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Images in Infectious Diseases

Meloidogyne eggs in human stool in Northeastern Brazil

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Root-knot nematodes (*Meloidogyne* spp.) are among the most economically damaging genera of plant-parasitic nematodes worldwide[1]. Although they are not pathogenic to humans, their eggs may eventually be found in human stools[2] and owing to their similarity with eggs of pathogenic nematodes must be correctly identified to avoid unnecessary treatments. Recently, researchers reported the presence of eggs similar to those of *Trichostrongylus* spp. (identified as *Meloidogyne* eggs) in three (0.5%) of 586 stool samples collected from East Kwaio, Solomon Islands[2]. From 2008 to 2014, 332,132 stool samples, referred to a private laboratory network (Datalab) in Salvador, Brazil, were examined using the Lutz method; 61 (0.02%) were positive for *Meloidogyne* eggs (**Figure 1**).

Meloidogyne eggs may be identified based on their shape, size, and absence or presence of characteristic internal structures[3]. *Meloidogyne* eggs have thin hyaline shells without visible markings, elongate-ovoid with rounded ends. One of the sides can be concave or slightly flattened. They measure 82-120µm in length × 24-43µm in width and can be seen inside a juvenile cell mass in the first division phase or in a fully formed larva. They may present internal refractive corpuscles, located between the shell and the morula, which are important to distinguish them from eggs of *Trichostrongylus* spp. and hookworms. The presence of corpuscles, resembling *air-sacs*, on one of the poles, between the morula and the shell is very characteristic, although not always present. However, during its development, the concavity and the *air-sacs* may disappear, and the egg becomes plano-convex or even biconvex.

FIGURE 1. A *Meloidogyne* egg showing a thin, hyaline shell and refractive internal corpuscles located between the shell and the morula, resembling lipid droplets.

Conflicts of Interest

The authors declare that there is no conflict of interest.

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