

中文題目：糞小桿線蟲感染症

英文題目：Strongyloides stercoralis hyperinfection

作者：陳祈池<sup>1</sup>，曾志偉<sup>1-2</sup>

服務單位：<sup>1</sup>大林慈濟醫院內科部，<sup>2</sup>大林慈濟醫院內科部腸胃科

**Introduction:** Strongyloidiasis is a parasitic disease caused by infection of *Strongyloides stercoralis*. It can manifest from asymptomatic eosinophilia in immunocompetent patients and disseminate the disease in immunocompromised ones.<sup>(1)</sup> The inconsistency of eosinophilia and low sensitivity of a standard microscopic stool examination makes strongyloidiasis a disease that is frequently misdiagnosed. We herein report a case of hyperinfection strongyloidiasis presenting with eosinophilia and chronic DIC.

**Case Presentation:** A 77-year-old woman with a history of end stage renal disease was admitted because of abdominal pain and hypotension during a regular hemodialysis session. She had intermittent abdominal pain, diarrhea and post-prandial vomiting in the past one week. Laboratory studies revealed leukocytosis (9990/ $\mu$ l; neutrophils :66% and eosinophils: 16.2%), anemia (haemoglobin 7.1 g/dL, mean corpuscular volume 90.2 fL) and hypoalbuminemia (1.01 g/dL).

After admission, persistence diarrhea (8 times/ day) and eosinophilia (2991/ $\mu$ l) were found. Five sets of stool specimen were checked where two sets revealed the presence of *Strongyloides stercoralis* (Figure 1). The gastroduodenoscopy for anemia survey showed duodenal ulcer and gastric ulcer. The histopathology reported nematode-like material within the glandular lumens and surrounded by neutrophils and eosinophils (Figure 2).

Under the diagnosis of Strongyloidiasis, Ivermectin 12mg was administered consecutively for two days. Second course of Ivermectin were prescribed again one week later as the patient still had diarrhea. The symptoms and peripheral eosinophilia improved one month later.

**Discussion:** Diagnosis of *Strongyloides* disease can be very difficult to establish and entails a high level of suspicion. The definitive diagnosis involves visualization of the larvae. Strongyloidiasis is difficult to diagnose since the parasite load is low and the larval output is irregular in majority of the patients. This situation necessitates the collection of consecutive samples and the use of concentration techniques.

**Conclusion:** The diagnosis of strongyloidiasis presents several challenges, including the delayed onset of symptoms after exposure to *S. stercoralis*, the variable clinical presentations, and the lack of sensitivity of the different diagnostic tests available.

Figure 1: The larva of *Strongyloides stercoralis* in feces

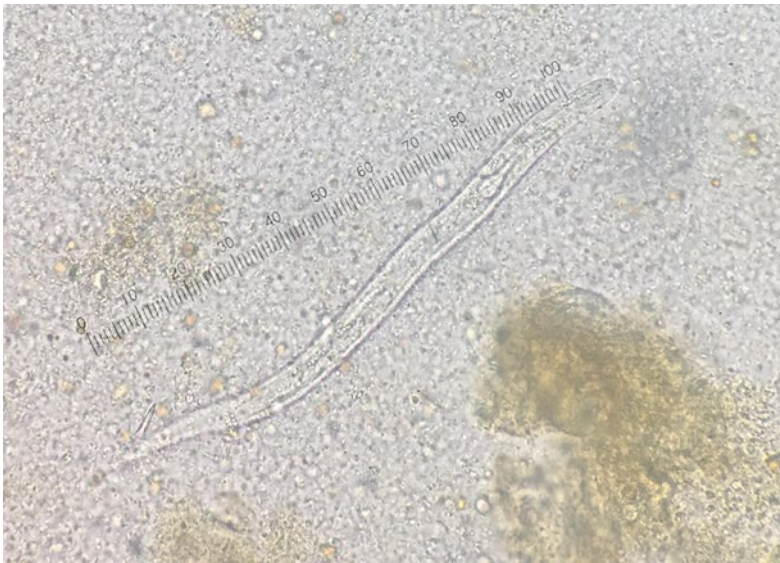
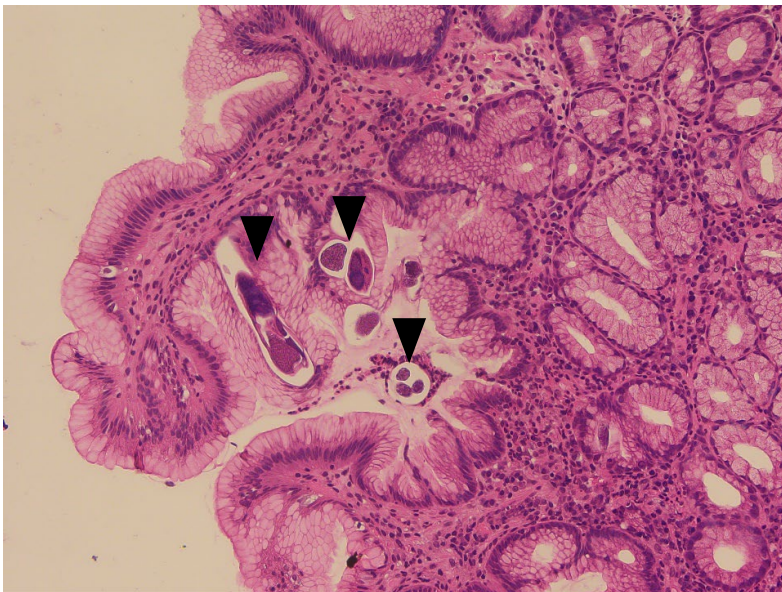


Figure 2: Nematode-like material (black arrow) which surrounded by neutrophils and eosinophils within the glandular lumens and glandular epithelial walls.



## Reference

1. Keiser PB, Nutman TB. *Strongyloides stercoralis* in the Immunocompromised Population. *Clin Microbiol Rev.* 2004;17(1):208-17.