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CORRESPONDENCE

Massive infestation with pinworms causing chronic diarrhea



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Enterobius vermicularis (pinworm) is a common intestinal parasite often seen in the primary care setting, regardless of race, culture, or socioeconomic status. While humans are thought to be the primary hosts, primates may be the alternate hosts.¹ Although generally believed to be an infestation affecting children between 5 and 10 years, it may also occur in adults. Usual manifestations are perianal itching, sleeplessness, hyperactivity, weight loss, abdominal pain, and vomiting. Nongastrointestinal manifestations are pruritus vulvae, urinary tract infections, postmenopausal bleeding, epididymitis, pelvic mass, chronic sialadenitis, unilateral salpingitis, and rarely hepatic involvement.² *E. vermicularis* is a small parasite that inhabits the cecum, though occasionally has also been reported in the appendix. A fully mature gravid female migrates nocturnally through the anus and deposits the eggs in the perianal region. The worm is usually 3–10 mm long and causes an intense itching in the perianal area, especially at night. Eggs survive for a long time in the perianal region and can survive up to 3 weeks on clothing. The infestation is diagnosed by identifying adult worm or its eggs in the perianal area.

Our patient is 40-year-old male who presented with a complaint of increased frequency of stools for 1 month, four to five episodes per day with passage of semisolid

stools, small in quantity, and lower abdominal pain, which is relieved by passing stool. He was a known case of diabetes mellitus and has been on oral hypoglycemic agents for 10 years. Physical examination was unremarkable. Results of routine laboratory tests were within normal limits. In addition, the examination of his stool did not reveal any parasites or eggs. Therefore, a colonoscopy was done to ascertain the cause of prolonged diarrhea, which showed small white worms throughout the colon, with maximum numbers in the cecum, with normal colonic mucosa (Fig. 1). Findings of a microscopic analysis of the retrieved parasites were consistent with previously published reports on *E. vermicularis* and a female worm with a long-pointed tail was also found. The patient was orally administered a single dose of 400-mg albendazole and his symptoms resolved in few days.

Worldwide, children in the age group of 5–10 years are most commonly affected by *E. vermicularis* infestation. They usually have no symptoms apart from itching around the anus. Our patient is an adult who presented with diarrhea, which is a very unusual symptom for this parasitic infection.³ Only few cases of diarrhea caused by *E. vermicularis* in adults have been reported in the literature. A typical pinworm infection is usually cured by administering a single dose of mebendazole (100 mg) or albendazole (100 mg for children and 400 mg for adults).⁴ However, the entire family of the patient should be treated. By presenting this report, we want to emphasize the importance of including parasitic infections such as *E. vermicularis* in the differential diagnoses of patients presenting with colitis-like

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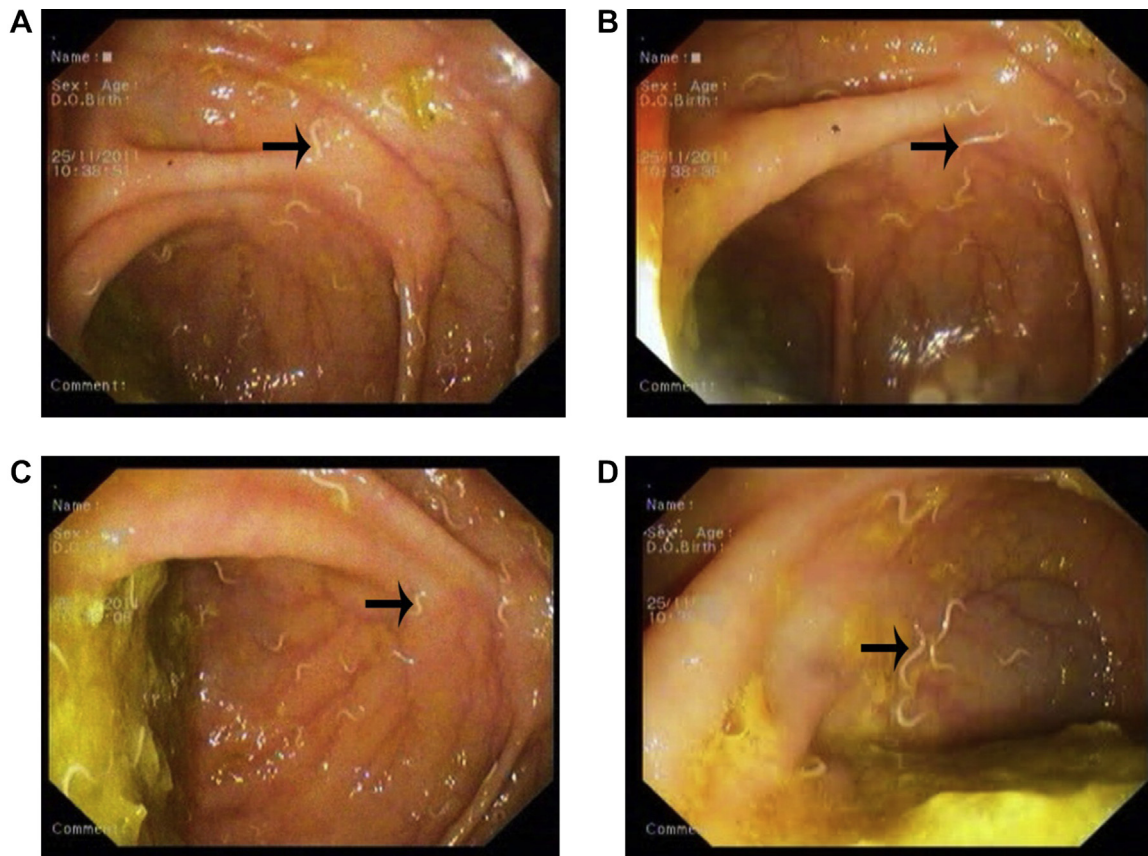


Figure 1 Colonoscopic images showing massive infestation of the cecum with *Enterobius vermicularis* (arrow).

symptoms, especially in areas where this infection is highly prevalent.

References

1. Russell LJ. The pinworm, *Enterobius vermicularis*. *Prim Care* 1991;**18**:13–24.
2. Rajamanickam A, Usmani A, Suri S, Dimov V. Chronic diarrhea and abdominal pain: pin the pinworm. *J Hosp Med* 2009;**4**: 137–9.
3. Petro M, Iavu K, Minocha A. Unusual endoscopic and microscopic view of *Enterobius vermicularis*: a case report with a review of the literature. *South Med J* 2005;**98**:927–9.
4. Horton J. Albendazole: a review of anthelmintic efficacy and safety in humans. *Parasitology* 2000;**121**:S113–32.