Isolated colonic tuberculosis

Wang Yu-ao and Yu Wen-Yi

Department of Surgery, Fuzhou Medical College, Fuzhou City, Jiangxi Province, The People's Republic of China

Summary: Two cases of isolated colonic tuberculosis are reported, and recent literature on this field is reviewed. Isolated colonic tuberculosis is defined as a tuberculosis which exists in the colon except for ileocaecum, without focus in any other organ.

The morphological changes are tuberculous granulation primarily located to the submucosa layer of the colon with smooth surfaces of both mucous and serous membrane. Its clinical features are atypical, just like those on X-ray examination, and even on frozen biopsy, it may sometimes be misdiagnosed. The treatment of choice is resecting the diseased segment of colon combined with anti-tuberculosis therapy.

Introduction

Intestinal tuberculosis is more frequent in Asia than in the West.¹ Colonic tuberculosis is usually located in the ileocaecal region. Isolated colonic tuberculosis which is restricted to the colon apart from the ileocaecal area is rare.² Clinically, isolated colonic tuberculosis manifests itself as intestinal obstruction and is readily misdiagnosed as colonic carcinoma. We here report two cases of isolated colonic tuberculosis.

Case reports

Case 1

A 34 year old Chinese female was admitted to the teaching hospital of Fuzhou Medical College with colicky abdominal pain, and alternating watery diarrhoea and constipation of six months' duration, which had become more severe in the past month accompanied by tenesmus and bloody, mucous faeces. She denied any history of tuberculosis. Barium enema demonstrated a 12 cm stricture in the proximal sigmoid colon, suggesting a carcinoma of sigmoid colon with partial intestinal obstruction. On physical examination, the thinly built patient's temperature was 37°C, pulse 80, blood pressure 120/80 mm Hg. The white cell count was $11 \times 10^9/l$. X-rays of chest and abdomen were negative.

At laparotomy, a mass was found in the proximal sigmoid colon. There were five isolated enlarged lymph nodes in the mesentery of the sigmoid colon, two of which were resected for frozen biopsy which demonstrated a necrotic caseation surrounded by Langerhans' cells. The sigmoid colon was excised with

an end-to-end anastomosis. Receiving anti-tuberculosis therapy, the patient made an uneventful recovery and was discharged on the 45th post-operative day.

Case 2

A 28 year old Chinese male was sent to the emergency room of the teaching hospital of Fuzhou Medical College with intermittent abdominal discomfort for 30 days and no bowel movement for one day. He had had watery diarrhoea for 6 days before admission, while fibrecolonoscopy examination disclosed chronic enteritis. One day before admission, he developed a generalized colicky abdominal pain, and diarrhoea consisting of a mixture of blood, mucus and flecks of faeces. On physical examination the thinly built patient was in acute distress, temperature 37°C. There was generalized abdominal tenderness which was more severe on the left flank with slight rigidity, lack of rebound tenderness; bowel sounds were active. Rectal examination and X-ray of abdomen showed distal intestinal obstruction. Emergency laparotomy demonstrated a mass located in the distal descending colon. There were three enlarged lymph nodes in the mesocolon. A colostomy was performed. Post-operatively, the histological examination revealed tuberculosis of the descending colon and antituberculosis chemotherapy was started. Three months later, the diseased colon was resected. The patient recovered and was discharged on the 125th post-operative day.

Discussion

The majority of cases of bowel tuberculosis occur in the ileocaecal region. Isolated colonic tuberculosis is rare.¹ A review of previous publications revealed only

Correspondence: Wang Yu-ao M.S.
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28 cases of isolated colonic tuberculosis reported until 1980.³

The history is usually unhelpful. The primary clinical features are the same as those of distal intestinal obstruction as in case 2. The features on X-ray examination are similar to those of either Crohn's disease or colonic carcinoma. The only approach to the diagnosis is by colonoscopy. A normal mucosa is often the case, tubercles are chiefly restricted to submucosa, so a false negative result of endoscopy may occur as in case 2.

The gross morphological changes may give rise to problems in diagnosis as the serous membrane of the

diseased colon is often smooth without adhesions and without typical tubercles. Even if the diseased tissue is biopsied, frozen sections may be misleading as in case 2.

The treatment of choice is resection of the diseased segment of intestine with an enteroenterostomy, followed by anti-tuberculosis therapy. If acute intestinal obstruction occurs, fistulization of the colon, before resecting the diseased area, is recommended. Once the diagnosis is confirmed, the prognosis is good. Possibly administration of corticosteroids would lessen cicatrization and reduce the chance of intestinal obstruction.⁴

References

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