Strongyloides stercoralis ileitis detected by double-balloon endoscopy

Fig. 1 Small-intestine series and abdominal computed tomography demonstrating diffuse wall thickening of the terminal ileum.

Fig. 3 **a** Eosinophils infiltrating the lamina propria. **b** Parasitic ova and larvae resembling the filariform larvae of *S. stercoralis* within the intestinal crypts.

A 52-year-old man was admitted for chronic diarrhea since more than a year, and progressive low-leg edema over the past three months. His history revealed that he made several short-term trips to southern China for business. He was passing loose stool seven to eight times every day. Laboratory tests revealed a total leukocyte count of $10.5 \times 10^9/L$ with 59.7% neutrophils, 1.5% eosinophils, and 30% lymphocytes. His serum albumin level was

11.5 g/L and serum IgE level was 739 IU/mL (normal range <78 IU/mL). The serum human immunodeficiency virus (HIV) antibody status was negative. Small-intestine follow-through study showed long-segment narrowing of the lumen of the terminal ileum (▶ Fig. 1 a), whereas abdominal computed tomography demonstrated diffuse wall thickening of the terminal ileum (▶ Fig. 1 b). Double-balloon endoscopy was carried out via the anal

Fig. 2 **a** Double-balloon endoscopy showing disappearance of villi in the terminal ileum under water. **b** Air inflation revealed widespread swollen and erosive mucosa with petechiae.

route to further explore the long-segment narrowing in the ileum. There was loss of the normal villous structure of the terminal ileum on washing with water (▶ Fig. 2 a), and widespread swelling and erosions with petechiae were noted in the mucosa after air inflation (▶ Fig. 2 b; ▶ Video 1). Histopathological examination of biopsy specimens of this area revealed marked leukocytic infiltration, with eosinophils in the lamina propria (▶ Fig. 3 a). Parasitic ova and larvae, morphologically resembling the filariform larvae of *Strongyloides stercoralis*, were found within the intestinal crypts (▶ Fig. 3 b). The patient subsequently received treatment with ivermectin (12 mg/day) for 3 days. The diarrhea gradually resolved and the serum albumin level rose to 31.2 g/L 4 months after drug treatment.

Endoscopy_UCTN_Code_CCL_1AC_2AG

Video 1

Washing of the terminal ileum with water revealing loss of the normal villous structure.

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Bibliography

DOI 10.1055/s-0029-1215073

Endoscopy 2009; 41: E292 – E293

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