



Medical Imagery

Endoscopic Diagnosis of a Rare Cause of Iron-Deficiency Anemia

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A 74-year-old retired farmer was admitted complaining of general malaise and dizziness for one week. His medical history was unremarkable. He denied melena or hematochezia. Physical examination revealed pale conjunctivae but no other abnormalities. His hemoglobin was 8.3 g/L and his serum iron level was 42 ug/dL (normal: 44–164 ug/dL). A test for fecal occult blood was positive. Upper endoscopy revealed no abnormalities in the esophagus, stomach or duodenal bulb. However, an 8-mm long, thin, straight, red lesion resembling a visible vessel was seen in the mucosa of the distal duodenum (Fig. 1A). A few tiny hemorrhagic spots were found nearby.

After flushing with water, the lesion actively moved, although it remained adherent to the mucosa at one end. The endoscope was passed into the third to fourth portion of duodenum where more than 5 worms were found, indicative of hookworm infection (Fig. 1B) and was subsequently confirmed by presence of stool hookworm ova. The hemorrhagic spots resulted from worms attaching to the mucosa to suck blood and caused intestinal blood loss.¹ The most common exposure to hookworms in humans occurs by walking barefoot on fecally-contaminated soil that contains infective hookworm larvae. This likely explains the infestation in the retired farmer in this case. Hookworms develop into adult worms mostly in the jejunum, but they are occasionally found in the duodenum and can some-

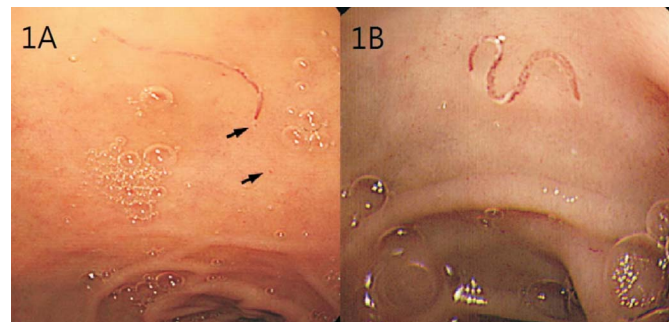


Fig. 1. (A) An 8-mm long, thin, straight, red lesion resembling a visible vessel was seen in the mucosa of the distal duodenum. A few tiny hemorrhagic spots were found nearby (arrowhead). (B) The endoscope was passed into the jejunum where more than 5 worms were found, indicative of hookworm.

times be identified by routine upper endoscopy.² A careful endoscopic inspection of the distal duodenum is therefore important in patients with iron-deficiency anemia who has barefoot on fecally-contaminated soil.

References

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