

Choledochal Cyst Presenting As External Biliary Fistula-A Case Report.

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Abstract: Non traumatic perforation of choledochal cyst is a rare entity and can have diverse presentation. A 30 year old male was diagnosed to have liver abscess elsewhere and had undergone open drainage. Postoperatively patient had persistent abdominal pain and investigations revealed bilioma which was drained by Percutaneous catheter. The catheter was draining 500 ml bilious fluid. He underwent further evaluation and provisional diagnosis of iatrogenic bile duct injury was made. During laparotomy , a choledochal cyst was diagnosed and hepatico jejunostomy was done. Post op biopsy was consistent with choledochal cyst.

Keywords: Choledochal cyst- Percutaneous catheter- hepatico jejunostomy

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I. Case Report

A 30 year old male came with a history of abdominal pain for 10 days. He was evaluated for right upper quadrant pain and was diagnosed to have liver abscess and had undergone laparotomy elsewhere, the details of which was not clear. He was continuing to have abdomen pain in the post operative period. He had undergone CT scan abdomen and was found to have bilioma and it was causing dilatation of intrahepatic biliary radicals. Percutaneous catheter drainage had been done using 14 Fr foleys catheter and around 500 ml of frank bile had been drained. He was referred to us with the aforementioned catheter with daily output of 500 ml frank bile for 3 months. On examination he was moderately built ,not icteric, afebrile , adequately hydrated. Had stable vitals, abdomen was soft except for midline scar and percutaneous catheter in right subcostal region. The catheter was still draining 500 ml bile. His total bilirubin was 1.0 mg/dl , direct bilirubin was 0.6 mg/dl, ALT-94 mg/dl, AST-54 mg/dl, SAP- 120 mg/dl. Total count was 7000 cells. MRCP was done which showed normal Intrahepatic biliary radicals, undilated left hepatic duct, right hepatic duct, common hepatic duct. Beyond common hepatic duct, common bile duct could not be visualized. Gall bladder was contracted and catheter was noted in morrison's space. Fistulogram through the Foleys catheter showed contrast flow into the collection with filling up of the proximal biliary tree. On ERCP contrast was flowing into the subhepatic space and into the percutaneous catheter. His upper GI endoscopy and Portal Doppler were normal. He was provisionally diagnosed to have iatrogenic external biliary fistula and planned for laparotomy. During laparotomy; duodenum was found to be densely adherent to the catheter, CBD was found to be dilated to approximately 1.5 cm prompting to a diagnosis of choledochal cyst . Catheter was seen inside the dilated common bile duct. As the choledochal cyst was densely adherent to portal vein, Lilly's procedure was done. Choledochal cyst was transected and Roux en Y hepatico jejunostomy was done. The post operative period was uneventful. He is on regular follow up for 10 months. The histopathology was consistent with choledochal cyst.



Fig 1. Non visualization of common bile duct

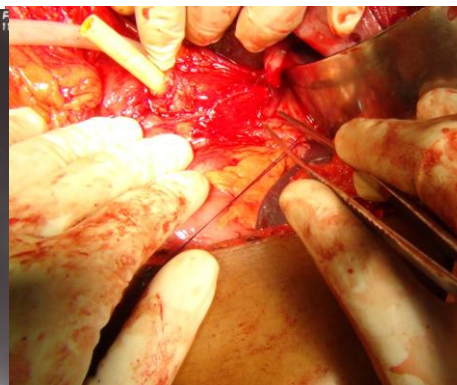


Fig 2. Foleys catheter inside choledochal cyst

II. Discussion

The presentation of choledochal cyst is usually varied in adults. Adults present with abdominal pain and were thought to have pancreatitis and acute biliary tract symptoms prompting cholecystectomy (1). Correct recognition and treatment is mandatory as they may lead to morbidity and mortality.

Spontaneous perforation of choledochal cyst is well documented (2). Non traumatic perforation of bile duct induced by choledochal cyst is extremely rare (3,4) and has high mortality and complication rate (4). Two stage biliary reconstruction has been recommended (5) depending on clinical condition of patient.

Our patient had iatrogenic perforation of choledochal cyst. It created diagnostic dilemma because he was initially diagnosed to have liver abscess and treated for that. Investigations were not revealing anything and patient was normal clinically and biochemically. It was a revelation, only during surgical exploration that the entire problem was due to a perforated choledochal cyst type 1 A. The probable reason for clinical and biochemical well beingness of the patient may be due to the PCD and moderate nourishment of the individual.

III. Conclusion

Iatrogenic injury to choledochal cyst could be avoided if managed by expert surgeons in hepatopancreaticobiliary surgeries. Thorough clinical history along with adequate preoperative evaluation is mandatory for biliary fistulas.

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