

# A case of Crohn's disease initially misdiagnosed due to active pulmonary tuberculosis

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**INTRODUCTION** Crohn's disease (CD) and intestinal tuberculosis (TB) are chronic granulomatous inflammatory diseases of the gastrointestinal tract. Because the endoscopic, radiological, and clinical findings of both diseases are similar, differentiating them is very difficult, particularly in areas where TB is endemic. Herein, we report the delay in the diagnosis of CD in a patient with gastrointestinal complaints and diarrhea with hematochezia due to pulmonary TB. **CASE REPORT** A 14-year-old female patient was admitted symptoms of abdominal pain, 6 kg weight loss over the past one month, and diarrhea with hematochezia. Serological results were equivocal for Immunoglobulin G anti-Saccharomyces cerevisiae antibody (9.4; normal < 7 units). The QuantiFERON gold assay result for latent TB infection was negative. The patients underwent a colonoscopy that showed stricture of the ileocecal valve, and scattered longitudinal ulcers in the whole colon, more than four segment involvement (Figure 1A, 1C). A computed tomography (CT) scan of the abdomen showed nonspecific colitis of the whole colon (Figure 2). Because the abdominal CT also showed branching nodular opacities and consolidation in the left lower lobe of the lung, a chest CT scan was performed. The findings were suggestive of active pulmonary TB (Figure 3). Chest x-ray showed consolidation in the left lower lobe of the lung (Figure 4A). TB polymerase chain reaction of bronchial washing was positive. The patient was diagnosed with pulmonary and intestinal TB. She was then treated with anti-tubercular therapy (ATT). However, her gastrointestinal symptoms worsened over the next six weeks despite the improvement observed on her chest x-ray (Figure 4B). Colonoscopy showed exacerbated ulcers in the whole colon. Because pulmonary TB improved but gastrointestinal symptoms aggravated after ATT, the patient was diagnosed with CD and was treated with prednisolone, mesalazine, and ATT. Thereafter, she showed significant improvement in her clinical condition. A follow-up colonoscopy, three months following treatment with prednisolone and mesalazine revealed a considerable improvement of the ulcers (Figure 1B, 1D).

