Whipworms

What are whipworms?
This worm is one of the "big four" intestinal parasites with which our canine friends must contend: roundworms, tapeworms, hookworms, and whipworms. The whipworm that affects dogs (Trichuris vulpis) is substantially smaller than the other worms (a mere 30-50 mm in length, about two inches maximum) and is rarely seen as it lives in the cecum (the part of the large intestine where the small and large intestine meet). The head (or more accurately, the digestive end of the worm) is skinny versus its stout tail (or reproductive end), which gives the worm a whip shape, hence the name.

The adult worms bite the tissue of the intestine, actually embedding their heads inside, and suck blood there. Eggs are laid inside the large intestine and pass with the stool. Once passed, the eggs require about 2 to 4 weeks to form embryos and become capable of infecting a new host. (***This means that contaminated soil is the source of infection, not fresh feces***.)

The new host is infected by consuming the egg, usually during grooming. The egg hatches in the small intestine releasing a larva which eventually reaches the cecum and develops into an adult parasite after almost 3 months.

What do whipworms do?
Whipworms can cause a lot of inflammation resulting in a bloody, gooey diarrhea. Usually there is not enough blood loss to be dangerous but the diarrhea readily becomes chronic and hard to control. A second syndrome of infection has emerged but is not well understood, this being symptoms mimicking those of Addison's disease (hypoadrenocorticism). Here, a waxing and waning weakness with inability to conserve salt ultimately creates a dehydration crisis. The syndrome mimics Addison's disease in every way except that testing for Addison's disease will be negative and deworming yields a complete recovery.

How do we know my pet is infected?
Because female whipworms only periodically lay eggs (whereas other female worms lay eggs continuously), a fecal sample tested may easily be negative for eggs. This makes the confirmation of a whipworm infection a challenge. It is common to deworm for whipworms if the symptoms are suggestive of the whipworm presence even if the fecal test is negative.

How is it treated?
Most common deworming agents do not work on whipworms so something special must be selected. The most common products are fenbendazole, and febantel. Because of the long maturation cycle of young worms, a second or third deworming some 75 days or so after the first deworming is needed. More recently, regular heartworm prevention products have been developed to remove and control whipworms: Sentinel and Interceptor [milbemycin] both will cover whipworms and their regular use covers the second deworming as well. Heartgard products do not carry a high enough dose of ivermectin to kill whipworms, though at other doses ivermectin could be used with appropriate cautions.

How is it prevented?

Soil contaminated by whipworm eggs is contaminated for years. It is difficult to remove the eggs from the soil or kill them. Dogs that have continual infections likely are being re-exposed. Options are to concrete the area involved or move the dogs to a new area. Once one of the above specific treatments has been used, one can institute monthly milbemycin to continue killing the adults so that new eggs will not be added to the environment. Since it takes longer than a month for the larva to develop into adults, the dogs will not produce new eggs and additional infection will begin to drop off in a couple of years due to the fact that the worms infecting the dog are not producing additional prodigy.

Can this be transmitted to people?
This is one pet intestinal parasite that is not readily transmissible to humans.

How do I know the Whipworm has been gotten rid of?
Fecal parasite testing is recommended, to screen for this parasite, but if whipworms have been diagnosed you will need to keep your dog on monthly year round medication.

Feline Whipworm Infection

There are species of whipworms that can infect cats: Trichuris serrata in North America and Trichuris campanula in Europe. Cats are clean animals and fastidious around feces, and they rarely get infected. When they do, worm numbers are so small that symptoms hardly ever occur. Whipworms are more of an interesting incidental finding in cats when whipworm eggs happen to come up on a routine fecal check. In other words, feline whipworm infection is generally not considered to be much of a problem.