UNUSUAL SITES OF GASTRO-INTESTINAL TUBERCULOSIS

(A Report of 2 cases)

Lt Col ATUL K SHARMA*, Maj SUNIL ARORA+,
Maj HARDEEP S BINDRA#, Maj MANJEET S BINDRA**

ABSTRACT

Tuberculosis of the stomach and colon is rare, and there are no pathognomonic clinical, radiological or gross morphological features. Unless facilities for endoscopic biopsy are available surgical intervention is required to clinch the diagnosis and to treat the complications. One case each of gastric and colonic tuberculosis is reported.

MJAFI 1994; 50 : 227-229

KEY WORDS : Gastric tuberculosis; Colonic tuberculosis.

Introduction

Gastric tuberculosis is rare, being seen only in 0.5 to 1% of patients with abdominal tuberculosis [1,2]. Isolated segmental or extensive lesions of the colon, without enteritis or involvement of the ano-rectum is found in only 1 to 3% of patients with gastro-intestinal tuberculosis [3,4].

A case each, of gastric and colonic tuberculosis is reported.

CASE REPORTS

Case One

A 35 years old female, presented with epigastric pain, postprandial fullness and self induced vomiting of 3 years duration. There was no heartburn, waterbrash, haematemesis or melena. She had been treated with H-2 receptor antagonists with no relief. Clinical examination did not reveal any abnormality except for tenderness at the duodenal point. Investigations revealed relative lymphocytosis; stools were negative for occult blood. Chest radiography and ultrasound scan [USS] did not reveal any abnormality. Barium meal examination showed a persistent annular filling defect in the pre-pyloric region of the stomach, infiltrating the head of pancreas (Fig. 1A). Supra-pyloric lymph nodes were enlarged, firm and discrete. Pyloric canal was narrowed. A Bilroth II partial gastrectomy and cholecysto-jejunostomy was performed. Histopathology revealed a granulomatous lesion of the pylorus with evidence of caseation, epithelioid cells and Langhan's giant cells in all layers of the stomach wall and the lymph nodes (Fig 1B). With a final diagnosis of tuberculous stricture of the pylorus, she was put on

Fig. 1A Tuberculosis of the stomach : Annular filling defect in the prepyloric region.

Fig. 1B Granulomatous lesion with epithelioid cells and Langhans's giant cells.

* Classified Specialist (Surgery), + Classified Specialist (Pathology), # Graded Specialist (Surgery), ** Graded Specialist (Pathology), Command Hospital (WC) Chandimandir - 134 107.

anti-tubercular chemotherapy for 7 months and had an uneventful recovery.

Case Two

A 57 years old female, presented with distention of abdomen off and on, of one year; progressive constipation of 6 months; and a lump in the right lower abdomen of 3 months duration. She was poorly nourished, pale and had no lymphadenopathy. A firm, globular, non-tender, freely mobile mass, 8 x 10 cm, was palpable in the right iliac fossa. There was no hepato-splenomegaly or ascites. Investigations revealed, hemoglobin 9.5 gm/dl; total leukocyte count of 9000/cmm; differential leukocyte count P 39, L 56, E 4, M 1; and an erythrocytic sedimentation rate of 10 mm fall in first hour. Occult blood was present in the stools. Chest radiography showed a calcified lesion in the left upper zone suggestive of old healed pulmonary tuberculosis. Barium enema revealed a 10 cm long stricture in the right transverse colon (Fig 2) and the USS did not show any mass lesions in the liver or free fluid in the peritoneal cavity. With a provisional diagnosis of carcinoma transverse colon, an exploratory laparotomy was done which confirmed the site of the mass. Firm discrete lymph nodes were present in the mesocolon and the gastrocolic omentum. There

Fig. 2 Barium enema showing a 10 cm long stricture in the transverse colon.

were no peritoneal seedlings or serosal tubercles. A physiological resection of the transverse colon along with the mesocolon and gastro-colic omentum was performed. Histopathology revealed a non-caseating granulomatous lesion of the transverse colon but the lymph nodes revealed typical tubercles with central caseation surrounded by epithelioid and Langhan's giant cells. With a final diagnosis of tuberculous stricture of transverse colon she was put on anti-tubercular chemotherapy for 7 months and had an uneventful recovery.

Discussion

Gastric tuberculosis commonly involves the lesser curvature and the antrum, in the form of solitary or multiple ulcers or as a non-ulcerative granulomatous mass and may present as pyloric obstruction, perforation, or rarely haematemesis. Not only is differentiation from peptic ulcers, chronic gastritis and carcinoma of the stomach difficult, 10% of these patients have co-existent gastric carcinoma [5]. Radiological features are non-specific but the simultaneous involvement of pylorus and duodenum are suggestive of a tubercular pathology. Endoscopic biopsy may obviate the need for a laparotomy [1].

In colonic tuberculosis, symptoms depend upon the segment involved, constipation being frequent with proximal involvement, diarrhoea alternating with constipation being more common when the disease involves the left colon. Tenderness, lump and intestinal obstruction are the usual presentations. Sigmoid and transverse colon are the most common sites. Occult blood is frequently present in the stools but stool cultures for acid fast bacilli are time consuming and unreliable [6]. In the absence of ileal involvement, there are no pathognomonic radiological or gross morphological features to distinguish the strictures or ulcero-hypertrophic lesions, of colonic tuberculosis from those of malignancy or Crohn's disease except for the multiplicity of lesions when present, and their dissimilarity [3,4,7]. A negative colonoscopic or laparoscopic biopsy does not rule out the disease as the typical caseating granulomata may be present in the lymphnodes only, the colon showing non-specific changes [4,8].

Both gastric and colonic tuberculosis respond well to chemotherapy [9], and

resectional surgery should be considered only to treat the complications such as pyloric or intestinal obstruction, haemorrhage or perforation [1]. However, because of the difficulty in distinguishing these lesions from malignancy by non-invasive means these patients almost invariably have to be explored [10]. In lesions difficult to distinguish from malignancy on exploration a radical resection is advised [6].

REFERENCES

1. Gupta NM, Chaudhary A, Talwar BL, Gastro-duodenal tuberculosis. *Indian Journal of Surgery* 1989; 51 : 19-24.
2. Mishra RC, Aggarwal SK, Prakash P, Saha MM, Gupta PS. Gastric tuberculosis. *Endoscopy* 1982; 14 : 235-7.
3. Chawala S, Mukerjee P, Bery K. Segmental tuberculosis of the colon; A report of 10 cases. *Clin Radiol* 1971; 22 : 104-9.
4. Tandon HD, Praksh A. Pathology of Intestinal tuberculosis and its distinction from Crohn's disease. *Gut* 1972; 13 : 260-9.
5. Palmer ED, Tuberculosis of stomach and stomach in tuberculosis - review with particular reference to gross pathology and gastroscopic diagnosis. *Amer Rev Tuberc & Pulm Dis* 1950; 61 : 116-30.
6. Pujari BD, Experience with tuberculosis of the large bowel. *Indian Journal of Surgery* 1989; 51 : 57-63.
7. Tabrisky J, Lindstrom RR, Peters R, Lachman RS. Tuberculous enteritis - Review of a protean disease. *Amer J Gastroenterol* 1975; 63 : 49-57.
8. Das P, Kumar P, Gupta CK. Clinical patterns of abdominal tuberculosis. *Amer J Proctol* 1975; 26 : 75-86.
9. Chuttani HK. Intestinal tuberculosis. In : Card WI, Creamer B, eds. *Modern Trends in Gastro-enterology*, London : Butterworths, 1970; 308-27.
10. Pujari BD. Modified surgical procedure in intestinal tuberculosis. *B J Surg* 1979; 66 : 180-1.