

## Trematode

### -Dog

Eg *Paragonimus kellicotti*, *Alaria* spp.

CS -*Paragonimus kellicotti* adults develop in cysts in the lung of both dogs and cats; animals infected with *P. kellicotti* may be asymptomatic or can present with a variety of respiratory signs, including coughing, dyspnea, pneumothorax, bronchiectasis, and hemoptysis. *Alaria* spp. adults develop in the small intestine and are not usually associated with intestinal illness. However, migration of immature *Alaria* through the lungs may result in pulmonary hemorrhage and subsequent respiratory compromise.

Tx-There are no products labeled for treatment of trematodes in dogs and cats; however, praziquantel, epsiprantel, and fenbendazole have been reported to be effective.

Although albendazole has been reported to be effective in treating trematodes in dogs and cats, its use in small animals is not recommended because of potential associated side effects such as bone marrow toxicity.

Tetracyclines are considered by many to be the treatment of choice, although other classes of antibiotics are favored by some. Short-acting corticosteroids may be used supportively. There are anecdotal reports of pet owners in high-risk areas who have dogs with exposure opportunities choosing to expose—in essence, immunize—their dogs by feeding raw fish and then treating with antibiotics at first notice of anorexia or fever. This practice appears to stimulate lifetime protection.

### Control and Prevention

- Prevention of predation and scavenging activity by confining dogs on a leash or in a fenced yard and keeping cats indoors will limit the opportunity for dogs and cats to acquire infection with trematodes.
- To avoid *Heterobilharzia* infection, dogs should not have contact with water through such activities as swimming in canals or ponds.

### -Cat

Eg *Nanophyetus salmincola*, *Platynosomum fastosum*

CS -*Nanophyetus salmincola* adults are found in the small intestine of both dogs and cats. Infection with *N. salmincola* alone is not associated with clinical disease, but this fluke serves as the vector of *Neorickettsia helminthoeca*, the causative agent of salmon poisoning, a virulent canine disease in the Pacific Northwest.

*Platynosomum fastosum* is a liver fluke of cats in Florida, other areas of the southeastern United States, and Hawaii. Chronic infection with *Pla. fastosum* leads to development of enlarged bile ducts and gall bladder, biliary epithelial hyperplasia, and ultimately, liver failure.

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