An Unusual Rectal Mass

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Question: A 35-year-old previously well man presented with tenesmus and small caliber stool in recent 3 months. A weight loss of around 5 kg was also noted. He denied having hematocchezia or abdominal pain. He visited the outpatient department and underwent colonoscopy, which revealed a 3-cm mass in the rectum (Figure A); the rest of the colon seemed to be normal. An endoscopic ultrasound examination of the rectal mass was performed (Figure B).

What is your diagnosis?

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Conflicts of interest
The authors disclose no conflicts.

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The colonoscopy and endoscopic ultrasound examination revealed a subepithelial nodular mass in the rectum. The histopathologic examination of biopsy specimens revealed aggregation of epithelioid macrophages with central caseous necrosis, forming a granuloma (Figure C, D). Although no organism was identified with Acid-fast bacilli staining, the culture of the biopsies yielded *Mycobacterium fortuitum*. After antimycobacterial therapy, his symptoms improved gradually. Follow-up colonoscopy also revealed significant reduction of the rectal mass (Figure E). Chest radiography, sputum *Mycobacterium* culture, and serology test for human immunodeficiency virus all revealed negative results. Thus, isolated nontuberculosis *Mycobacterium* infection of rectum was confirmed.

* M. fortuitum is a rapidly growing *Mycobacterium* that is ubiquitous in nature and has been isolated in soil and various water-related sources, including municipal tap water and hospital water systems. Recently, the number of nontuberculosis *Mycobacterium* (NTM) infection cases reported has been increasing, and the clinical importance of these organisms is also increasing. Mycobacterial infection of the gastrointestinal tract is uncommon, which occurs predominantly in the ileocecal region, less commonly in the colon, and rarely in the rectum. These lesions usually presented with ulcers or strictures. The NTM infection of the gastrointestinal tract is extremely rare, and almost always occurs in the immunocompromised subjects. To the best of our knowledge, the present case is the first to report isolated NTM involvement of the rectum, which presented with an isolated rectal mass; diagnosis can be challenging. Fortunately, the response to antimycobacterium therapy is uniformly good, and surgery is seldom required in these patients.

**References**