Digestive and Liver Disease 51 (2019) 323

Contents lists available at ScienceDirect

Digestive and Liver Disease

journal homepage: www.elsevier.com/locate/dld

Image of the Month

Bugs in inflammatory bowel disease — A questionable therapy

Nya D. Nelson, Laurel Glaser, Rashmi Tondon*

Department of Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania, Philadelphia, PA, United States

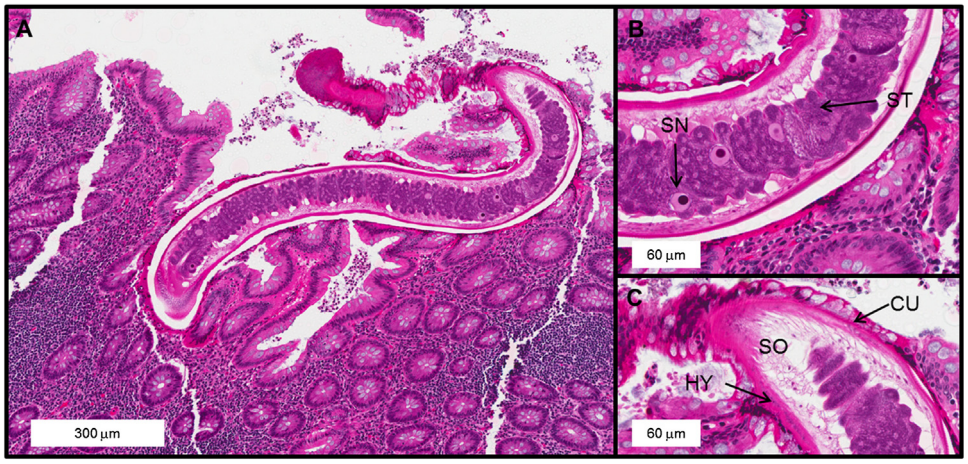

Fig. 1. Section of appendix show Trichuris worm with thick cuticle (CU), hypodermis (HY), layers of somatic muscle cells (SO), and stichocyte (ST) with stichosome nuclei (SN).

The patient is a 49-year-old woman who presented 9 years prior with bloody stools and cramping abdominal pain. Colonoscopy at that time demonstrated colitis at the hepatic flexure and distal 30 cm of the sigmoid colon and rectum, and she was given a presumed diagnosis of Crohn's disease. She was treated with multiple steroids and monoclonal antibodies, including 40 mg of prednisone and vedolizumab most recently. However, she continued to have disease flares requiring hospitalization, persistent anemia, and recurrent *Clostridium dificile* infection so the decision was made to proceed with a subtotal colectomy. Pathology revealed several worms within the lumen of the appendix (Fig. 1A) with a thick cuticle (CU), hypodermis (HY), layers of somatic muscle cells (SO), and stichocyte (ST) with stichosome nuclei (SN), characteristic of *Trichuris* (Fig. 1B and C). History revealed that the patient had been self-treating with ingestion of *Trichuris* ova for several months prior. The distal 13.1 cm of the bowel were carpeted with innumerable pseudopolyps, while the remainder of the colon was grossly unremarkable, findings consistent with a diagnosis of ulcerative colitis. Animal models have shown that *Trichuris* can suppress intestinal inflammation, and some clinical trials have shown efficacy in treatment of IBD in humans [1]. However, the efficacy and safety of this therapy still needs to be established through more scientific data.

Conflict of interest

None declared.

Reference

[1] Garg SK, Croft AM, Bager P. Helminth therapy (worms) for induction of remission in inflammatory bowel disease. Cochrane Database Syst Rev 2014;20(1).

* Corresponding author.
E-mail address: rashmi.tondon@uphs.upen.edu (R. Tondon).

https://doi.org/10.1016/j.dld.2018.08.020