Clinical Note

Severe pulmonary tuberculosis complicating intestinal tuberculosis with the entire colorectal ulcers

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Tuberculosis remains a major global public health problem, particularly in developing countries.¹ Intestinal tuberculosis can mimic any disease such as other infectious processes, neoplastic disorders, ulcerative colitis, and Crohn's disease. The diagnosis of intestinal tuberculosis, and specifically colonic tuberculosis, is a challenge for physicians due to its clinical presentation is usually nonspecific. Intestinal tuberculosis of entire colorectal ulcers has been very rarely reported. Recently, we experienced a case of severe pulmonary tuberculosis complicating intestinal tuberculosis with the entire colorectal ulcers. The clinical features and the diagnostic problems of these rare forms of intestinal tuberculosis are presented.

A 28-year-old woman presented with a 2-month history of intermittent hypogastric abdominal pain, and a 15 kg weight loss over 2 months. Further complaints included diarrhea, vomiting, cough, and fever. Her past medical history was unremarkable. Physical examination revealed several swollen mandibular lymph glands. On abdominal examination, the abdomen pain was located in the right lower quadrant. No palpable mass was in the abdomen. Laboratory test results as follows: white blood cell count - 4.3×10⁹/L; hemoglobin - 89 g/L; and erythrocyte sedimentation rate - 36 mm/h. Purified protein-derivative skin test and assay for human immunodeficiency virus (HIV) were negative. A chest radiograph revealed diffuse miliary nodular pattern in both lung fields (Figure 1A). Colonoscopy showed multiple superficial ulcers on entire colon and rectum (Figures 1B and 1C). Histologic analysis of mandibular lymph gland biopsy indicated a caseous necrotizing, granulomatous inflammation (Figure 1D). Histological findings of the colonic biopsy were inflammatory exudation and granulomas (Figure 1E). Antituberculous treatment resulted in dramatic clinical and endoscopic improvement. She responded well, and gained 10 kg weight at 6 months follow-up.

Disseminated tuberculosis has a high mortality and in the meantime, its morbidity rate is still high in developing countries.² Successful clinical outcomes of disseminated tuberculosis depend mainly on an early diagnosis and treatment. Clinical manifestations of disseminated



Figure 1 - Chest x-ray, colonoscopy, and histological findings of mandibular lymph gland and colonic biopsy showing: A) Chest radiograph revealed diffuse miliary nodular pattern (arrows) in both lung fields; B & C) colonoscopy showed multiple superficial ulcers on colon and rectum; D) mandibular lymph gland biopsy indicated a caseous necrotizing, granulomatous inflammation (Hematoxylin and Eosin [H&E] staining, x100, original magnification); and E) colonic biopsy exhibiting inflammatory exudation and granulomas in submucosa (H&E staining, x100, original magnification).

tuberculosis are often non-specific.³ Even in areas of high incidence of tuberculosis, diagnosis of disseminated tuberculosis is very difficult because the clinical presentation may be nonspecific until late in the disease.⁴ In this case, based on typical chest radiograph and histological findings of lymph node, we started antituberculous treatment, which showed marked clinical improvement.

Intestinal tuberculosis is a common type of extrapulmonary tuberculosis. Ileum and ileo-cecal region are the most commonly involved sites of abdominal tuberculosis.⁵ Segmental or isolated colonic tuberculosis commonly involves the sigmoid, transverse, and ascending colon. Entire colorectum involvement in tuberculosis is uncommon, however, in this case, our data suggest the tubercular involvement of entire colon and rectum in the patent. Diffuse involvement of the entire colon and rectum

is very rare, and the endoscopically findings can be very similar to those of ulcerative colitis. Tuberculosis should be always suspected in patients with gastrointestinal disease, and a definitive diagnosis of this treatable disease can be reached after careful examination.

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