Feline Roundworm Infection

Roundworms are one of the most common intestinal parasites of the cat. They can be an important cause of illness, and even death, in kittens. As their name implies, these are large-bodied round worms, averaging about 3-6 inches (8-15 cm) in length. They do not attach to the wall of the intestine, as do some worms. Instead, they are literally “swimming” freely within the intestine.

The scientific name for the feline roundworm is *Toxocara cati*. Another less common roundworm, *Toxascaris leonina*, can infect both dogs and cats. Roundworms are sometimes called *ascarids* and the disease they produce is called *ascariasis*.

**What cats are likely to get roundworms?**
Risk factors for roundworm infection include female cats with pre-existing infection, environments that are heavily contaminated, and the presence of intermediate hosts such as roaches, earthworms and birds.

**What are the clinical signs of roundworm infection**
Roundworms are not particularly pathogenic or harmful to adult cats, but large numbers may cause life-threatening problems in kittens and debilitated older cats. In kittens, common clinical signs include a pot-bellied appearance, abdominal discomfort, depressed appetite, vomiting and diarrhea, or poor growth. There may be no clinical signs of infection with a small number of worms.

**How do cats get roundworms?**
Trans-mammary or milk-borne infection is the major route of roundworm transmission to kittens. The immature roundworms called *larvae* are present in the mother’s mammary glands and pass through her milk to the kittens. Additionally, both kittens and adult cats may become infected by swallowing eggs that contain infective roundworm larvae. These eggs may come from the feces of infected cats or from the tissues of intermediate or paratenic hosts. Common intermediate hosts for roundworms include earthworms, cockroaches, rodents and birds.

Once ingested, the roundworm larvae hatch out in the cat’s gastrointestinal tract and migrate through the muscle, liver, and lungs. After several weeks, the larvae return to the intestine to mature. When these worms begin to reproduce, eggs will pass into the cat’s stool, thus completing the life cycle of the parasite.

**How are roundworms diagnosed?**
To diagnose roundworm infection, a small amount of the cat’s stool is mixed into a special solution that causes the eggs to float to the top of the solution. The sample is covered with a glass slide on which the floating eggs will collect, and the slide is examined under a microscope. The distinctive eggs are easily recognized under the microscope. Roundworm eggs are usually plentiful but, in some cases, it may take more than one fecal examination to find them. Occasionally, intact adult roundworms can be found in the cat’s stool or vomit.

**What is the treatment for roundworms?**
Fortunately, treatment is safe, simple, and relatively inexpensive. The dead and dying roundworms pass into the stool after administration of the *anthelmintic* or deworming medication. Since none of these treatments will kill the immature forms of the worm or the migrating larvae, at least two or three treatments are needed; they are typically performed at two to three week intervals. Ideally, kittens are dewormed with each visit for booster vaccinations.
What is the prognosis for a cat diagnosed with roundworms?
The prognosis of a roundworm infection is good if appropriate medication is given promptly. However, in some instances, extremely debilitated kittens may die.

Can I prevent my cat from getting roundworms?
Prevention of roundworm infection should include the following measures:

Breeding queens should be dewormed prior to pregnancy and again in late pregnancy. This will reduce environmental contamination for new kittens.

New kittens should be appropriately dewormed as recommended by your veterinarian. The first deworming should be given at two to three weeks of age. Note that this is prior to the time most kittens are seen for first vaccines. It is entirely appropriate to present new kittens for deworming only.

Adult cats remain at risk for re-infection with roundworms throughout their lives. Whenever roundworms are seen, the cat should be promptly dewormed. It is appropriate to routinely deworm all cats that remain at high risk for reinfection. For example, it is advisable for cats with predatory habits or indoor/outdoor cats to have a fecal examination several times a year.

Monthly heartworm and flea preventive products that are effective against roundworms can be administered. This is the easiest and simplest method for preventing roundworms. Your veterinarian can advise you of the appropriate time to give these products, based on your specific geographical area. Control of insects and rodents is important since they may serve as sources of roundworm infection for cats.

Stool should be removed from litter boxes daily, if possible. Litter boxes can be cleaned with a bleach solution (one cup of chlorine bleach in one gallon of water) to facilitate removal of eggs. Rinse the litterbox thoroughly to remove all bleach since it is toxic to cats. Surfaces that may be contaminated with roundworm eggs can also be treated with this bleach solution. This solution makes the eggs easier to rinse away but does not kill the eggs. Always wash your hands after handling litterbox material.

Appropriate disposal of cat and dog feces, especially from yards and playgrounds, is important. Roundworm eggs may remain viable in the environment for long periods unless they are exposed to direct sunlight or very dry conditions.

Strict hygiene is especially important for children. Do not allow children to play in potentially contaminated environments. Be mindful of the risk that public parks and non-covered sandboxes pose. Even though stool may not be visible, roundworm eggs may be present. Sandboxes that have fitted covers are popular and help prevent infection of children with roundworms.

Contact your animal control officials when homeless animals are found.

Are roundworms a danger to me or my family?
Roundworms can be a health risk for humans. The most common source of human infection is by ingesting eggs that have come from soil contaminated with cat (or dog) feces. As many as 10,000 cases of roundworm infection in humans have been reported in one year in the United States. Children are at an increased risk for health problems should they become infected. A variety of organs may be affected as the larvae migrate through the body. In suitable environments, the eggs may remain infective to humans and cats for years.

For more information on Roundworms or any other parasites, log onto www.petsandparasites.org.

This client information sheet is based on material written by Ernest Ward, DVM
© Copyright 2005 Lifelearn Inc. Used with permission under license. May 17, 2014