

Case Report

Type VI choledochal cyst: a rare entity case report and review of literature

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ABSTRACT

Choledochal cysts (CDC) are cystic dilatations of the biliary system, which are usually found in children and uncommon in adults, and type VI choledochal cyst which is isolated cystic dilatation of the cystic duct is a very rare occurrence and only single case reports are documented in the literature. We have reported a case of a young girl who was diagnosed as having Type VI CDC on pre-operative MRCP and found to have the same intraoperatively. She was treated with a simple cholecystectomy with cyst excision.

Keywords: Todani classification, Type VI CDC

INTRODUCTION

Choledochal cyst (CDC) is defined as a cystic dilatation of extra and/or intrahepatic bile ducts is a rare entity, with a reported incidence of 1: 100,000 to 150,000 live births.¹ It is uncommon in the adult age group. Traditionally, choledochal cysts have been classified into five main types as described by Todani et al, a modification of the earlier Alonso-Lej classification.² Type VI choledochal cyst which is isolated cystic dilatation of the cystic duct is a very rare occurrence and only single case reports are documented in the literature. Here, we report such a type of isolated dilatation of the cystic duct in a young woman. This is the 2nd reported case of adult type VI CDC in India to the best of our knowledge.

CASE REPORT

A 20-year-old lady presented to us with 2 months' history of dull aching right hypochondrium pain. There was no history of fever, jaundice, or vomiting. General physical

and abdominal examination revealed no abnormality. Hemogram and liver function tests were within normal limits. Abdominal ultrasonography (USG) demonstrated a hypoechoic cyst (35×40 mm) arising from the common bile duct (CBD), without any apparent dilatation of CBD suggestive of type II choledochal cyst. However Magnetic resonance cholangiopancreatogram (MRCP) revealed a cystic lesion (35×40 mm) arising from the cystic duct with a normal CBD (Figure 1). The right and left hepatic ducts, intrahepatic biliary ducts, and the main pancreatic duct were normal and no abnormal pancreaticobiliary ductal junction was detected. A preoperative diagnosis of Type VI CDC was thus made and the patient was planned for surgery.

Patient was explored by a right subcostal incision. Intra-operatively, a cystic lesion of size 35x40 mm was detected along the lateral wall of CBD and on further dissection it was found to be an isolated cystic dilatation the cystic duct thereby confirming the presence of type VI CDC. CBD was normal with a diameter of 5mm. A simple cholecystectomy with cyst excision was done.

Post-operative recovery was uneventful. Histopathology revealed presence of chronic cholecystitis with cyst wall inflammation.

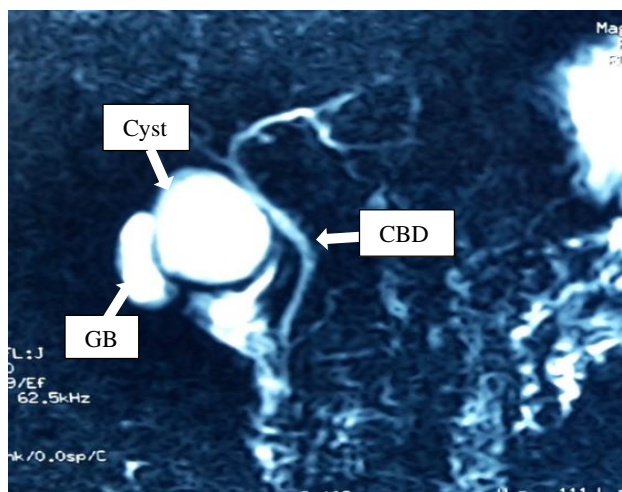


Figure 1: MRCP showing a cystic lesion arising exclusively from cystic duct.

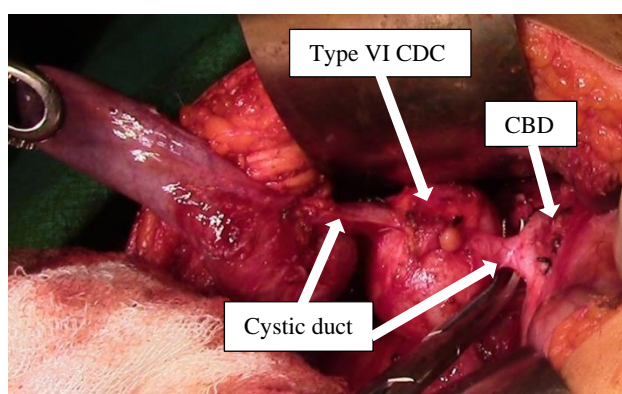


Figure 2: intraop image showing isolated dilatation of cystic duct with normal CBD.

DISCUSSION

Choledochal cyst (CDC) is defined as a cystic dilatation of extra and/or intrahepatic biliary ductal system. Type VI choledochal cyst which is isolated cystic dilatation of the cystic duct is a very rare occurrence and very few case reports are documented in the literature. The widely-accepted classification of Alonso-Lej et al, as modified by Todani et al, does not include the cystic lesions of cystic duct as a separate entity.² Serena Serradel et al proposed the inclusion of such type of cysts as type 6 lesions in the Todani's classification.³ The usual

symptom is upper abdominal pain as present in our patient also. Rarely jaundice may be present due to mass effect of cyst on CBD. Preoperative diagnosis of type VI CDC is difficult. Abdominal ultrasonography is a good initial screening tool. MRCP is highly effective and noninvasive method for evaluating the biliary tree but inspite of these imaging techniques due to the extreme rarity of this condition most cases can be mistaken either as type I or type II CDC, but MRCP was able to accurately detect this condition in our case. Serradel S et al and Bode and Aust had misdiagnosed their cases as type 2 choledochal cysts and Loke et al also mentioned that their case resembled a type 2 choledochal cyst.³⁻⁵ In such situations, only intraoperative findings can confirm the presence of type VI CDC. The recommended surgical treatment for cystic duct cysts is cholecystectomy with excision of the cyst which leads to cure.

CONCLUSION

In conclusion, Type VI adult CDC is an extremely rare condition which requires a high index of suspicion and MRCP co-relation for correct pre-operative diagnosis and a simple cholecystectomy along with cyst excision is the treatment of choice.

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