International Surgery Journal
Kavad HM et al. Int Surg J. 2024 May;11(5):843-845
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: https://dx.doi.org/10.18203/2349-2902.isj20241156

Case Report

A case report on choledochotomy with t-tube in rare case of oriental cholangiohepatitis in 33-year-old male patient

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Received: 15 March 2024
Revised: 15 April 2024
Accepted: 16 April 2024

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ABSTRACT

A 33-year-old male patient presented in OPD with c/o abdominal pain in right hypochondrium since 1 month which is mild in nature and intermittent on and off type and yellowish sclera since 1 year which is gradually increases. On CECT abdomen shows CHD dilated (15 mm) and sludge within it, RHD dilated (15 mm) and sludge within it, LHD dilated (11 mm) and calculus within it. patient is operated with choledocotomy with T-tube insertion in CBD, post operatively patient had significant improvement in clinical symptoms and lab findings also suggestive of better outcome.

Keywords: Oriental cholangiohepatitis, Recurrent bacterial cholangitis, Recurrent pyogenic cholangitis, T-tube, Choledochotomy, Hong-Kong disease

INTRODUCTION

Oriental cholangiohepatitis is most commonly seen in the Asian population, characterised by recurrent bacterial cholangitis and presence of calculi in the intrahepatic bile ducts, biliary strictures and it is associated with an increased risk for cholangiocarcinoma.[1] The therapeutic approach is multidisciplinary and includes antibiotic treatment, endoscopic and percutaneous biliary drainage with stone removal and dilation of strictures, and in selected cases surgical resection of affected liver segments. We report our experience with one relatively young patient with rare condition with Oriental cholangiohepatitis also known as a Hong Kong disease/recurrent bacterial cholamgitis (RPC).

CASE REPORT

A 33-year-old male patient presented in NCHS surgery OPD with c/o abdominal pain in right hypochondrium since 1 month which is mild in nature and intermittent on and off type and yellowish sclera since 1 year which is gradually increases. On ultrasonography GB is severely contracted with hepatomegaly with mild dilated IHBR noted. On CECT abdomen shows CHD dilated (15 mm) and sludge within it, RHD dilated (15 mm) and sludge within it, LHD dilated (11 mm) and calculus within it and CBD measures 6 mm and appear normal.

On MRCP shows multiple fairly large calculi in bilateral hepatic ducts, CHD and proximal CBD with dilatation of proximal CHD, bilateral central and peripheral IHBR noted, segmental atrophy of right lobe of liver involving segments VI and VII of liver with compensatory hypertrophy of segment V and VIII of liver noted. patient operate with choledochotomy with t-tube insertion was performed with stone extract from hepatic ducts and through choledochotpomy site k-90 inserted and saline is flushed and sludge is removed.

Post-operatively patient having bile output of nearly 200 cc from POD-5 every day for around 25 days. On t-tube cholangiography after 10 days of operation bilioma formation with leakage from CBD at site of t-tube noted

but after 25 days of operation on t-tube cholangiography only filling defect in CBD because of residual sludge was seen. Then t-tube removed after 1 month and 2 days and then patient not having any complaint and patient was discharged after 3 days of post t-tube removal.

Figure 1: Intra-operative choledochotomy with t-tube insertion.

Figure 2: T-tube cholangiogram on post-operative day 10.

Figure 3: T-tube cholangiogram on post-operative day 25.

Table 1: Results.

Parameters	Pre-operative investigations	Post-operative investigations
Total bilirubin (mg/dl)	17.2	3.7
ALP (U/l)	1187	242

DISCUSSION

Oriental cholangiohepatitis, an endemic disease mostly seen in Southeast Asia, is characterized by recurrent attacks of abdominal pain, fever, and jaundice. Pathologically, the hepatic ducts (intra and extra) are dilated and contain soft, pigmented stone with pus. There is proliferation of bile ducts along the periportal spaces and hepatic parenchyma.[2]

The role of helminthic infection is not clear yet, but it's thought that chronic infection with *Clonorchis sinensis* and Ascaris lumbricoides associated with the inflammatory process and failed the immune response, allowing for further bacterial translocation, epithelial damage and scarring, and formation of subsequent stricture.[3] Imaging has a major role in diagnosis of RPC. Ultrasonography is the first line investigation.

Abdominal USG in patients with oriental cholangiohepatitis may show intrahepatic and extrahepatic biliary tree dilatation, which is more prominent in central zones. Intraductal calculi may also be visible with variable echogenicity. periportal echogenicity is also seen.[4] Magnetic resonance cholangiopancreatography (MRCP) is the gold standard non-invasive imaging investigation for the diagnosis of oriental cholangiohepatitis.[5]

Definitive treatment of oriental cholangiohepatitis for who resistant to medical treatment comes in the form of biliary decompression. Initially, ERCP is used both to know the extent of disease (biliary tree 'mapping' for future evaluation) and to provide management e.g. stone removal, sphincterotomy, and stent insertion for visible and accessible strictures for more distal obstructions. Percutaneous transhepatic cholangiography (PTC) is better option for peripherally involved obstructed ducts.[6] In severe cases with extensive hepatic parenchymal damage or multiple abscesses, or in the case of cholangiocarcinoma, a partial hepatectomy may be better option. In these cases, cholecystectomy is also done. One single-center study in India looked at surgical outcomes in 94 patients with oriental cholangiohepatitis.[7] Focal hepatic diseases was managed by segmental liver resection and recurrent disease by interventional endoscopy or radiology.[8]

Various studies suggest that disease recurrence is more common inspite of attempts at definitive management.[9]

CONCLUSION

Oriental cholangiohepatitis, also known as Hong Kong in the form of clinical aspect and by investigatidisease, is a chronic disease initially triggered by a parasitic infection that results in biliary tree strictures and multiple stones formation in the intrahepatic and extrahepatic ducts. This leads to biliary stasis which ultimately causes RPC. It is a rare case with highly deranged liver function test with abdominal discomfort can be treated operatively and we can see good outcome one as mentioned above.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Verweij KE, Buuren H. Oriental cholangiohepatitis (recurrent pyogenic cholangitis): a case series from the Netherlands and brief review of the literature. Neth J Med. 2016;74(9):401-5.
2. Lim JH. Oriental cholangiohepatitis: pathologic, clinical, and radiologic features. AJR Am J Roentgenol. 1991;157(1):1-8.
3. Nguyen T, Powell A, Daugherty T. Recurrent pyogenic cholangitis. Dig Dis Sci. 2010;55(1):8-10.
4. Afagh A, Pancu D. Radiologic findings in recurrent pyogenic cholangitis. J Emerg Med. 2004;26(3):343-6.
5. Jain M, Agarwal A. MRCP findings in recurrent pyogenic cholangitis. Eur J Radiol. 2008;66(1):79-83.
6. Jeyarajah DR. Recurrent Pyogenic Cholangitis. Curr Treat Options Gastroenterol. 2004;7(2):91-8.
7. Ray S, Sanyal S, Das K, Ghosh R, Das S, Khamrui S, et al. Outcome of surgery for recurrent pyogenic cholangitis: a single center experience. HPB (Oxford). 2016;18(10):821-6.
8. Wilson MK, Stephen MS, Mathur M, Sheldon D, Storey D. Recurrent pyogenic cholangitis or "oriental cholangiohepatitis' in occidentals: case reports of four patients. Aust N Z J Surg. 1996;66(9):649-52.
9. Chijiiwa K, Yamashita H, Yoshida J, Kuroki S, Tanaka M. Current management and long-term prognosis of hepatolithiasis. Arch Surg. 1995;130(2):194-7.

Cite this article as: Kavad HM, Patel H, Patel T, Astik H. A case report on choledochotomy with t-tube in rare case of oriental cholangiohepatitis in 33-year-old male patient. Int Surg J 2024;11:843-5.