

A Rare Case of Strongyloides Cholangitis with Portal Vein Thrombus and Recurrent Intra-abdominal Abscesses

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Introduction

Strongyloides stercoralis infection outside of the gastrointestinal tract is extremely uncommon, particularly in an immunocompetent host. We present a rare case of *S. stercoralis* cholangiopathy complicated by portal vein thrombus and recurrent intra-abdominal abscesses in an immunocompetent patient.

Case Description

A 65-year-old male who immigrated to the US over 40 years ago from Nigeria, presented with 4 days of epigastric pain and fevers. Past medical history included COPD and an intraabdominal abscess two years prior. Vitals: afebrile, HR 110 bpm. Exam: jaundice, abdomen was distended with right upper quadrant tenderness. Labs showed AST 121 IU/L, ALT 263 IU/L, ALP 267 IU/L, T bilirubin 8.3 mg/dL (direct 5.4 mg/dL), WBC 13.6 K/uL, eosinophils 0.28 K/uL. CT abdomen showed an 8.4 cm subdiaphragmatic collection adjacent to the gastric fundus. MRCP showed luminal irregularity of the common bile duct with multiple areas of stenosis of intra- and extrahepatic bile ducts and cavernous transformation of a chronic portal vein thrombus. Aspirates of the sub-diaphragmatic fluid collection and blood cultures grew Pseudomonas aeruginosa. Upper endoscopy was normal. Duodenal biopsies revealed Strongyloides species (Figure 1). He underwent surgical washout of the abdominal abscess and was treated with 2 weeks of oral ivermectin and ciprofloxacin.

Figures

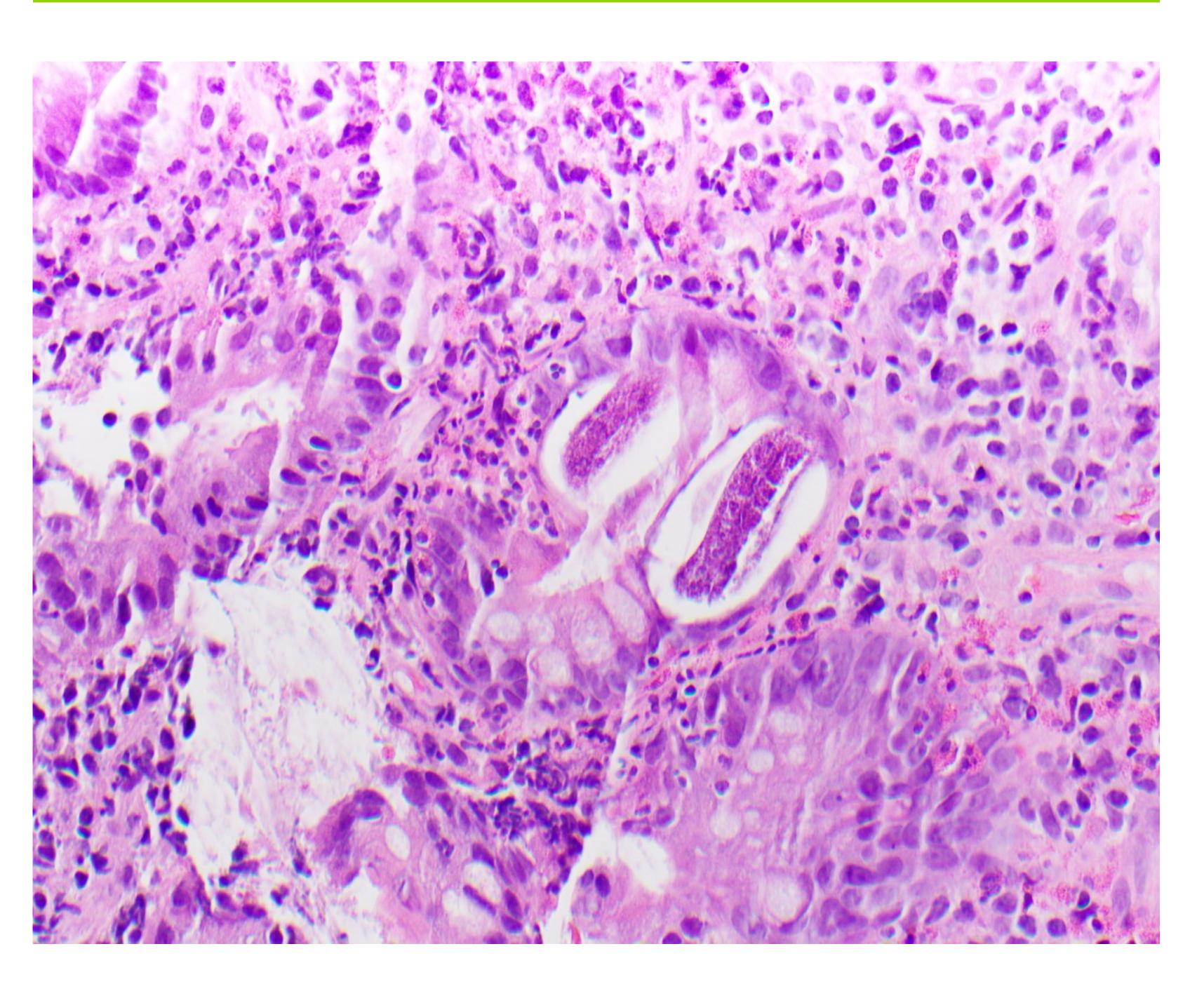


Figure 1: Duodenal biopsies revealing Strongyloides species.

Discussion

S.stercoralis transmission occurs when human skin contacts the infective larvae. Carriers may remain asymptomatic for decades. Symptoms can include pruritus, diarrhea, weight loss and abdominal pain. Complications such as biliary tree invasion and portal vein thrombus are rare but have been reported. Deposition of eggs in the bowel wall can lead to bacterial gut translocation, gram negative sepsis and recurrent abscesses. Disseminated strongyloidiasis typically occurs in the setting of immunosuppression, HIV, or hematologic malignancies and rarely occurs in an immunocompetent host. Diagnosis can be challenging

Conclusions

- Strongyloides infection can invade the bile ducts and cause a secondary cholangiopathy, portal vein thrombus and recurrent intra-abdominal abscesses.
- Disseminated strongyloides typically occurs in immunocompromised, but rarely in immunocompetent.
- Mainstay of treatment is a course of ivermectin.

References

1. CDC - Strongyloides - Biology. Centers for Disease Control and Prevention. https://www.cdc.gov/parasites/strongyloides/biology.html. Published July 30, 2019. Accessed June 13, 2022.