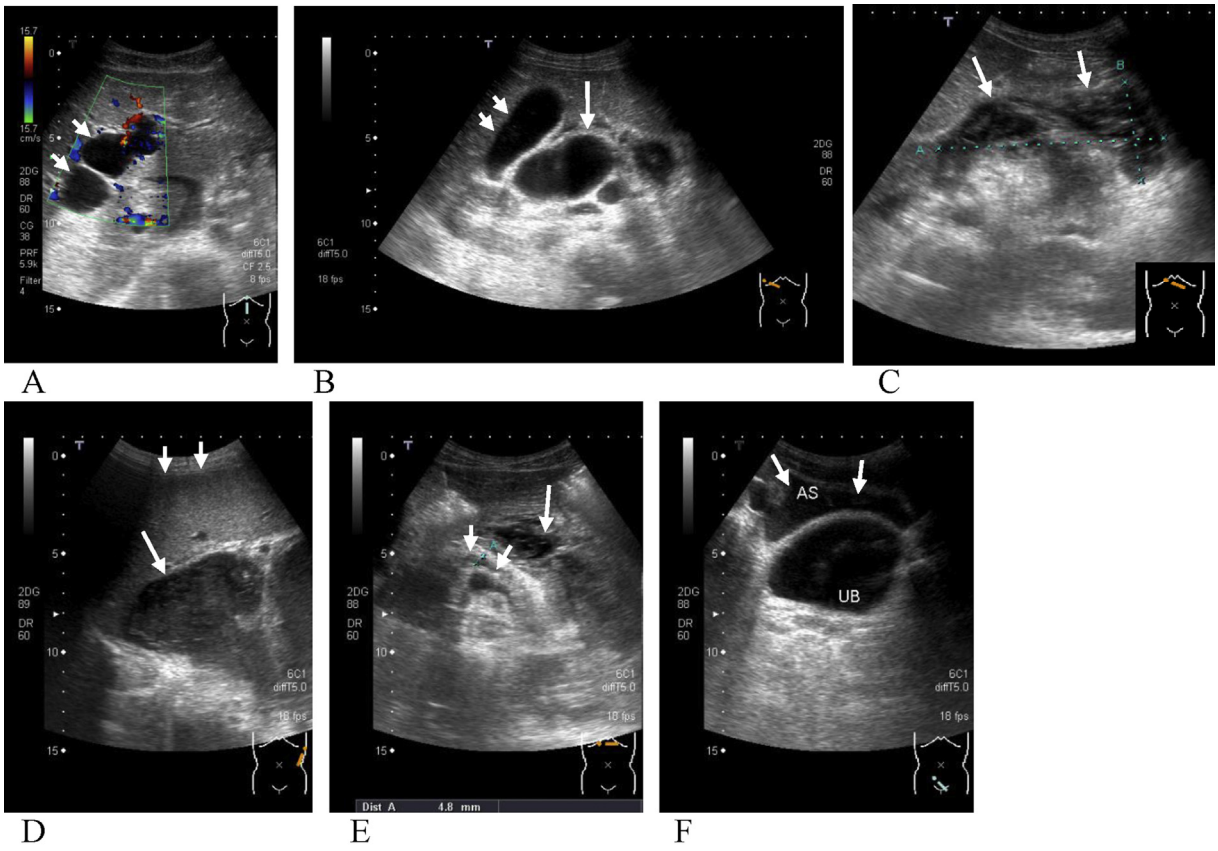

Figure 1 Ultrasonography of the abdomen. (A) Transverse scan of the liver shows dilated IHDs (arrows) in the hilar region (B) Oblique sagittal scan of the right upper abdomen shows mild distention of the gall bladder (small arrows) and apparently dilated CBD (large arrow) (C) Fluid collection in the lesser sac is noted (arrows), surrounding the lateral and inferior margins of the caudate lobe. (D) Similarly, echogenic fluid is evident in the left upper abdomen (large arrow), medial to the spleen (small arrows) (E) The pancreas is essentially in normal size (small arrows), showing mild heterogeneous in echopattern, and associated with mild dilated main pancreatic duct, suggestive of acute (chronic) pancreatitis. Large arrows = lesser sac fluid collection. (F) Pelvic fluid collection (arrows) adjacent to the urinary bladder.