UNUSUAL BILIARY FISTULA

Lt Col SN SHIRBUR^{*}, Col H RAMACHANDRAN⁺,
Lt Col S GOKHALE[#], Lt Col JJJ FALLEIROSM

ABSTRACT

Agenesis of gall bladder is a clinical rarity, as most of the diagnoses are made at autopsy. Preoperative diagnosis of this anomaly is fraught with follies. External biliary fistulae are usually result of complications of trauma or biliary surgery. Internal fistulae on the other hand may result from erosion of wall by a stone, cancerous growth or peptic ulcer. Sites of opening of internal fistulae are stomach, duodenum, jejunum, ileum or colon. These should be suspected if gas shadows are seen in biliary tree.

MJAFI 2001; 57 : 167-168

KEY WORDS : Biliary calculi; Choledochogastric fistula; Gall bladder agenesis; Pneumobilia.

Introduction

Congenital absence (agenesis) of gall bladder is a rarity. Autopsy reports indicate an incidence of 0.03%. Absence of intrahepatic vesicle or a left sided organ must be ruled out before making a diagnosis of agenesis [1]. An abnormal connection of any portion of the biliary tree with any other area is called biliary fistula. Common causes of such fistulae are gall stones, peptic ulcers, trauma or neoplasm [2]. External biliary fistulas are always a complication of biliary tract surgery. It usually results due to trauma to the main ducts or leaking anastomosis. Ulceration of a gall stone through the gall bladder wall into the stomach, duodenum or colon may result in internal fistula. In such cases, air shadow in the biliary tract on radiological examination is evident [3]. We are reporting a rare case of gall bladder agenesis with choledochogastric fistula manifesting as cholangitis.

Case Report

A 50 year old woman presented with dyspepsia of two months duration. She had developed fever and localised pain in right upper quadrant of the abdomen since few days. She was anaemic and mildly icteric with hepatomegaly of 2 cm. There were no other systemic or local signs. Investigations revealed her Hb 7.4 g%. TLC 10,500 with 80% polymorph, serum bilirubin was 3 mg%. Radiological examination of chest and abdomen was non contributory, USG was suggestive of small contracted bladder and dilated upper portion of CBD with gas in the biliary tree. An enhanced CT scan revealed hepatomegaly, absence of gall bladder, pneumobilia, dilatation of upper part of CBD and features suggestive of cholangitis (Fig-1).

She did not respond to conservative management with antibiotics and supportive therapy. Fever and jaundice persisted. Possibility of obstruction to biliary flow was entertained. Exploratory laparotomy confirmed absence of gall bladder and dilation of CBD

and hepatic ducts. CBD was adherent to the lesser curvature of stomach. A large fistula communicating between the CBD and stomach was detected (Fig-2). Exploration and irrigation of CBD brought out large quantity of debris and undigested vegetable particles. The fistula was repaired and T tube drainage of the CBD into the duodenum was instituted. Operative T tube cholangiography revealed dye in the hepatic duct, CBD and duodenum (Fig-3). Recovery was uneventful, fever and jaundice subsided. Post operative T tube cholangiography (Fig-4) revealed patency of biliary tract. USG review after 6 weeks revealed patent CBD and hepatic ducts.

Discussion

Agenesis of single organ is uncommon and mostly incompatible with life. Absence of gall bladder is extremely rare. It is considered to be due to genetic predisposition as several family members may be affected [4]. Unfortunately siblings of our case were not available for investigations. Association of primary sclerosing cholangitis and carcinoma of the bile duct

Fig. 1 : Enhanced CT scan reveals hepatomegaly and pneumobilia

^{*}Classified Specialist (Surgery), ⁺Senior Advisor (Surgery), [#]Classified Specialist (Path & Microbiology), ^{**}Classified Specialist (Pathology). Military Hospital Bareilly Cantt (UP) 243 001.

Fig. 2 : Diagrammatic representation of operative finding. Agenesis of gall bladder and choledochogastric fistula

Fig. 3 : Operative T tube cholangiography. Dye in the hepatic duct, CBD and duodenum

with agenesis of gall bladder is known [5]. These pathologies were not found in our case. Pre-operative diagnosis of agenesis of gall bladder in symptomatic cases is fraught with folly. Sonography may suggest small contracted gall bladder while oral cholecystography may fail to visualise the gall bladder. Per operatively, thorough search for gall bladder must be undertaken to exclude the possibility of aberrant location. Per operative cholangiography may resolve the issue [6].

Biliary tract fistulae usually develop between the gall bladder and duodenum but 15% are cholecystocolic fistulae. The fistulous tract may rarely connect the gall bladder with the stomach, jejunum or ileum. Internal biliary fistulae may communicate with the

Fig. 4 : Post operative T tube cholangiography reveals patency of biliary tract

pleural or pericardial cavities, tracheobronchial tree, pregnant uterus, ovarian cysts, renal pelvis or urinary bladder, mostly as a result of erosion by cancerous growth. [1].

This case had agenesis of gall bladder. The choledochogastric fistula could have been associated congenital abnormality or result of earlier erosion by a stone in CBD. Subsequently, blockage of this fistulous tract with food material led to symptoms of cholangitis. Repair of the fistula and provision of drainage of bile into the duodenum has relieved the symptoms and is expected to cure her.

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