

# CASE REPORT

## GASTRIC ASCARIASIS ASSOCIATED WITH UPPER GASTROINTESTINAL HEMORRHAGE

Polrat Wilairatana<sup>1</sup>, Sommai Wilairatana<sup>1,2</sup> and Pricha Charoenlarp<sup>1</sup>

<sup>1</sup>Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Bangkok 10400; <sup>2</sup>Department of Medicine, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand

Infection by *Ascaris lumbricoides*, the largest of the intestinal nematodes, is more predominant worldwide than infection with any other helminth (Schwartzman, 1991). The adult worms can migrate to any organ or orifice of the body, causing mechanical obstruction with corresponding symptoms. The commonest gastrointestinal complications are intestinal obstruction; volvulus; perforation; appendicitis; biliary, hepatic, or pancreatic ascariasis (Karbawang and Harinasuta, 1991). *Ascaris* may produce upper gastrointestinal bleeding (Jacob, 1983), however, it is the rare complication of ascariasis. We report a case of acute upper gastrointestinal bleeding associated with gastric ascariasis diagnosed by endoscopy.

A 60-year-old Thai woman was referred to upper gastrointestinal endoscopy because of dull aching abdominal pain and melena for 1 week. She had no previous history of peptic ulcer, upper gastrointestinal bleeding, abdominal surgery, or drug ingestion. Physical examination revealed pale conjunctiva and epigastric tenderness. Laboratory investigations showed a hemoglobin of 8 gm/dl with 3% eosinophilia. Endoscopic findings revealed multiple gastric erosions at pyloric antrum with stigmata of recent hemorrhage and one adult ascaris moving at the antrum (Fig 1). The patient was treated with antacid gel and mebendazole.

This report revealed endoscopic gastric erosions in the presence of an adult ascaris moving in the stomach. There was no any other risk factor of upper gastrointestinal bleeding found in the patient.

There is only one report in the literature of gastric ascariasis causing upper gastrointestinal bleeding (Jacob, 1983). The possible pathogenesis may be due to the mechanical trauma of adult ascaris migration in the stomach; or it may be due to gastric mucosal irritation by the worm's secretion (Jacob, 1983).

Many patients with ascariasis have no upper gastrointestinal bleeding even with heavy worm

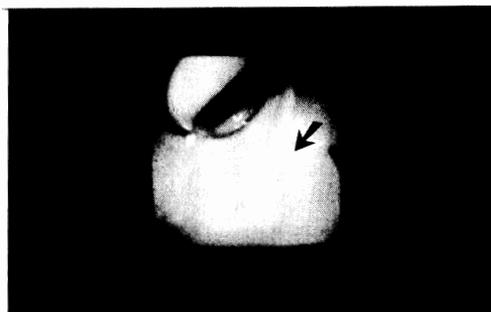


Fig 1—Adult ascaris at pyloric antrum.

infection while the adult worms live in their usual site of the host (small intestine). Complications due to ascariasis may be occurred during adult worm migration to the unusual sites such as bile duct (causing bile duct obstruction) or pancreatic duct (causing pancreatic duct obstruction and pancreatitis). However, there may be additional promoting factors contributing to upper gastrointestinal bleeding in the patients with gastric ascariasis. Thus, further study of the association between gastric ascariasis and upper gastrointestinal bleeding appears warranted.

### ACKNOWLEDGEMENTS

We are indebted to Professor Tranakchit Harinasuta for critical comment on the manuscript.

### REFERENCES

- Jacob GS, Nakib BA, Ruwaih AA. Ascariasis producing upper gastrointestinal hemorrhage. *Endoscopy* 1983; 15 : 67.
- Karbawang J, Harinasuta T. Handbook of antiparasitic drugs. Bangkok: Ruamtasana, 1991: 43-5.
- Schwartzman. Intestinal nematodes that migrate through lung (ascariasis). In: Strickland GT, ed. Hunter's Tropical Medicine. 7th ed. Philadelphia: WB Saunders, 1991: 696.