Enterobius vermicularis
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Summary
- Cosmopolitan distribution
- Humans are the reservoir of this 1 cm long worm
- Ileocaecal region ? Anal region: anal itch

Life cycle
This parasite is cosmopolitan. There is no intermediate host. Infection is via ingestion of eggs e.g. by eating food touched by contaminated hands or by handling contaminated clothes or bed linens. Eggs accumulate in the ileo-caecal region. After copulation the males die. The females migrate via the colon to the anus and lay their eggs chiefly at night as they creep over the peri-anal skin. This explains the nightly itching. Self-infection occurs by transferring infective eggs to the mouth with hands that have scratched the perianal area. Retro-infection or the migration of newly hatched larvae from the anal skin back into the rectum, may also occur. In rare cases there is vaginal itch because the females can also hide there. Sometimes the parasites are found in the appendix. Apart from the itch there are few problems. There is a possible association between infection with Enterobius and infection with the possibly pathogenic amoeboflagellate, Dientamoeba fragilis. A hypothesis is that Enterobius vermicularis serves as a vector for D. fragilis, as D. fragilis DNA has been detected within surface-sterilized eggs of E. vermicularis.

Treatment
- Mebendazole 100 mg (Vermox®), to be repeated after 1 and 2 weeks. Albendazole is also effective.
- Ivermectin 12 mg single dose, to repeat after 2 weeks
- Pyrantel pamoate 10 mg/kg base once (max. 1 g); to repeat in 2 weeks
- Vanquin® (pyrvinium) may also be used as an alternative to mebendazole. The faeces may discoulour red.

Since the eggs can adhere to all objects e.g. underclothing, sheets and so on, these should be changed. In a family it is best to treat all the family members, even those without symptoms.