

Syphilis infection throughout the whole gastrointestinal tract

A 30-year-old Japanese woman presented to our hospital with epigastric pain. A physical examination revealed epigastric tenderness and red eruptions on her face. Laboratory evaluation showed normal results for leukocyte count and serum protein level, but a slightly elevated C-reactive protein (CRP) level of 1.10 mg/dL. The findings on serologic tests for syphilis, including rapid plasma regain and *Treponema pallidum* antibody hemagglutination test, were positive.

Esophagogastroduodenoscopy (EGD) revealed hypertrophy of the rugae and multiple irregular ulcers in the stomach (► Fig. 1). A *Helicobacter pylori* culture test was negative. Colonoscopy revealed reddish mucosa in the terminal ileum and slightly elevated lesions with decreased normal vascular networks in the descending colon (► Fig. 2). Biopsy specimens were obtained from the gastric ul-

cers, the red ileal mucosa, and the elevated lesions in the descending colon. Pathological analysis of these revealed regenerative epithelium and marked lymphoplasmacytic infiltration with no evidence of malignancy. Warthin–Starry staining revealed infiltration by spirochetes in the epithelium and lamina propria of the ileal and colonic tissues. No spirochetes were detected in the gastric tissues, although a polymerase chain reaction did detect the presence of some genes from *T. pallidum* with 100% similarity.

The patient was treated with penicillin (1500 mg/day) for 7 weeks, following which both her epigastric pain and the endoscopic appearances were improved. This is the first reported case of syphilis infection in which lesions were observed throughout the whole gastrointestinal tract. It has been reported that the rate of gastric involvement is only 1% [1] and

syphilis infections in the colon have been detected in only a few cases [2–5]. When gastroscopic findings such as hypertrophy of the rugae and multiple irregular ulcers are observed, gastric syphilis should be considered. In addition, other sections of the gastrointestinal tract, including the small and large intestines, should be examined.

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Competing interests: None

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Fig. 1 Esophagogastroduodenoscopy images showing hypertrophy of the rugae and multiple irregular ulcers in the stomach.

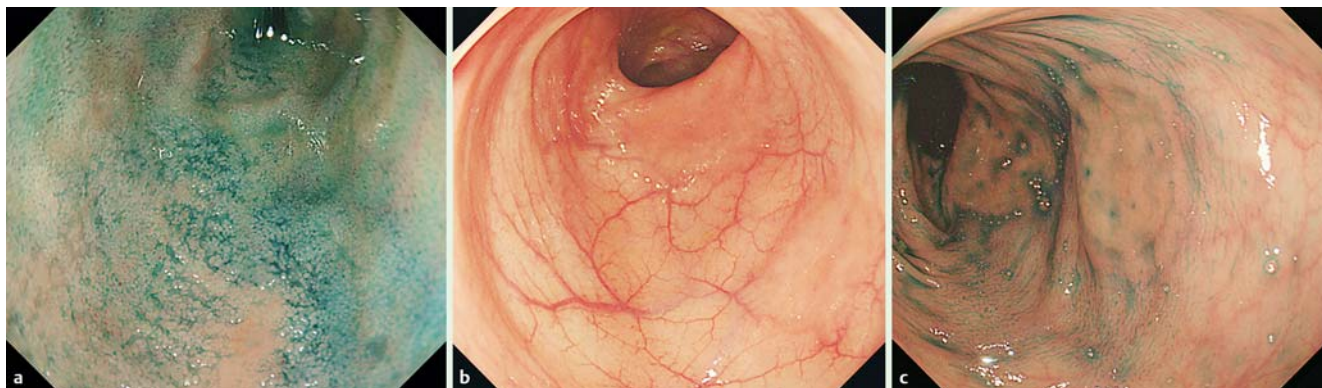


Fig. 2 Colonoscopy images showing: a reddish mucosa in the terminal ileum; b, c slightly elevated lesions with decreased normal vascular networks in the descending colon.

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