

Title: "What Swims Within: A Case of Enterobius Vermicularis Discovery"

Authors: Wayne Wheeler, MD, William Chastant, MD, John Hutchings, MD, FACG

Introduction:

With increasing tourism and immigration into the United States, the incidence of intestinal helminth infections will rise. These parasitic worms can remain asymptomatic for years, causing increased morbidity and mortality if left undetected <sup>(1)</sup>. When intestinal parasites are suspected, the laboratory testing of stool samples is typically diagnostic. In addition to microscopic evaluation, recent studies have highlighted the utility of endoscopy in making a diagnosis of intestinal parasite infection <sup>(2,3)</sup>. This case is an example of asymptomatic enterobiasis diagnosed through endoscopy.

Case:

A 68-year-old female with a past medical history of hypertension and gastroesophageal reflux, presented for routine colorectal cancer screening. During colonoscopy a parasitic worm was visualized in the cecum (Images 1,2). The worm was removed with jumbo forceps and delivered to the parasitology lab for further identification. The specimen was identified as Enterobiasis Vermicularis. The patient had denied prior symptoms of pruritis ani or abdominal pain. She was treated with oral albendazole therapy and advised to encourage close contacts to seek similar treatment in hopes of preventing re-transmission. She remains well.

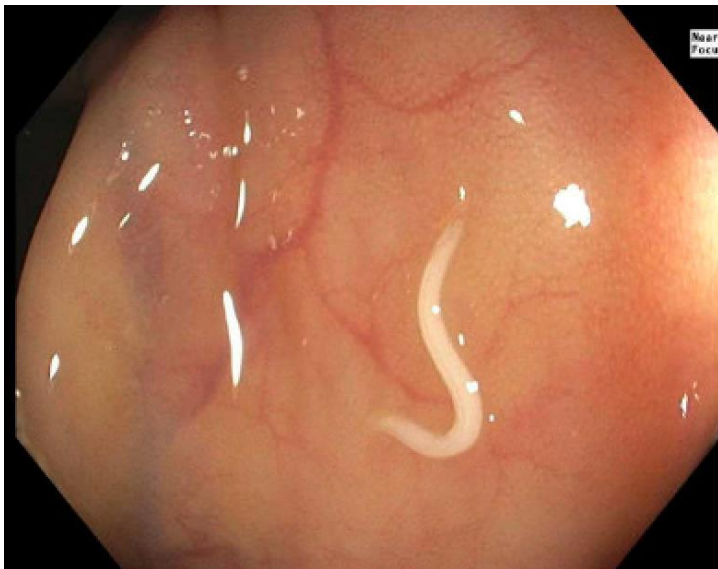
Discussion:

The more commonly diagnosed helminths in North America include Enterobius vermicularis, Trichuris trichiura, Ancylostoma duodenale, Ascaris lumbrigoides, and Taenia saginata<sup>(4)</sup>. Of this group, Enterobius vermicularis, the common pinworm, is the most prevalent <sup>(5)</sup>. Pinworms prefer the cecum and have previously been reported to mimic appendicitis <sup>(6)</sup>. Other helminths may harbor anywhere throughout the intestinal lumen, mucosa, lymphatics, vasculature, or biliary tracts <sup>(7)</sup>. Although most patients are asymptomatic, intestinal helminths can cause anemia, nutritional malabsorption, secondary bacterial infection, and even perforation <sup>(8)</sup>. When suspected, helminths are classically diagnosed through tissue biopsy or the observation of ova, cysts, and larvae within stool samples. Although it is not the initial diagnostic test of choice, endoscopy has been useful in directly visualizing worms in unsuspecting patients. Pinworms, roundworms, tapeworms, hookworms, and whipworms have all previously been visualized during endoscopic evaluations <sup>(3,5, 9-13)</sup>. If encountered, the worms should be removed and evaluated by a parasitologist for proper identification and treatment guidance. This case represents the versatility of endoscopy for diagnosing gastrointestinal tract pathogens in an unsuspecting, asymptomatic individual.

Image 1



Image 2



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