Physaloptera spp Infection in a Cat

Colin F. Burrows, BVetMed, PhD, Hon FRCVS, DACVIM
Alex Gallagher, DVM, MS, DACVIM
University of Florida

History & Diagnosis
At 3 years of age, a castrated, domestic shorthaired cat was presented for chronic vomiting, decreased appetite, and weight loss. Diagnostic studies, including CBC, serum chemistry panel, urinalysis, fecal analysis (via microscopic examination of a centrifuged fecal sample), and survey abdominal radiography revealed no abnormalities. Upper GI endoscopy revealed two small nematodes within the stomach, each with one end embedded in the gastric mucosa (Figure 1). A small area of erythema surrounded each attachment point. No nematodes were observed in the proximal duodenum.

Treatment
The parasites were removed and identified by a parasitologist as Physaloptera spp. The cat was treated with pyrantel (25 mg/kg PO for 2 days) and famotidine (2 mg/kg PO q12h for 3 days) and recovery was uneventful with no more reported vomiting.

Overview
Physaloptera spp are found in the proximal GI tract of several mammals, including dogs and cats, in which they can cause chronic gastritis and vomiting. Intensity of infection is usually low with as few as 1 to 5 worms capable of causing clinical signs.1 Infection can develop after ingestion of the intermediate hosts (eg, cockroaches, field crickets, flour or ground beetles) or ingestion of transport hosts (eg, rodents, snakes). Diagnosis requires special fecal examination techniques or endoscopy; endoscopy is more efficient, as eggs can be difficult to recover and clinical signs may be apparent before the parasite matures and sheds eggs.

Adult Physaloptera spp attach to the gastric and proximal small intestinal mucosa and, when viewed via endoscopy, appear as creamy white worms. According to a study of Physaloptera spp found in cats, females have a reported size of 27 to 41 mm long and 0.9 to 1.1 mm wide while males are 22 to 30 mm long and 0.8 mm wide.2 They may be tightly coiled. Most often they cause intense focal gastritis and enteritis with chronic intermittent vomiting. Inappetence and associated weight loss may also be observed. Treatment involves manual removal of the parasite, followed by oral pyrantel pamoate or fenbendazole; in some cases, anthelmintics may be repeated to resolve signs. Prognosis for resolution of signs is good to excellent. ■ cb

See Aids & Resources, back page, for references & suggested reading.