

GASTRIC TUBERCULOSIS*

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Tuberculosis of the stomach is a rare condition and is usually secondary to tuberculosis elsewhere, often of the lung, but it may be secondary to intestinal tuberculosis.¹ Gastric tuberculosis may present without evidence of pulmonary tuberculosis.²

The association of pulmonary and gastro-intestinal tuberculosis has been a common autopsy finding and in a series of cases quoted by Abrams and Holden,² and carried out by Rhoades *et al.*, 883 cases of pulmonary tuberculosis were found to have gastro-intestinal tuberculosis in 56.6% of cases. In another series reported by the same authors,² 70.4% of patients in a series of 1,043 had intestinal tuberculosis. Abrams and Holden,² quoting Jordan and De Bakey, indicated that in a series of cases of pulmonary tuberculosis there was gastro-intestinal involvement in 65-90% of cases.

However, despite autopsy findings, only a small percentage of patients complain of gastro-intestinal symptoms.

According to Mitchell and Bristol,³ 5,529 patients with pulmonary tuberculosis were subjected to barium-meal examinations. Of 1,429 patients with slight changes of pulmonary tuberculosis, only 14 had changes of tuberculous enteritis. Of 3,362 patients with moderately advanced changes of pulmonary tuberculosis, 150 had evidence of gastro-intestinal tuberculosis, while 182 out of 738 patients with far-advanced pulmonary tuberculosis showed gastro-intestinal involvement.

They also demonstrated that gastro-intestinal tuberculosis was far commoner in the presence of pulmonary cavitation with positive sputa tests for tuberculosis.

The incidence of gastro-intestinal tuberculosis is decreasing, mainly due to the effectiveness of antituberculosis therapy, but cases sometimes occur, especially in the less privileged members of our population.

CASE REPORTS

Case 1

A Bantu male, aged 48 years, complained of difficulty in swallowing liquids and solids for 5 months. He usually vomited shortly after eating, and had had intermittent epigastric pain, stabbing in nature, also for 5 months. He had

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lost a considerable amount of weight.

The previous history was of no significance. On examination, he was dehydrated, with evidence of a considerable loss of weight. He had a succussion splash and was slightly tender in the upper abdomen.

Clinical examination showed no further abnormality, but the results of a chest radiograph and barium meal showed that there was some segmental consolidation in the right upper lobe apex, which was likely to be tuberculous in nature.

There was no evidence of a lesion in the oesophagus or body of the stomach. In the region of the pylorus and antrum there was irregularity of the mucosal pattern, and a considerable hold-up in the passage of barium into the duodenum. The appearances were suggestive of a carcinoma in this region (Figs. 1 and 2).

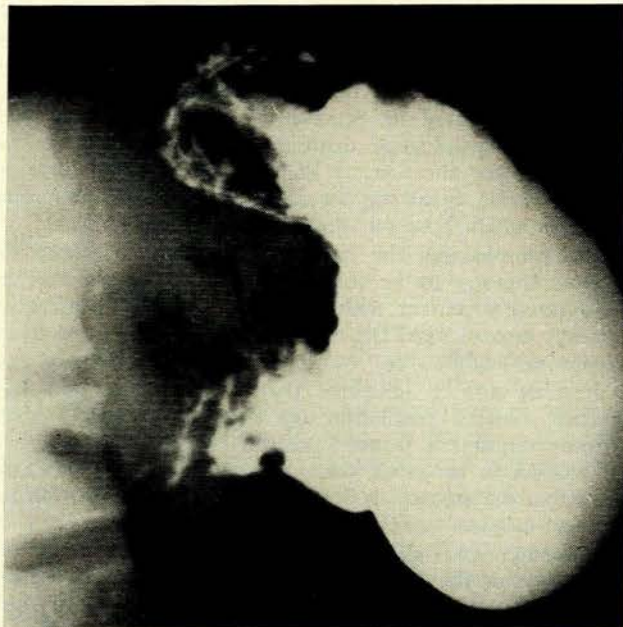


Fig. 1. Barium meal of case 1.

Operative findings. After a right paramedian incision ascites was encountered within the peritoneal cavity, and numerous caseous lesions were found on the stomach wall anteriorly, with enlarged lymph nodes. Inflammatory tissue was found in the antral region. A gastro-enterostomy was performed and a number of lymph nodes were excised for histology.



Fig. 2. Barium meal of case 1, showing appearances suggestive of carcinoma.

Histological examination showed caseous tuberculosis. The patient was treated with INH and streptomycin, and 8 weeks later was progressing favourably.

Case 2

A Coloured male, aged 43 years, complained of upper abdominal pain, aching in nature, for 7-8 years, lasting day and night.

The pain was relieved by alkalis and by food, but he tended to vomit frequently after meals and on one occasion vomited up about one cup of fresh blood; he noticed that after this his stools were black in colour. He also complained of significant loss of weight, and dizziness. There was a history of slight coughing, and he was found to be anaemic and tender in the upper abdomen. Nothing else of significance was noted in his previous history and physical examination.

His lungs were emphysematous and there was no evidence of any other lesion.

A barium meal (Fig. 3) revealed a large ulcer crater on the lesser curve of the stomach, which appeared to consist of two parts, with some doubtful extravasation of contrast outside the stomach wall. There was an apparent linear track of air in this region, suggestive of a sinus communicating with the ulcerating lesions, and the appearances were suggestive of a perforated peptic ulcer.

There was a soft-tissue mass in this region, which could have been a large abscess or a collection of inflammatory tissue.



Fig. 3. Barium meal of case 2.

Operative findings. An upper midline abdominal incision was made. On opening the peritoneal cavity, macroscopic appearances suggested a large carcinoma on the lesser curve of the stomach, infiltrating the posterior wall of the lesser sac.

A Polya gastrectomy was done as a palliative procedure, with high section of the stomach. Much of the inflammatory tissue and enlarged lymph nodes in the lesser sac were left on the posterior wall. The patient died 4 days later, after a period of rapid deterioration. Autopsy revealed the remaining lesser-curve mass without further extension. There was no disruption of the anastomoses.

Specimens excised at the operation and during autopsy consisted of tuberculous granulation tissue and caseating glands.

DISCUSSION

The development of the gastro-intestinal lesion in tuberculosis commences from the stage of acute inflammation, associated with local lymphadenopathy. This primary lesion may resolve, or it may progress in a number of ways:

1. Ulceration.
2. Perforation.
3. Sinus and fistula formation.
4. Granuloma formation leading to a palpable mass or obstruction.
5. Fibrosis and stricture formation.
6. Generalized spread to other organs and the peritoneum and producing ascites.
7. Abscess formation.

The initial lesion may be single or multiple, but different forms of the subsequent lesion may coexist. In the

stomach, the site of the initial ulceration is usually on the lesser curve, but it may occur anywhere in the stomach.

As a result of the different manifestations of tuberculosis of the gastro-intestinal tract, the clinical presentation of the patient varies considerably, and the condition may simulate many different types of lesion of the gastro-intestinal tract.

The diagnosis is a difficult one clinically, and may be easily confused with peptic ulceration and carcinoma.

Sixty-two cases of tuberculosis of the gastro-intestinal tract were reported by Dinner¹ between 1956 and 1961 at Baragwanath Hospital, but it is rare to find it restricted to the stomach. In the above series of cases, only 2 were restricted to the stomach, one being a hypertrophic lesion of the pylorus and the other a lesion producing lymphadenopathy from a primary lesion of the pylorus, and in both cases there was no evidence of pulmonary tuberculosis.

There does not appear to be any distinctive clinical feature of tuberculosis of the stomach.⁵

An active tuberculous lesion elsewhere may arouse suspicion, but it is inconclusive, since tubercle bacilli are not always found in biopsy specimens, and gastric washings

may have tuberculous bacilli from a primary pulmonary or bronchial lesion.

Gastroscopic examination of patients with pulmonary tuberculosis rarely shows specific tuberculous lesions, and, due to the fact that gastric acid does not destroy the tubercle bacillus, and because there is no lymphoid tissue in the stomach and mucous militates against the formation of tuberculous ulceration, it has been suggested that the tubercle bacillus gains entry to the submucosa of the stomach via an existing peptic ulcer.⁶

SUMMARY

The incidence of gastric tuberculosis and its clinical and pathological features are discussed. Two cases of gastric tuberculosis are described.

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