An Unfamiliar Creeper in the Colon

Anagha Nagaraj BA, Jasmin Hundal MD MS, Jennifer Onwochei MD/MPH MS
University of Connecticut Health Center, Department of Medicine

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INTRODUCTION

- Unexpected findings during routine endoscopic procedures are common and should be further evaluated
- Here, we present a case of chronic strongyloidiasis that was incidentally discovered during a routine screening colonoscopy
- Chronic strongyloidiasis is a parasitic infection caused by the nematode *Strongyloides stercoralis* which can silently establish a cycle of autoinfection in humans and remain latent for years
- Infection occurs via direct skin contact with contaminated soil
  - Skin → blood → lungs → coughed up and swallowed into the GI tract → penetrate the gut wall and restart the cycle

CASE DISCUSSION

- 57 yo asymptomatic M with no known PMHx presented for first screening colonoscopy
- Colonoscopy findings (Images A-D):
  - Sessile polyp in recto-sigmoid colon – tubular adenoma
  - Multiple white submucosal nodular lesions noted throughout colon
- Biopsies of submucosal nodules unexpectedly revealed nematode fragments consistent with S*trongyloides stercoralis* (Image E)
- Stool O&P test x1: negative
- No known exposures but patient had spent the first 30 years of his life in Africa
- No treatment pursued at the time; patient to return for routine surveillance

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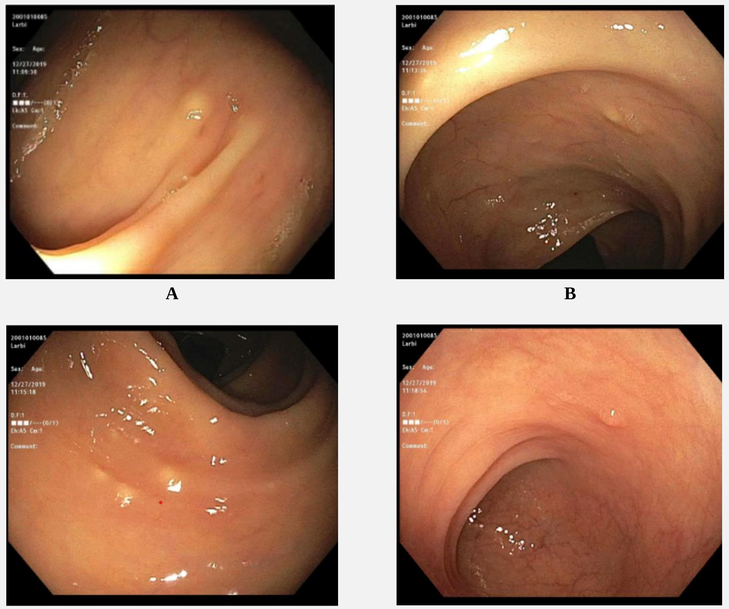
IMAGING & PATHOLOGY



A B C D

Images A-D. Submucosal lesions identified on colonoscopy in A) ascending colon; B & C) hepatic flexure; D) sigmoid colon.

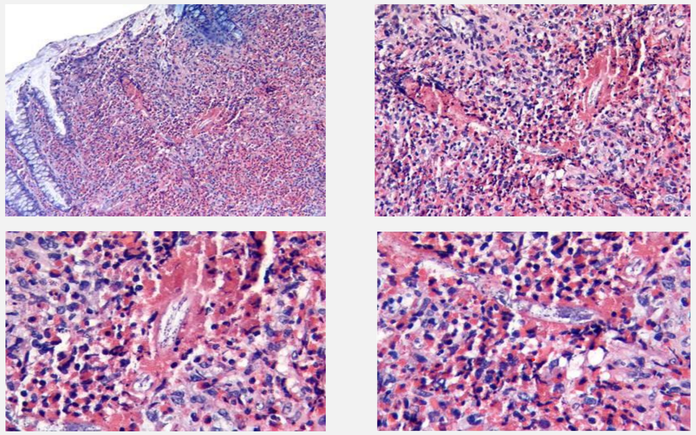


Image E. H&E stains of submucosal nodule biopsies. Evidence of nematode fragments <1mm in size in background of prominent eosinophils, neutrophils, lymphocytes, histiocytes and a few granulomas.

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DISCUSSION

- Rare presentation of chronic strongyloidiasis as submucosal colonic nodules
- Most patients are asymptomatic; if symptomatic, patients may present with non-specific skin, respiratory, or abdominal complaints
- Thorough work up is needed if Strongyloidiasis is suspected to avoid chance of developing dissemination/hyperinfection which has a high mortality rate and usually occurs when untreated patients are exposed to steroid therapy or immunosuppressants
- Diagnostic work-up is challenging
  - Serology testing (low specificity), stool testing (low sensitivity)
  - Peripheral eosinophilia may be present (low sensitivity)
  - Biopsies
- Treatment is with Ivermectin 200mcg/kg per day for 1-2 days depending on if patient is immunocompetent or immunocompromised

Key takeaways:

- Investigate unexpected findings on routine procedures, even if asymptomatic
- Chronic strongyloidiasis is rare in the U.S. and is not immediately considered in the differential
- Thorough history and a high clinical index of suspicion are essential for prompt diagnosis and treatment, especially in immigrant patients with possible remote exposures
- Empiric treatment is recommended in high-risk patients
- Clinicians should consider discussing with ID specialists to help guide care

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