CASE REPORT

Duodenal Tuberculosis Presenting as Gastric Outlet Obstruction

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Abstract:

A case of duodenal tuberculosis is presented. The case had features of gastric outlet obstruction. Endoscopy showed both the stomach and duodenum dilated and features of duodenitis and gastritis. Endoscopic biopsy showed no abnormality. Histopathological diagnosis of tuberculosis was made after taking nodular tissue from the serosal wall of the duodenum and a mesenteric lymph node. Duodenal tuberculosis should be considered in patients presenting with gastric outlet obstruction especially in areas where tuberculosis is endemic.

Introduction:

Gastrointestinal tuberculosis is an important health problem in developing countries like Bangladesh, India[1]. However, with the spread of the acquired immune deficiency syndrome (AIDS), its incidence in the developed countries is also on the rise[1,2]. Ileo-caecal and ileal are the usual forms seen in gastro-intestinal tuberculosis. In the recent years, more and more cases of gastroduodenal tuberculosis are being reported. In areas, where tuberculosis is endemic, diagnosis of duodenal tuberculosis must be kept in mind, particularly in patients with upper gastro-intestinal obstruction and in those with features of gastric outlet obstruction.

Case report:

A 30 year old woman was admitted into surgical unit-3, Bangabandhu Sheikh Mujib Medical University with the features of gastric outlet obstruction of two months duration. Upper gastrointestinal endoscopy showed a dilated stomach and the duodenum was also dilated up to second part. Barium meal X-ray of stomach and duodenum also showed the same findings and there was a stricture in the third part of the duodenum. X-ray chest showed no abnormality.

Ultrasound of the abdomen revealed multiple mesenteric lymph nodes. Laparotomy revealed a dilated stomach and dilated duodenum up to second part with a stricture in the third part of the duodenum. There were multiple soft caseating nodes in the mesentery and there were also small nodules on the serosal surface of the duodenum. Biopsy of the nodules from the serosal surface of the duodenum and messenteric lymph nodes showed tuberculosis. Duodeno-jejunostomy was done in this case and anti-TB drugs were given for six months postoperatively. Follow up endoscopy and barium meal X-ray done after six months showed no features of obstruction.

Discussion:

Gastrointestinal tuberculosis is still rampant in developing countries and can mimic other gastrointestinal disorders. Isolated duodenal tuberculosis, without involvement of other parts of the gastrointestinal tract does occur, though infrequently[1]. The presentation of duodenal tuberculosis is varied, the commonest being gastric outlet obstruction[2,3,4].

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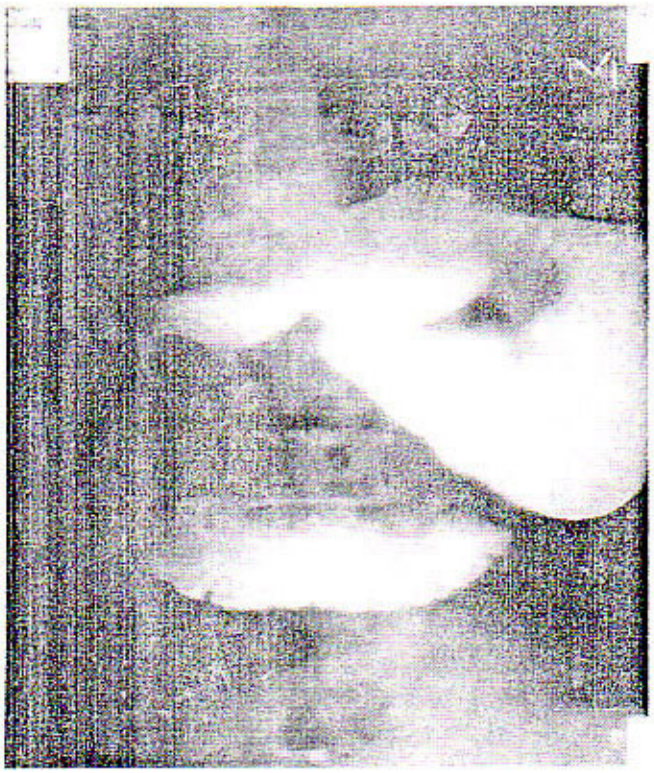

Figure- 1: Barium meal X-ray showing duodenal obstruction.

It may present as an acute emergency with bleeding or duodenal perforation. Obstructive jaundice may follow duodenal tuberculosis. The total number of cases reported till date is only about 50. Most of the literature on duodenal tuberculosis is from tropical countries, especially India and South East Asia. There have been only occasional case reports from western countries like Italy[4], Spain[5], Germany[6] and Canada[7].

Proximal duodenal obstruction due to tuberculosis can masquerade as duodenal ulcer[2]. Although the commonest cause of duodenal obstruction is still post-ulcer stenosis, atypical presentation of primary aorto-duodenal fistula caused by duodenal tuberculosis without an abdominal aortic aneurysm has been reported as an occasional case of pyloro-duodenal fistula[8].

Treatment in duodenal tuberculosis has been directed at the specific complication during presentation followed by appropriate antitubercular therapy[9]. The case reported here presented with features of gastric outlet obstruction with no evidence of pulmonary tuberculosis. Duodeno-jejunostomy was performed in this case.

Duodenal tuberculosis is indeed a diagnostic challenge. Clinical evaluation, radiology and endoscopy[10,11] are important modalities for diagnosis but they do have limitations. Despite the availability of above modalities, sometimes it is extremely difficult to make a diagnosis and surgical intervention is required. Surgery is primarily directed at the presenting complication followed by a full course of anti-tubercular therapy. The importance of duodenal tuberculosis as a possible diagnosis in cases of gastric outlet obstruction in endemic areas of tuberculosis is hereby stressed.

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