

## *Trichuris vulpis*

### *Whipworms*

#### **Affected Animals:**

Dogs. Very rarely, cats are affected by whipworms.

#### **Overview:**

Whipworms are whip-shaped parasites that upon entry into a dog's gastrointestinal tract usually attach to the dog's large intestine and cecum. The cecum is a blind pouch extending off the large intestine that has its own valve and can be compared to the appendix in humans. Dogs can get whipworms by eating dirt that contains the infective eggs of the adult parasite.

Whipworms are a dangerous parasite because they can cause intestinal inflammation, bleeding, and sometimes the loss of protein. Puppies with heavy infections can become seriously ill. Occasionally in severe cases of infestation, whipworms can alter the dog's potassium and sodium electrolytes causing central nervous system problems such as seizures.

#### **Clinical Signs:**

Clinical signs include diarrhea that may contain mucus and blood; weight loss; and in severe cases, electrolyte abnormalities such as hyponatremia and hyperkalemia that may cause seizures.

#### **Symptoms:**

See Clinical Signs.

#### **Description:**

Whipworms are parasites that use their whip-shaped bodies to attach themselves to a dog's cecum and large intestine, where they cause irritation and damage to the lining of the intestines. The worms can cause inflammation, bleeding, and sometimes the loss of protein from the intestines. Whipworms have been known to cause seizures that may be due to the electrolyte disturbances affecting the central nervous system. Puppies who get this parasite can become seriously ill.

#### **Diagnosis:**

To diagnose whipworms, the veterinarian will perform a procedure called a fecal flotation examination that uses a microscope to identify whipworm eggs.

Sometimes multiple fecal samples are needed to find the eggs for two reasons: they are not always passed every time the dog has a bowel movement, and the eggs are passed in smaller numbers than those of other parasites.

**Prognosis:**

With proper medical treatment, the prognosis is excellent.

**Transmission or Cause:**

Transmission of whipworms occurs when a dog eats soil containing whipworm eggs that have matured to the infective stage, a process that takes about one month. The infective eggs are very hard to kill and are resistant to both heat and drying; they can survive in the dirt for a very long time -- from several months to years. Thus, even if the dog is treated for whipworms, re-infection is common if the environment is not kept clean and free of feces.

**Treatment:**

Treatment of whipworms involves the use of medications such as fenbendazole, which is given daily for three days, again three to four weeks later, and then again after a three month period. Treatment is needed in repeat dosages because whipworms take three months to mature. The examining veterinarian will be able to prescribe the appropriate medications, dosages and treatment plan.

**Prevention:**

Prevention is accomplished by treating the infected animal for whipworms, and keeping the dog's environment clean and free of feces.