Atypical Presentation of Duodenal Tuberculosis

Tuberculous involvement of the peritoneum and gastrointestinal tract is now a relatively infrequent disease in western countries (1). The most frequent site of intestinal involvement is the ileocecal valve, with very rare reports of duodenal- and gastric-segment involvement (2).

Case Report: A 29-year-old black man sought medical attention ten months before admission to our hospital because of epigastric pain. He was treated with omeprazol and antiacids without improvement. He was referred to our center six months later, still having persistent abdominal pain, abdominal distension, anorexia and weight loss. The Mantoux (2 UI PPD) test was anergic. Human immunodeficiency virus titer was negative. Chest X-ray was normal. An upper barium study demonstrated a normal stomach with a fixated postbulbar region with spiculation of the folds and five fistulous tracts arising from the wall of the duodenum without communication to any near organ (Figure **1**). Gastroscopy revealed an irregular ulcer of the lesser curvature in the distal stomach and five holes with apparent fistulous aspect, arising in the first part of the duodenum (Figure **2**). Histology showed caseating granulomata but no acid-alcohol-fast bacillus was found. Computed tomographic scan showed enlarged peripancreatic and mesenteric lymphs nodes, thickened peritoneal wall and high density ascites. Laparoscopy showed multiple white nodes ("miliary nodules") scattered over the visceral and parietal peritoneum. The Fite Faraco and auramine-rhodamine results were positive, and mycobacterium tuberculosis was grown from the peritoneal nodules. After nine months of antituberculous therapy, the patient remains asymptomatic.

Duodenal and gastric tuberculosis can mimic a variety of other abdominal disorders (3, 4, 5). Our patient showed a gastroduodenal tuberculosis with a gastric ulcer and multiple fistulous tracts arising from the duodenum, without communication to any organ and without clinical manifestations of obstruction. When intestinal tuberculosis causes fistulas, it arises between the duodenum and such neighboring structures as the renal pelvis, aorta, colon or bile duct. However blind fistulas are exceptional in the duodenum. The differential diagnosis includes Crohn's disease and rare duodenogastric infections such as syphilis (1). The finding of numerous whitish nodules scattered around the peritoneal surface with laparoscopy is very characteristic of this disease (1). Standard therapy with antituberculous drugs is effective, and surgery is reserved only for complications or uncertainty in diagnosis.

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Figure 1: An upper barium study demonstrated a normal stomach with a fixated postbulbar region with spiculation of the folds and multiple fistulous tracts arising from the wall of the duodenum without communication to any near organ.

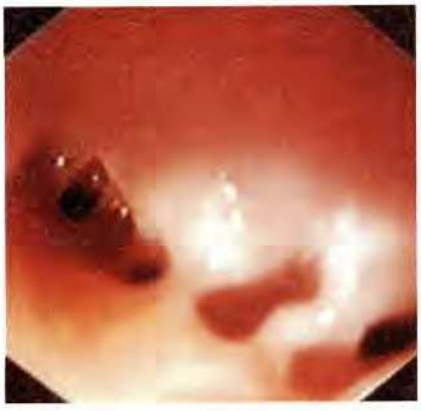

Figure 2: Gastroscopy revealed five holes with apparent fistulous aspect, arising in the first part of the duodenum.

References

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