

Multiple colonic aphthoid ulcers caused by *Diphyllobothrium latum* infection

A 15-year-old boy attended our outpatient clinic for recurrent lower abdominal pain. He did not have any remarkable medical and family history. The cramping abdominal pain was localized around the right lower quadrant region, and he had no other gastrointestinal symptoms. He often ate raw fish, and sometimes his feces contained noodle-like material. Serum chemistries were all within the normal ranges, and the hematologic examination revealed mild microcytic hypochromic anemia (hemoglobin 12.4 g/dL, hematocrit 36.3%, MCV 77.9 fL, MCH 26.7 pg). No eggs were seen in the stool examination.

Colonoscopy revealed many shallow, oval-shaped aphthoid ulcers with edema, located in the distal ileum up to the proximal ascending colon (● Fig. 1). The histologic examination revealed chronic inflammation with superficial ulceration, several inflamed crypts with abscesses, and eosinophilic infiltration (● Fig. 2). The microscopic examination of lavage fluids during colonoscopy revealed a large quantity of oval-shaped, operculated eggs (● Fig. 3b), and the noodle-like material was identified as proglottides of *Diphyllobothrium latum* (● Fig. 3a). A single dose of praziquantel 600 mg was given for treatment of *D. latum* infection. A repeat colonoscopy revealed the ulcers had healed, and the patient's feces were found to be egg-free after 1 month. He also had no more abdominal pain.

Diphyllobothriasis is a disease that occurs worldwide, with a higher prevalence in areas of the northern hemisphere where raw or partially cooked fish is commonly eaten [1,2]. Although there have been several reports of colonoscopic detection of *D. latum* infection, there have been no reports of cases of *D. latum* infection with colonic ulcers identified by colonoscopic examination, as in our patient [3,4]. In the absence of discharge of proglottides or eggs in the feces, it may be difficult to differentiate this lesion from

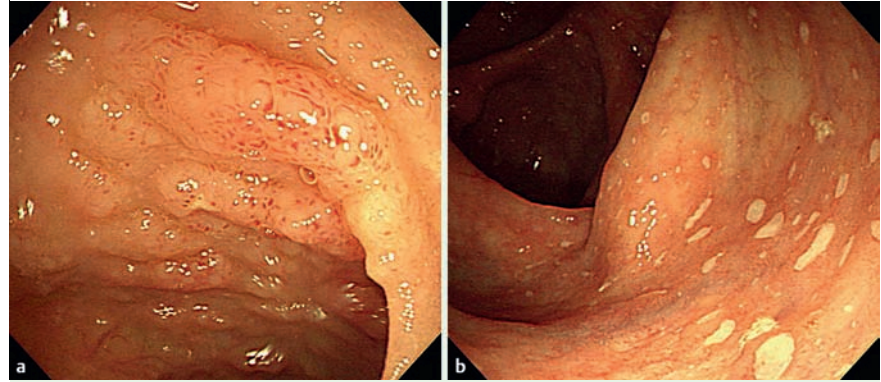


Fig. 1 Initial colonoscopic findings. **a** Multiple shallow aphthoid ulcers with mucosal erythema in the distal ileum. **b** Similar ulcers, 3–5 mm in size, in the proximal ascending colon.

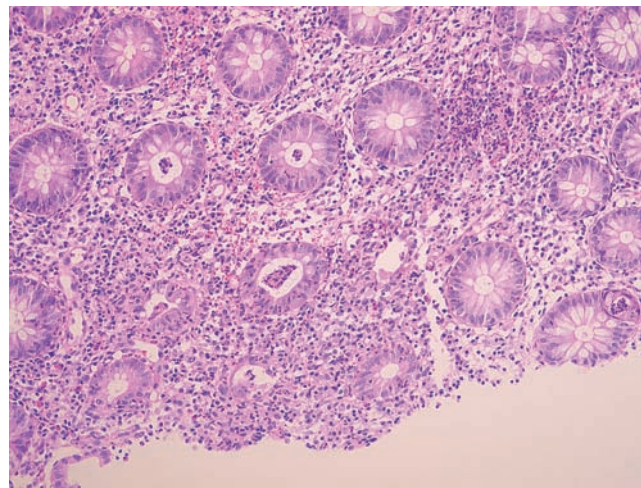


Fig. 2 Histologic examination (hematoxylin and eosin, magnification ×200) shows chronic inflammation with superficial ulceration, multiple areas of cryptitis with abscess formation, and eosinophilic infiltration.

chronic inflammatory conditions such as infectious colitis and ulcerative colitis. Keeping in mind the size and shape of the colonic ulcers, it is possible they may be caused by the action of the “sucking grooves” of the intact scolex of the worms.

With the increasing consumption of raw fish around the world, endoscopists should consider parasite infections, including those caused by *D. latum*, in patients with colonic ulcers and recurrent, nonspecific abdominal pain.

Endoscopy_UCTN_Code_CCL_1AD_2AZ

T. J. Byun¹, D. S. Han¹, S. B. Ahn¹, H. S. Cho¹, C. S. Eun¹, J. S. Ryu², Y. H. Oh³

¹ Department of Gastroenterology, Hanyang University College of Medicine, Guri, Seoul, Korea

² Department of Parasitology, Hanyang University College of Medicine, Guri, Seoul, Korea

³ Department of Pathology, Hanyang University College of Medicine, Guri, Seoul, Korea



Fig. 3 Gross and microscopic appearance of *Diphyllobothrium latum*: **a** a proglottid (length = 20 cm); and **b** operculated eggs.

References

- 1 Beaver PC, Jung RC, Cupp EW. Clinical parasitology. 9th edn. Philadelphia, USA: Lea & Febiger, 1984
- 2 Lee EB, Song JH, Park NS et al. A case of *Diphyllobothrium latum* infection with a brief review of diphyllobothriasis in the Republic of Korea. Korean J Parasitol 2007; 45: 219–223
- 3 Fujita M, Koga H, Iida M et al. The diagnostic yield of colonoscopy and the therapeutic value of intraduodenal amidotrizoic acid injection in intestinal *Diphyllobothrium latum* infection: report of a case. Am J Gastroenterol 2002; 97: 2468–2470
- 4 Lal S, Steinhart AH. *Diphyllobothrium latum*: a case of an incidental finding. World J Gastroenterol 2007; 13: 1875–1876

Bibliography

DOI 10.1055/s-0029-1214733

Endoscopy 2009; 41: E181–E182

© Georg Thieme Verlag KG Stuttgart · New York ·

ISSN 0013-726X

Corresponding author

D. S. Han, MD, AGAF

Hanyang University Guri Hospital

Gyomun-dong 249-1

Guri-si

Gyeonggi-do

Korea 471-701

Fax: +82-31-5552998

hands@hanyang.ac.kr