№ 016

Ascariasis, Neglected Tropical Disease, Rare Cause of Upper Gastrointestinal Bleed

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Background

Ascariasis, caused by the nematode *Ascaris lumbricoides*, is a preventable helminthic infection, particularly in tropical and subtropical regions with inadequate sanitation. It commonly affects humans who get contact with parasitic eggs. Adult worms can live in the human gastrointestinal tract for years. While many remain asymptomatic, heavy infestations lead to significant gastrointestinal complications, including rare instances of upper gastrointestinal bleeding. Hence, this is a case of UGIB with *Ascaris* infestation.

Case Report

A 13-year-old Orang Asli boy presented with history of lethargy, fever, and dark brown vomitus for three days, along with loose stools for one day. Upon reviewed in Emergency Department, the patient was alert, appeared pale and malnourished, with melena upon digital rectal examination. He was prescribed with IVI pantoprazole and started with packed cell transfusion. Abdominal X-ray showed faecal loaded with colitis features. Abdominal ultrasound was suboptimal due to bowel gas obscuration. On day 3 of admission, the patient expectorated a worm identified as *Ascaris lumbricoides*. Patient started on antihelmintic once daily for a week and discharged in stable condition on day 11.

Discussion

Gastrointestinal infestation with *Ascaris lumbricoides* is found in tropical countries, particularly in areas with poor sanitation. Severe infestations cause a series of illnesses, including intestinal obstruction, pancreatitis, and intussusception. It is uncommon for patient presented with hemorrhagic symptoms, as the helminth itself lacks suckers. UGIB caused by *Ascaris* infestation is uncommon but can occur through direct mucosal injury, vascular compromise and associated complications. In this case, diagnosis was confirmed as the patient expectorated the worm. Yet, it remains debatable whether the upper GI bleed in this case caused by the helminth or co-occurrence with another species, as the stool examination for ova and cysts was negative, and no endoscopic evidence available.

Conclusion

This case highlights the importance of considering parasitic infections as a differential diagnosis in unexplained GI bleeding, particularly in endemic areas. The role of the emergency department (ED) in the initial management is crucial in stabilizing the patient. Early recognition of potential parasitic involvement, despite absence of stool ova and cysts, allowed for timely initiation of antiparasitic treatment.

Keyword

Ascariasis, orang asli, upper gastrointestinal bleed

References:

1. Smith H, Jones P. Ascariasis: Epidemiology, clinical manifestations, and diagnosis. In: UpToDate, Post TW (Ed). UpToDate Inc., Waltham, MA. [Last updated 2024]. Available from: www.uptodate.com

2. Acute Massive Gastrointestinal Bleeding Caused by *Ascaris lumbricoides* Infection: A Case Report. Author(s). *Journal Name*. 2022;Volume(Issue):Page numbers. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9621741

3. Ascaris lumbricoides: An Unusual Aetiology of Gastric Perforation Author(s). *Front Med*. 2024;Volume(Issue):Page numbers. Available from: https://www.frontiersin.org/journals/medicine/articles/10.3389/fmed.2024.1525301/full

Helminth that expectorated by patient during admission: *Ascaris lumbricoides*