

## Pinworm Inside the Appendix

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## 1. Abstract

Enterobius vermicularis is the most common parasitic worm worldwide but its association with acute appendicitis remains controversial. Acute appendicitis due to E. Vermicularis is a rare infection, affecting mostly the children. The aim of this paper is to report a case of acute appendicitis caused by E. vermicularis. A 11-year-old girl with a clinical picture of acute appendicitis. After the appendectomy the histopathology examination revealed parasites at the appendiceal lumen. Clinicians should be aware of this parasitosis as a possible cause of appendiceal syndrome, appendiceal colic or acute appendicitis.

## 2. Introduction

Enterobius vermicularis is the most common parasitic worm worldwide but its association with acute appendicitis remains controversial [1]. Acute appendicitis due to E. Vermicularis is a rare infection, affecting mostly the children [2]. The aim of this paper is to report a case of acute appendicitis caused by E. vermicularis.

## 3. Case

A 11-year-old girl presented with a right lower abdominal pain

for the past 12 h. Clinical examination revealed right iliac fossa tenderness upon palpation and rebound tenderness upon release. The patient was diagnosed as a case of suspected acute appendicitis and was taken to the operating room. After the uncomplicated appendectomy the histopathology examination revealed parasites at the appendiceal lumen without inflammation (Figure 1-3). The treatment was followed by using Flubendazole (100 mg/d) for 15 day.

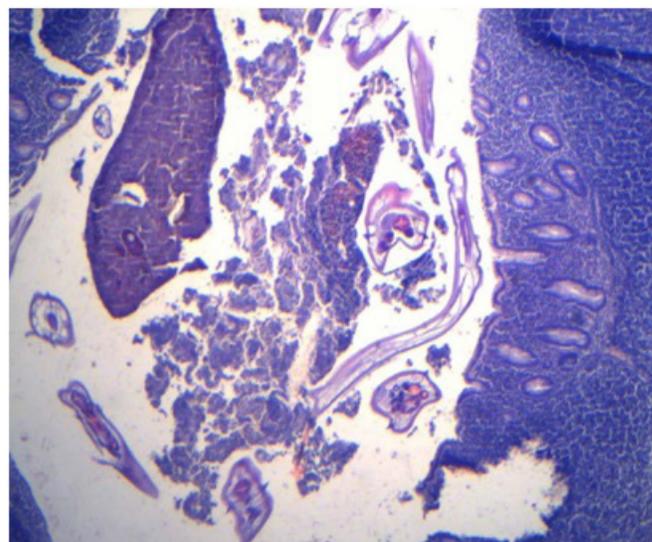
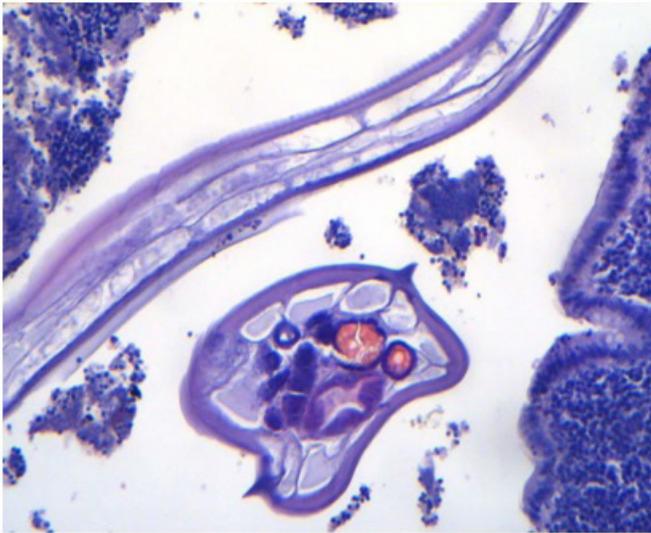
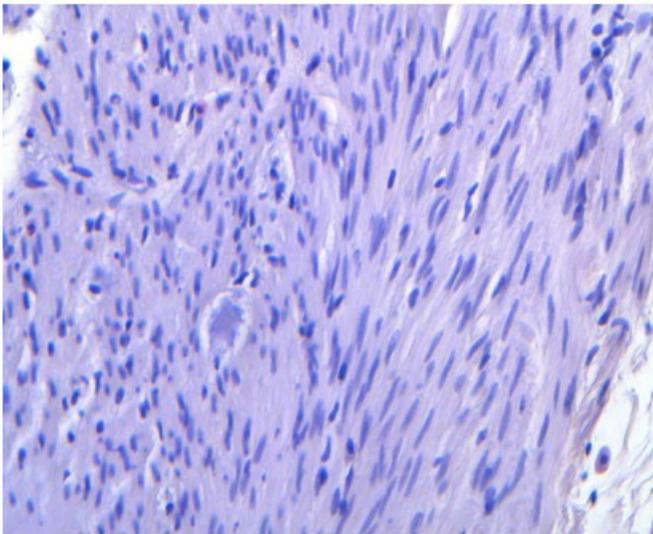


Figure 1. E.vermicularis (Pinworm) inside the appendix (HEX25).



**Figure 2.** *E.vermicularis* (Pinworm) inside the appendix (HEx100).



**Figure 3.** Muscular wall of the appendix without inflammation (HEx200).

#### 4. Discussion

*Enterobius vermicularis* is known by many names (pinworm, seat-worm, oxyuriasis, threadworm) and Fabrius in 1634 was the first described involvement of the worm in appendicitis [3]. Despite that the relationship between *E. vermicularis* and pathogenesis of appendicitis has been studied for many years, the influence of the parasite to induce inflammation is still unclear [3]. Complete treatments and control strategies of helminthic-infected children may influence the prevention of serious complications such as appendicitis [4]. Physicians should also screen family members of affected patient because the family members usually share similar eating habits [5]. Clinicians should be aware of this parasitosis as a possible cause of appendiceal syndrome, appendiceal colic or even acute appendicitis.

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