An unusual finding during screening colonoscopy: A cockroach!

A 52-year-old woman with a history of depression was referred by her primary physician for colorectal cancer screening. She had no family history of colorectal cancer and a review of systems was positive for abdominal bloating. Bowel preparation was done using 4 L of polyethylene glycol the evening prior to screening colonoscopy. The procedure was uncomplicated with no gross mucosal pathology, however, an insect was found in the transverse colon (Fig. 1).

The insect was aspirated and sent to the lab for further identification. The insect had three body segments (head, thorax, and abdomen) with ventrodorsal flattening of the body and a segmented abdomen, three pairs of legs extending from the thorax (with spikes and claw-like terminal appendages), elongated hind legs, and a pair of elongated antennae extending from the head to beyond the hind legs (Figs. 2 and 3). These morphologic findings were most consistent with the nymph form of Blattella germanica (German cockroach) of the Blattellidae family, a common household pest. The patient had a cockroach infestation at home and hence it was hypothesized that she may have inadvertently ingested a cockroach with food.

Only a few cases of finding insects within the gastrointestinal tract have been described in the existing literature [1–7]. After a comprehensive MEDLINE search, our case is the third reporting any insect in the colon and the first reporting a cockroach in the colon or anywhere in the gastrointestinal tract [1,6]. Ants, wasps, ladybirds, bees, and yellow-jackets are among the other insects accidentally ingested and found on endoscopy in the reported literature. The complex exoskeleton (“cuticle”) of the cockroach is probably resistant to the action of human digestive system. The insects are most likely carried into the gastrointestinal tract by the accidental ingestion of infested or contaminated food that serves as an inanimate vector. In many parts of the world, however, cockroaches and other insects in their various forms are considered a form of food delicacy.

Competing interests: None

Fig. 1 A nymph cockroach belonging to the Blattellidae family, Blattella germanica (German cockroach), was found in the transverse colon on a routine screening colonoscopy.

Fig. 2 Whole mount of the insect under a light microscope showing three body segments (head, thorax, and abdomen) with ventrodorsal flattening and segmented abdomen (magnification x 20).

Fig. 3 Three pairs of legs originating from the thorax, with spikes and claw-like terminal appendages (magnification x 200).
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