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.

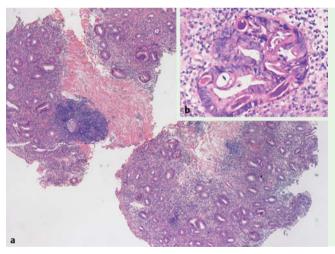


Fig. 3 a Eosinophils infiltrating the lamina propria. **b** Parasitic ova and larvae resembling the filariform larvae of *S. stercoralis* within the intestinal crypts.

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. 1a**), whereas abdominal computed tomography demonstrated diffuse wall thickening of the terminal ileum (**° Fig. 1b**). Double-balloon enteroscopy was carried out via the anal

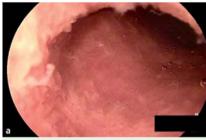




Fig. 2 a Double-balloon enteroscopy showing disappearance of villi in the terminal ileum under water. **b** Air inflation revealed widespread swollen and erosive mucosa with petechiae.

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. 2b; Video 1). Histopathological examination of biopsy specimens of this area revealed marked leukocytic infiltration, with eosinophils in the lamina propria (Fig. 3a). 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.

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Video 1

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

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Bibliography

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