Echinococcus granulosus

The canine tapeworm is a cestode that can cause hydatid cyst disease in humans.5

- In dogs, worms penetrate the skin, migrate through tissues (via lymphatics and venous system) to the lungs, are coughed up and swallowed, and grow and mature in the small intestine.
- Larvae may migrate to other tissues such as mammary glands, so puppies can be infected through nursing.
- Infection is by egg ingestion or larval penetration of the skin.
- In humans, larvae are unable to complete their normal life cycle, therefore they serve as a potential zoonotic agent.
- Infection can be successfully treated with albendazole or ivermectin in humans.

Ancylostoma caninum

The canine hookworm is a nematode that can cause cutaneous larval migrans in humans.6

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Baylisascaris procyonis

The raccoon ascarid is a major zoonotic risk that can infect humans and domestic species resulting in significant disease.

- In raccoons, larvae hatch and penetrate the intestinal mucosa, where they grow and mature.
- Infections in the definitive host are generally asymptomatic, though high worm burdens may occasionally cause intestinal obstruction and death.
- Eggs are shed in the feces 50-76 days after infection; ingested from contaminated soil.
- In intermediate/aberrant hosts, larvae hatch and migrate randomly throughout the body as they grow, causing considerable tissue damage that results in visceral and neural larval migrans.
- Liver, lungs, CNS commonly affected.
- When larvae enter the brain, prolonged migration causes extensive neural damage.

Diseases caused by migrating worms (wikipedia.org)

- Prevalent worldwide, especially in developing regions.
- Cystic infection is persistent in rural areas where livestock act as intermediate hosts.
- People living in close proximity to dogs fed on raw livestock offal are at high risk of infection.
- Prevention is achieved by restraining dogs and limiting their access to raw meat or wildlife.

References: