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A surprising white thread on a terminal ileoscopy

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CASE REPORT

A 54-year-old female without a relevant medical history complained of intermittent crampy abdominal pain in the right quadrants, lasting at least one year. She denied

diarrhea, constipation, weight loss or blood in the stool. Physical examination and

laboratory investigation were unremarkable. An abdominal ultrasound showed hepatic

steatosis. A screening colonoscopy was performed and after intubation of the terminal

ileum, a whitish filament of approximately 5 cm (Fig. 1) was found and retrieved. The

macroscopic observation is shown in Fig. 2A. The parasitological examination (Fig. 2B

and C) confirmed a diagnosis of Hymenolepis nana (H. nana).

DISCUSSION

H. nana is the most common cestode globally, albeit infrequent in adults (2). Infection

is more common in populations living with inadequate sanitation and generally occurs

upon ingestion of cysticercoid-infected arthropods or embryonated eggs from

contaminated water and foods. The entire life cycle of *H. nana* can be established in

the gut, making self-infection possible, and it can persist for many years if left



untreated, especially in immunosuppressed hosts. Although often asymptomatic, skin eruptions, chronic urticaria and phlyctenular eye disease have been reported (1,3). Traditionally, the identification of worms or eggs in feces allows a diagnosis and the recommended treatment is a single dose of praziquantel 25 mg/kg *per os* followed by repeat dose ten days later.

This case illustrates a *H. nana* infection in an immunocompetent adult in a developed country where it is considered to be rare. Ileoscopy remains an important aspect for differential diagnosis when performing colonoscopy for abdominal pain.

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Fig. 1. Whitish parasite with approximately 5 cm found upon terminal ileum intubation and recovered through traction with biopsy forceps during colonoscope withdrawal.





Fig. 2. A. Gross anatomy of the worm. Adult worms measure up to 40 mm and it has a life span of 4-6 weeks (1). B. Light microscopy: proglottids (x 100). C. Eggs of *Hymenolepis nana* (x 400).