Duodenal Diverticula and Their Complications

CF KIIRE

SUMMARY

Duodenal diverticula are rare. A patient with a solitary duodenal diverticulum complicated by apper gastrointestinal haemorrhage is presented. The clinical features and complications of this condition are discussed.

INTRODUCTION

The common form of duodenal diverticula is due to an out-pouching of the duodenal mucosa. Duodenal diverticula are thought to be acquired and occur at points of weakness on the medial duodenal wall. The diverticulum is usually solitary and is seen in two per cent of upper gastrointestinal series. Ninety-six per cent of duodenal diverticula occur in the second part of the duodenum. One such patient is presented.

Department of Medicine, Godfrey Huggins School of Medicine, University of Zimbabwe,

Case report

A 55-year-old African lady presented with a history of epigastric pain, nausea, vomiting and weight-loss for one month. One week prior to admission she had developed malaena. She denied having had haematemesis. There was no history of alcohol or drug ingestion.

On examination she was in a good general condition. The abdomen was soft and non-tender and there was no visceromegaly. Rectal examination revealed malaena stools. The rest of the physical examination was normal.

The barium meal revealed a solitary duodenal diverticulum (Fig. 1). Endoscopy confirmed the presence of a diverticulum in the second part of the duodenum. The mucosa in the diverticulum appeared to be thin and superficial vessels were readily visible. There was no evidence of mucosal erosions, ulceration or active bleeding at the time of endoscopy. Arteriography was considered unnecessary and was not performed.

The patient was offered surgery but she refused and has been lost to follow-up.

FIGURE 1 – Barium meal examination showing diverticulum (arrowed) in the second part of the duodenum



DISCUSSION

Duodenal diverticula are often asymptomatic. When symptoms occur, they consist of pain, nausea, vomiting and weight-loss. When complications occur, however, they are serious and a mortality rate of 33 per cent has been reported.³ Perforation is the commonest complication. The perforation is usually retroperitoneal and sometimes a fistula may develop between the diverticulum and the gall bladder or colon. Haemorrhage is usually severe and results from ulceration of the wall of the diverticulum with erosion of the underlying vessels.

The majority of duodenal diverticula lie in the region of the papilla. Since the common bile duct often terminates in the diverticulum, where it can be obstructed by kinking or by food or enteroliths, obstructive jaundice or pancreatitis can occur. Metabolic complications are rare but bacterial colonization of the diverticulum with or without its attendant complications has been reported.^{4,5}

Surgical treatment is necessary for haemorrhage, perforation or obstruction of the common bile duct. Bleeding is localized by endoscopy and/or arteriography and the diverticulum is excised. When there is obstruction to the common bile duct, a choleduodenostomy is usually carried out. Perforated diverticulum is treated by excision, closure and drainage.

REFERENCES

- Wilk PJ, Mollura J, Danese CA. Jaundice and pancreatitis caused by a duondenal diverticulum. Am J Gastr 1973; 60: 273-9.
- Ohto M, Ono T, Tsuchiya Y et al. Cholangiography and pancreatogrphy. Tokyo: Igaku-Shoin, 1978; 2204-5.
- Munnell ER, Preston WJ. Complications of duodenal diverticula. Arch Surg 1966; 92: 152-6.
- Gorbach SC, Levitan R. Intestinal flora in health and gastrointestinal diseases. In: Glass GBJ, ed. Progress in Gastroenterology. New York: Grune Stratton, 1970; 2: 1110-29.
- Goldstein F, Cozzolino HJ, Wirts CW. Diarrhoea and steatorrhoea due to a solitary duodenal diverticulum: Report of a case. Am J Dig Dis 1963; 8: 937–43.