



CHOLECYSTO HEPATIC DUCT; A RARE CASE PRESENTATION

1. FR.C.S
Foundation Hospital,
Rajana, Dist. Toba Tek Singh.
2. F.C.P.S
Senior Registrar
Allied Hospital Faisalabad

Correspondence Address:
Prof. Altaf Hussain Rathore
Foundation Hospital,
Rajana, Dist. Toba Tek Singh.
surgrathore@gmail.com

Article received on:
10/09/2014

Accepted for publication:
27/09/2014

Received after proof reading:
15/12/2014

INTRODUCTION

Embryologically hepatico biliary system starts developing in the fourth week of intrauterine life².

A hepatic diverticulum is developed at the junction fore gut and mid gut. The cranial part of the diverticulum forms CBD and liver and caudal part develops into cystic duct and gallbladder. In the fifth week the GB gets connected with the liver by the subvesical channels called ducts of Luschka³ which usually disappear before birth⁴. In 0.2-20.3% (0.85%) of the cases one of them remain persistent which communicate one of the hepatic ducts and GB and is called cholecysto hepatic duct⁵.

It should be differentiated from the hepatico cystic⁶ or cysto hepatic duct⁷ When Common bile duct gets closed up and hepatic ducts open directly into the GB or cystic duct, and bile drains from the liver via hepatic duct, gall bladder and cystic duct into the duodenum. This is one of the rarest anomaly^{8,9}.

A surgeon performing cholecystectomy, open or laparoscopic should always keep in mind these anomalies specially when there is too much bile is coming out through the drain or there is biliary peritonitis or bilioma after operation. We operated such a case of cholecysto hepatic duct and will discuss our experience and its management.

Prof. Altaf Hussain Rathore¹, Dr. Usman Riaz²

ABSTRACT... A rare congenital anomaly of extra hepatic biliary tract is presented. Its embryology and treatment is discussed. It is concluded that every abdominal surgeon should be aware of such extra hepatic anomaly in detail to avoid prolonged drainage of bile from the drainage tube, even death after cholecystectomy¹.

Key words: Extra hepatic biliary anomalies-cholecysto hepatic duct

Article Citation: Rathore AH, Riaz U. Cholecysto hepatic duct; a rare case presentation. Professional Med J 2014; 21(6):1279-1281.

CASE PRESENTATION

A 35 years old multi parous woman presented to surgical out door of Foundation Hospital, Rajana on 15th, January 2012 with pain in right hypochondrium and vomiting since 5 days. She had similar episodes off and on since last 3 years, but they got better within a week by the conservative treatment. There was no history of jaundice. On examination she was a well built woman, slightly dehydrated. Otherwise medically fit by all parameters. There was slight tenderness and vague lump in right hypochondrium. Her all the laboratory tests were within normal range. Ultrasound confirmed the diagnosis of cholelithiasis with thick wall gall bladder, Common bile duct was normal. She was admitted and rehydrated.

She was given cefotaxim 1gm twice a day as prophylactic antibiotics.

Operation

She was operated on the next day by Kocher's incision. Gall bladder was acute on chronically inflamed, full of gall stone, with soft adhesions. Common bile duct was not dilated. A difficult cholecystectomy was performed. Wound was closed in layers after leaving a tube drain in gall bladder bed.

Post Operative

There was 400-600ml bile drainage from the tube on the first per day which continued for 10 days. We did a tubogram an 11th day which revealed two cholecysto hepatic ducts.



Fig-1. Tubogram for cholecysto hepatic duct. Arrow indicates the cholecysto hepatic duct.

However drainage started decreasing till it was completely dry by 27th day after operation. Her U.S. was performed on the next day which revealed no collection, when drainage tube was removed.

DISCUSSION

Cholecystectomy is one of the most common surgical operation in the world. Minor post operative bile leakage is common after open cholecystectomy though significant bile drainage occurs in 0.5% of the cases¹⁰.

In other words it dries up within 7 to 30 days¹¹. But if it remains copious even after 30 days then one should investigated by ERCP whether it is due to

any surgical misadventure or any anomaly like persistent cholecysto hepatic duct.

This anomaly cannot be diagnosed before operation. However it can be pin pointed during the operation by per operative cholangiogram¹²; which is done as a routine during cholecystectomy in some centers.

Our case is unique that it got diagnosed by a simple test-tubogram. It got dried up spontaneously with out any intervention. Alternately we could have resorted to the endoscopic papilotomy or E.R.C.P. and placement of a stent or nasobiliary drainage of CBD endoscopically; even open hepatico jejunostomy if all the measures would have failed which occurs in 1-3%¹³.

Copyright© 27 Sep, 2014.

REFERENCES

1. Harada N., Sugawara Y., Ishizawa T. et al, **Resection of hepatico cystic duct, a case anomaly: A case report**, J. Med. Case report, 2013, 7:279.
2. Moor KL. Mosby Toronto: 1982. **The Developing Human clinically oriented Embryology 3rd Edition**.
3. Batorfi J, Baranyay F, Simon E, Beznicza h, Kolonics G. **Laparoscopic treatment of bile leakage from the Luschka duct after the laparoscopic cholecystectomy**. Orv Hetil. 2004; 145:1061-4.
4. Hayes, M. A., I. S. Goldenberg and C. C.Bishop: **The Developmental Basis for Bile Duct Anomalies**. Surg., Gynec., & Obst 1958, 107:447.
5. Javors BR, Simmons MZ, Wachsberg RH. **Cholangraphic Demonstration of the Cholecysto hepatic of Luschka**. Abdominal imaging 1998 23(16).
6. Abeysuriya V, Salgado S, Deen KL, Kumarage SK: **Heapticocystic duct and a rare extra-hepatic "cruciate" arterial anastomosis: a case report**. J Med Rep 2008, 2:1.
7. Losanoff JE, Jones JW, Richman BW, Rangnekar NJ: **Hepaticocystic duct: A Rare Anomaly of the Extrahepatic Biliary System**. Clin Anat 2002, 15:314-5.
8. Jaskson JB, Kelly TR: **Cholecystohepatic ducts: case report**. Ann Surg 1964,159:581-584.
9. Robin koushik MS, attri AKMS: **Hepaticocystic Duct-A case report**. The international Journal of surgery 2005, 21:1528-8242.

10. Kihne MJ, Schenken JR, Moor BJ, Karrer FW, **persistent cholecystohepatic ducts**, Arch Surg, 1980;115:972-4.
11. Pisanu A, Altana ML, Piu S, Ussheddu A. **Bile leak from the accessory biliary duct following laparoscopic cholecystectomy**. G Chir. 2003;24:115-8.
12. Champetier J, Letoublon C, Alnaasan I, Charvin B. **The cystohepatic ducts: surgical implications**. Surg Radio Anat. 1991; 13(3):203-11.
13. Sandha GS, Bourke MJ, Haber GB, Kortan PP. **Endoscopic Therapy for bile leak based on a new classification: Results in 207 patients**. Gastrointest Endosc. 2004 Oct;60(4):567-74.

Surgery

4th Edition | Volume-I

TELL ME THE ANSWER



Muhammad Shuja Tahir