

Fatal Disseminated Strongyloidiasis in Steroid Overuse

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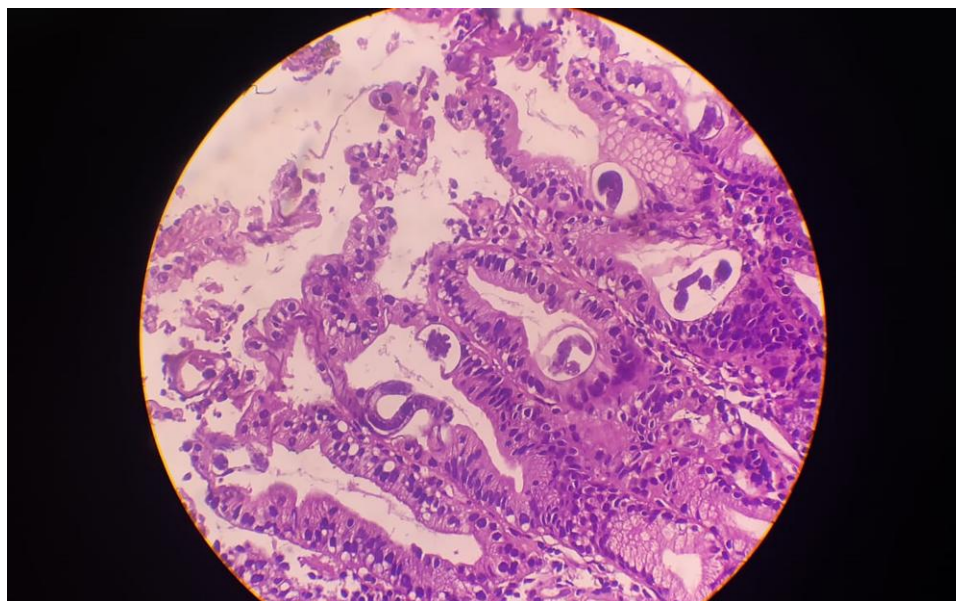
Image Legend

A 50-year-old Asian Indian gentleman was admitted with a history of significant postural giddiness and vomiting that had persisted for the past week. He had overused oral steroids (dexamethasone 0.5-1 mg per day) for a skin rash in the inguinal area for almost a year. At admission, he had hypotension and was started on intravenous fluids. Baseline biochemistries including renal, liver, and hematologic parameters were within limits. Serum cortisol was 22.06 nmol/L (0.8 mcg/dL), suggesting hypothalamo-pituitary-adrenal axis suppression. He was promptly placed on a stress dose of steroids (intravenous hydrocortisone 50 mg thrice daily). His blood pressure showed improvement. However, vomiting persisted even after 48 hours. Hence, upper gastrointestinal

endoscopy was done, which showed yellowish-white pseudo-membranous lesions in esophagus, stomach, and duodenum, and biopsies were taken. In the meantime, his general condition worsened. Workup for sepsis, including blood cultures, was negative. He succumbed to multiorgan dysfunction within 24 hours of intensive care treatment.

The image shows the histopathological section from the gastric biopsy specimen, revealing larval and adult forms of *Strongyloides stercoralis*. Disseminated strongyloidiasis is a rare infectious complication seen in immunocompromised patients uniquely on chronic steroid therapy [1]. Steroids enhance the molting of the parasite and cause dissemination, as seen in our case [2].

The threshold for suspicion of this rare infection should be low especially in patients on long-term corticosteroid



treatment. Stool routine examination and blood serology may give a vital clue to the condition in nonendemic areas. In endemic areas, early biopsy for confirmation and aggressive antiparasitic therapy may be considered.

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Disclosures

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Informed Patient Consent for Publication

Signed informed consent could not be obtained from the patient or a proxy but has been approved by the treating institution.

References

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2. Khadka P, Khadka P, Thapaliya J, Karkee DB. Fatal strongyloidiasis after corticosteroid therapy for presumed chronic obstructive pulmonary disease. *JMM Case Rep.* 2018;5(9):e005165.