

Enterobius vermicularis

Enterobius vermicularis is a cosmopolitan parasite that mainly infects pre-school and school-age children.

Life cycle and transmission

Enterobius vermicularis is a small nematode which lives in the crypts of the large intestine. The male is 2 - 4 mm long but is rarely seen as it dies soon after fertilising the female. The female is 8 - 12 mm long and once fertilised, becomes full of ova. It is usually at night when the fertilised female leaves her host and crawls onto the skin of the perianal area where she deposits 10,000 - 15,000 ova. Once this reproductive stage is completed, the female dies. The eggs adhere to the perianal skin causing itching. Scratching results in the ova being transferred via the fingers and finger nails to the mouth where they are swallowed, resulting in reinfection.

Laboratory diagnosis

Laboratory diagnosis is based on

1. Recovery of characteristic ova from the perianal area or under the finger nails. Since ova are rarely found in the stool, a sellotape slide or a saline swab taken from the perianal area are recommended methods for the recovery of ova. The ovum of *Enterobius vermicularis* is ellipsoid with one long end flattened. It measures 50µm to 60 µm in length by 20 µm to 30 µm width. The shell is colourless and moderately thick. The ovum is frequently found containing a fully formed larva.
2. Capture of the migrating female from the anus (usually at night). It can also be seen in the stool.



An ovum of *Enterobius vermicularis*