A 19-year-old woman was admitted to our hospital with a 3-month history of bloody diarrhea and abdominal pain. On examination, she had some tenderness of the lower abdomen. Routine stool culture was negative. Blood tests showed that the white blood cell count was normal (7600/µL), but that the neutrophils were slightly increased (71.9%); the C-reactive protein was 4.49 mg/dL. Barium enema revealed a small area of nodular (granule-like) mucosa in the lower rectum (Figure 1). There was no inflammation and no nodular lesions from the cecum to the upper rectum. Colonoscopy also showed an erythematous nodular mucosa in the lower rectum (Figure 2). Microscopic examination of the rectal biopsy specimens showed well-formed lymphoid follicles and diffuse inflammation in mucosa and lamina propria, with cryptitis. Enzyme immunoassay of chlamydial antigens in the rectal biopsies and specific serum immunoglobulin G antibodies revealed the presence of a Chlamydia trachomatis infection. The diagnosis was therefore proctitis caused by C. trachomatis. She was found to be HIV-negative. She was treated with oral minocycline and tetracycline and her symptoms and rectal inflammation improved after 1 month.

There are two C. trachomatis serovars, LGV (lymphogranuloma venereum) and non-LGV. The LGV serovar causes lymphogranuloma venereum [1]. Proctitis caused by the LGV serovar is very severe and is associated with ulceration and rectal stricture [2,3]. In contrast, proctitis caused by the non-LGV serovar is mild. These types of proctitis are characterized by intraepithelial and intraluminal inflammation, and with well-formed lymphoid follicles consisting of transformed lymphocytes. In our case, mild cervicitis and proctitis were seen. She had not had any unprotected anal intercourse, so her proctitis might have been caused by lymphatic spread of non-LGV infection from the vagina rather than by direct infection. C. trachomatis infections are the most prevalent bacterial sexually transmitted infections through-out the world [4,5], and proctitis caused by C. trachomatis should be considered in the differential diagnosis of rectal inflammation.

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References

2 Quinn TC, Taylor HR, Schachter J. Experimental proctitis due to rectal infection with Chlamydia trachomatis in nonhuman primates. J Infect Dis 1986; 154: 833 – 841

Figure 1 Barium enema study showing a small area of nodular (granule-like) mucosa in the rectum.

Figure 2 Colonoscopic view of the erythematous, nodular mucosa in the lower rectum. There was no ulceration.