ejpmr, 2017,4(8), 567-569

SJIF Impact Factor 4.161

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Case Report

ISSN 2394-3211

EJPMR

TYPE VI CHOLEDOCHAL CYST: A CASE REPORT & REVIEW OF LITERATURE

Girish D. Bakhshi*, Kavita V. Jadhav, Shradha D. Gangawane, Mukund B. Tayade and Rajesh B. Yadav

Department of General Surgery, Grant Government Medical College and Sir J.J. Group of Hospitals, Mumbai-08.

***Corresponding Author: Dr. Girish D. Bakhshi**

Department of General Surgery, Grant Government Medical College and Sir J.J. Group of Hospitals, Mumbai-08.

Article Received on 23/05/2017 **Article Revised on 13/06/2017** **Article Accepted on 04/07/2017**

ABSTRACT

Choledochal cyst is a congenital anomaly of the bile duct. It is cystic dilatation of biliary tree. It usually manifests in first year of life. Its presentation directly in adulthood is rare. It is usually associated with complications in adulthood. According to different classifications, choledochal cysts are mainly of 5 types. Recently, type VI of choledochal cyst has been introduced. It is isolated cystic dilatation of cystic duct. It is rarest amongst all types. Only few reports have been reported. We present a case report of type VI choledochal cyst with review of literature.

KEYWORDS: Biliary anomalies, choledochal cyst.

INTRODUCTION

Choledochal cyst (CDC) is a congenital anomaly presenting as cystic dilatation of biliary tree. It is rare and commonly manifests in childhood. According to Todani classification[1], choledochal cysts are classified into 5 types. Isolated cystic dilatation of cystic duct is rare and is not included in traditional classifications. This as type VI choledochal cyst has been suggested by Serena Serrandel (2). Only few cases of type VI choledochal cyst have been reported in literature.[4,5,6,7] We present a case of type VI choledochal cyst in a 31 years old male.

CASE REPORT

A 31 years old male presented with pain in right hypochondium for 5 months. It was dull aching type of pain relieved by medication temporarily. He also developed burning sensation in epigastrium for 1 month. Patient had no history of jaundice, biliary colic or any other medical illness.

His all routine blood investigations along with liver function tests were within normal limits. Patient was seronegative for viral markers.

Ultrasonography (USG) of abdomen was suggestive of early parenchymal liver disease with grade 2 fatty changes with gall bladder (GB) calculi with no intrahepatic biliary radicals (IHBR) or common bile duct(CBD) dilatation. Repeat target scan for GB was suggestive of distended GB with normal CBD & IHBR with multiple calculi in dialted cystic duct.

Magnetic resonance cholangiopancreaticography (MRCP) showed dilated cystic duct with multiple calculi within with abrupt narrowing of cystic duct at its insertion with common bile duct (CBD) (Fig.1). Thus raised doubt of type VI choledochal cyst i.e. isolated cystic dilatation of cystic duct.

As MRCP was suggestive of abrupt narrowing of dilated cystic duct, cholecystectomy with excision of choledochal cyst was planned. Intraoperatively cystic dilatation of cystic duct was found with normal CBD (Fig.2). Simple cholecystectomy with excision of cystic duct was performed. As there was healthy stump of cystic duct and CBD was normal, bilio-enteric bypass was not performed. Specimen (Fig. 3a & 3b) was sent for histopatholgy examination.

Postoperative course of patient in hospital was uneventful. Histopatholgy examination report of specimen was suggestive of chronic calculus cholelithiasis with dialted cystic duct with inflammation suggestive of Type VI choledochal cyst.

Patient on follow up of 2 years was found to be symptoms and disease free.

Figures

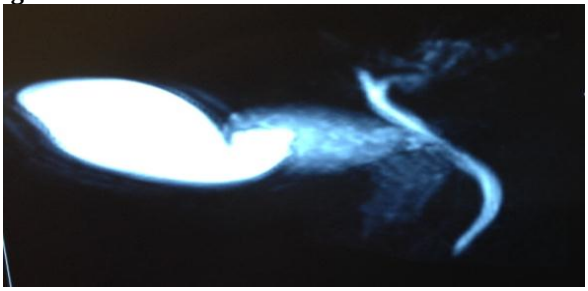


Fig. 1: MRCP showing dilated cystic duct with multiple calculi within with abrupt narrowing of cystic duct at its insertion with CBD

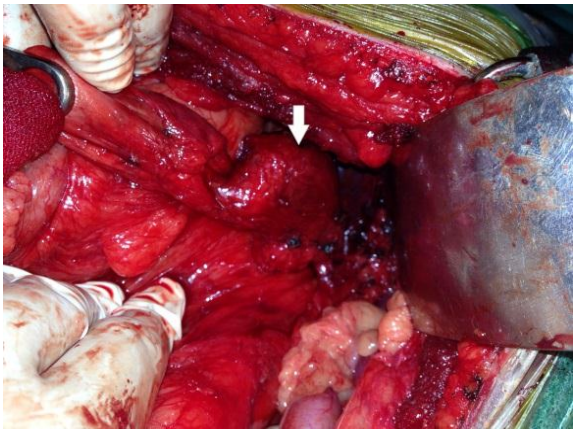
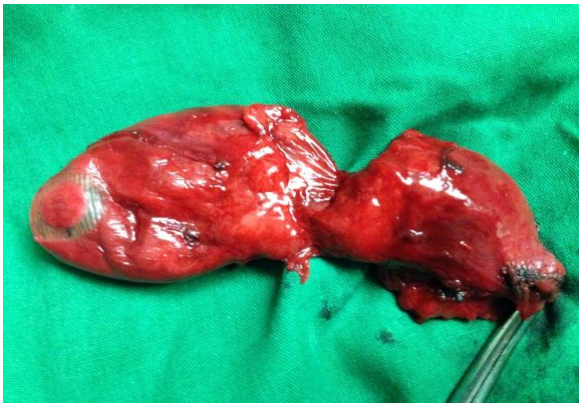


Fig. 2: Intraoperative image showing GB with dialted cystic duct shown with arrow



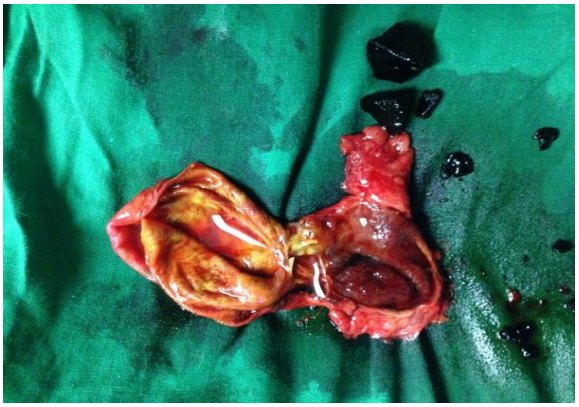


Fig. 3a: Specimen of GB with Type VI choledochal cyst i.e. isolated dilated cystic duct
Fig. 3b: Cut open specimen of GB with type VI CDC with calculi

DISCUSSION

Choledochal cysts(CDC) have been classified into 5 main types as described by Todani et al(1) - a modification of earlier Alonso-Lej classification (3). Serrandel et al (2) proposed for inclusion of type VI CDC in this classification. Type VI CDC is isolated cystic dilatation of cystic duct. it is extremely rare amongst all CDCs. Until now very few cases have been reported in literature.

Shah et al (4) presented a case of type VI CDC in a 10 years old female patient. She was diagnosed preoperatively on MRCP and was managed with cholecystectomy with total excsion of cystic lesion along with common hepatic duct and CBD. Reconsruction was achieved by Roux-en-Y hepaticojejunostomy. In present case, simple cholecystectomy with excision of cystic duct was performed. As there was healthy stump of cystic duct and CBD was normal, bilio-enteric bypass was not performed.

Sharma et al (5) reported a case of type VI CDC in a 20 years old female who was diagnosed preoperatively on MRCP and managed with simple open cholecystecomy with cyst excision. In present case, patient was 31 years old male and was managed similarly.

Ray et al (6) also reported a case of a 23 years old male with type VI CDC suspected preoperatively on imaging and confirmed intraoperatively by laparoscopy. It was excised completely with gall bladder by laparoscopic cholecystectomy. In present case, open procedure was chosen over laparoscopic because MRCP was showing abrupt narrowing of cystic duct and we had suspected need of bilio-enteric anastomosis. Nambiar et al (7) reported a case of Type VI CDC in a male patient of jaundice. On computed tomography, it was diagnosed as dilatation of CBD. Patient underwent laparoscopic converted to open cholecystectomy with excision of CDC of cystic duct. Intraoperatively, it was found to be isolated dilatation of cystic duct with normal CBD.

In present case, a 31 years old male presented with symptoms of dull aching type of pain and burning sensation in epigastrium. Patient had no history of jaundice or recurrent biliary colics. On MRCP, type VI CDC was diagnosed. As cystic dilation of cystic duct was getting abruptly cut off near CBD, open cholecystectomy was planned. Findings were confirmed intra-operatively. Simple cholecystectomy with cystic duct excision was done as stump was healthy and CBD was normal.

CONCLUSION

Dilated cystic duct on ultrasonography can raise a suspicion of type VI choledochal cyst. MRCP plays a key role for diagnosis of such type of choledochal cyst. If it purely isolated cystic dilatation of cystic duct, simple cholecystectomy with complete excision of cystic duct is sufficient. In such cases, laparoscopic approach can be preferred if CBD is absolutely normal.

REFERANCES

1. Todani T, Watanabe Y, Narusue M. Congenital bile duct cysts- Classification, operative procedures and review of 37 cases including cancer arising from choledochal cyst. Am J Surg, 1977; 134: 263-9.
2. Alonso-Lej F, Rever WB, Pessango DJ. Congenital choledochal cyst, with a report of 2, and analysis of 94 cases. Int Abstr Surg, 1959; 108: 1-30.
3. Serradel S, Santamaria LE, Herrera GR. Cystic dilatation of the cystic duct: a new type of biliary cyst. Surgery, 1991; 109: 320–2.
4. Shah OJ, Shera A, Shah P, Robbani I. Cystic Dilatation of the Cystic Duct: a Type VI Biliary Cyst. Indian journal of surgery, 2013; 75: 500–2.
5. Sharma D, Bheerappa N, Thumma VM. Case Report Type VI choledochal cyst: a rare entity case report and review of literature. Int Surg J., 2017; 4: 1129-30.
6. Ray S, Bhat BK, Yadav a, Nundy S. Isolated dilatation of cystic duct - type VI choledochal cyst. J surg case rep., 2017; 4.
7. Nambiar L, Alex A, Siskind E, Shen AW, Fan C. Type VI choledochal cyst - an unusual presentation of jaundice. int J angio, 2016; 25: 263-5.