CHOLEDOCHODUODENAL FISTULA (CDF): A COMPLICATION OF CHRONIC PEPTIC ULCER DISEASE. A CASE REPORT AND REVIEW OF LITERATURE.

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Abstract

Bilio-enteric fistulas have been reported though not common. They are usually incidental findings during certain investigative procedures. It is mostly associated with gallstones or penetrating abdominal injury. A case of choledochoduodenal fistula (CDF) complicating chronic duodenal ulcer disease picked up on upper gastro-intestinal barium study, is reported.

Introduction

Bilio-enteric fistulas are usually incidental findings during upper gastro-intestinal studies. It is mostly associated with gallstones or penetrating abdominal injuries. Bilio-enteric fistulas particularly involving the first part of the duodenum, in patients with ulcer-like symptoms in the part of the world in which gall stones are rare can either be a complication of malignancy or peptic ulcer disease.

In this report, we would highlight the benefit of high index of suspicion of CDF as a complication of chronic duodenal ulcer (DU) as well as the place of potent ulcer drugs place of surgery in cases without other chronic DU complications. The management of CDF complicating DU has been controversial. However, it has been observed that the use of potent anti-ulcer drugs have resulted in the healing of ulcer as well as closure of the fistula. Endoscopic biliary stenting combined with anti-ulcer drugs tend to fasten healing. Surgery is indicated in those with DU complication with stenosis, haemorrhage or perforation. Majority without these complications heal on conservative treatment with anti-ulcer drugs, surgery is hardly necessary.

Cholecysto-duodenal or enteric fistulas are more common than Choledochoduodenal fistulas (CDF). CDF due to gallstones is rare even in the countries where gall stones are very common. Though the incidence of gallstones is gradually increasing in Nigeria, it is still more prevalent in females than in males. This case report supports the benefit of potent anti-ulcer drugs in the treatment of CDF complicating chronic duodenal ulcer in which there is no other complication of stenosis, haemorrhage, or perforation.

CASE REPORT

A 52-year-old Nigerian male, presented with a history of recurrent upper abdominal pain, which at times radiate, to the right upper abdomen. Pain is worsened by hunger, peppery food and it wakes him up at night. Patient is relieved after eating small amount of food. He called it a "hooking pain". A diagnosis of peptic ulcer disease was made.

Liver function test, Helicobacter Pylori serology and Abdominal Ultrasound were normal. Plain film of the abdomen showed air in the biliary tree, suggesting possibility of a fistula between the bowel and biliary system. This was confirmed by the barium meal which outlined the common bile duct and the intra hepatic biliary channels with barium and a deformed cap. (figure 1-3). A diagnosis of choledochoduodenal-fistula complicating chronic duodenal ulcer disease was made. The patient was treated successfully with anti ulcer drugs. He was seen in the clinic twice in the year for follow-up, without any complaints.

Fig. 1: Plain Abdominal X Ray Air In The Biliary Tree

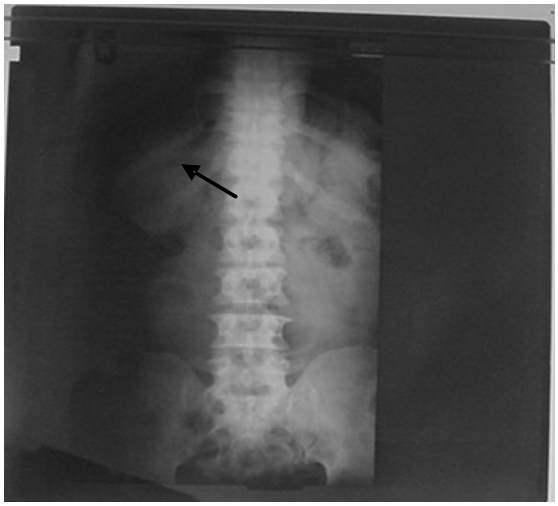


FIG. 2: Barium Meal Shows A Fistulous Tract Connecting The First Part Of The Duodenum With The Biliary Tree.

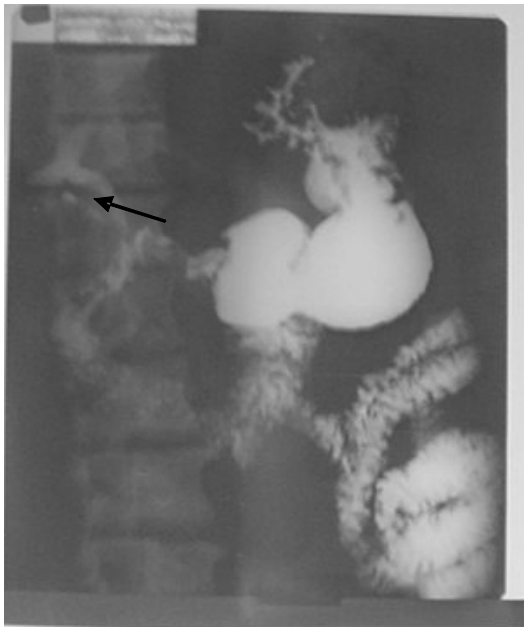
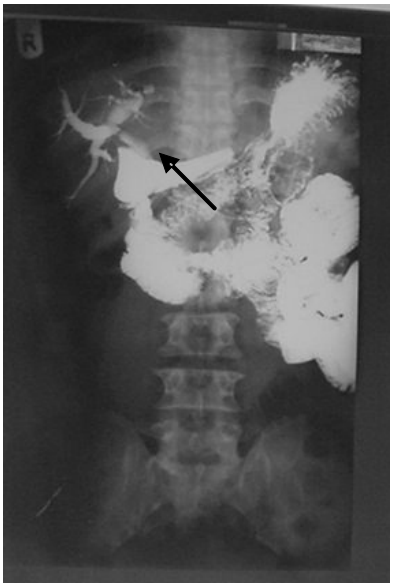


Figure 3
Barium meal radiograph shows a fistulous tract connecting the first part of the duodenum with the biliary tree.



Discussion

Choledocho-duodenal fistula as a complication of chronic duodenal ulcer is rare. It comprises about 4-20% of biliary enteric fistulas whereas cholecystoduodenal fistula comprises about 90%. [1,2,4] It is usually an incidental finding during radiographic studies of the upper gastrointestinal tract in the course of investigating patient with suspected peptic-ulcer disease or biliary diseases. [1,2,6]

Males are affected more than females (3:1) as opposed to fistulas complicating cholelithiasis. It seems to be common, (the reported cases), among people from India, Philippines, China, and has been reported in Nigeria (Africa)[7]. This possibility may be due to poor drug compliance, inability to purchase drugs or drug inefficacy. It is rare in English Literature probably due to availability of potent ulcer healing drugs, or better compliance to drugs.The clinical presentation is not different from those of the peptic ulcer symptoms, unless there are complications of cholangitis or obstruction, which are rare.[5] The incidental demonstration of air in the biliary

tree on plain radiograph of the abdomen or barium in the biliary tract in a person who has not had endoscopic retrograde cholangio pancreaticography ERCP, sphincterotomy or entero- biliary anastomosis gives a high index of suspicion or outright diagnosis of CDF. CDF can be diagnosed on oesophago-gastro-duodenoscopy (OGD). Fistulography can also be performed for proper verification [6,8].

The treatment of uncomplicated CDF is akin to treatment of duodenal ulcer disease with potent anti-ulcer drugs. Majority heal with this conservative treatment and surgery is hardly necessary. [8,9]

Conclusion

Biliary enteric fistula as a complication of chronic duodenal ulcer is rare, and is usually an incidental finding in upper gastrointestinal tract radiological studies. It is gradually disappearing due to the use of potent anti-ulcer drugs. The diagnosis does not change the treatment of the ulcer as healing usually occurs with medical treatment. Surgery is hardly necessary for majority of the cases.

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