In Vivo Endoscopic Imaging of Ancylostomiasis-Induced Gastrointestinal Bleeding: Clinical and Biological Profiles

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Abstract:

Little data are available regarding the association of ancylostomiasis with overt gastrointestinal bleeding. This 6-year retrospective study describes the clinical and biological profiles of unexpectedly identified ancylostomiasis in a 4-month-old baby and four adults; they presented with melena and were referred for urgent diagnostic gastrointestinal endoscopy, which confirmed numerous small intestine injuries with surrounding blood pools caused by Ancylostoma duodenale worms. Gastric erosions were also encountered in one patient. Uniquely, worm biological activities were recorded live in vivo, including mucosal invasion through a vigorous, rapid piercing process, repeated bloodsucking habits, and gut appearance during the stages of feeding, digestion, and excretion in male and female worms. In conclusion, ancylostomiasis-induced melena may occur in all ages from infants to the elderly. Worm bloodfeeding occurs after quick mucosal piercing, with blood loss being aggravated by a repeated feeding behavior. After treatment is started, bleeding stops rapidly in response to anthelmintic therapy.

Published In: