

# **ScarsdaleVets**

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### Lungworm

Dogs with lungworm infection have been seen here at Scarsdale Vets, so it is important that all dog owners are aware of this worm and its potential affects.



#### Lifecycle

Angistrongylus vasorum is a worm that lives in the heart and lungs of our domestic and wild canines. The adult worm lives in the heart and the arteries that connect the heart to the lungs. Here, the adult worms lay eggs that quickly hatch into larvae (young worms), and travel deep into the lung tissue. Irritation produced by the larvae stimulates the dog to cough, causing the larvae to be expelled from the lung tissue and into the dog's mouth where they are then swallowed and passed into the faeces.

At this stage, the worm that has been passed in the faeces is not yet able to infect another dog, as further development is required inside a slug or snail. If your dog ingests a snail or slug with a matured *Angiostrongylus vasorum* larva, it can then migrate to your dog's heart and lungs where it matures into an adult and the lifecycle is then restarted.

### Symptoms and Diagnosis

The most common symptoms experienced by dogs with lungworm infections are those relating to the heart and lungs. Some dogs may develop a sudden onset of coughing, respiratory distress, exercise intolerance and/or collapse while other dogs may simply develop a mild chronic cough that may stay stable or acutely worsen. Either way, accurate diagnosis is important as permanent changes to the heart and lungs can form, and severe cases may result in failure of the heart and lungs, which could possibly result in death.

Dogs may also develop bleeding disorders suspected to be secondary to the inflammation caused by migration of the worms. The symptoms associated with this depend on where the bleeding occurs. For example, the bleeding can present as a nosebleed or gastrointestinal bleeding (dark, tarry faeces), which can be easily observed by the owner or veterinarian. However, bleeding may also result in more severe clinical signs such as seizures and respiratory distress if it occurs in the brain or lungs. Unfortunately, determining whether a dog will develop bleeding disorders and where they will bleed is not possible.

There are no "classical" symptoms associated with Lungworm, so a clinical diagnosis can be challenging. A definitive diagnosis can be made if larvae are detected in a stool or lung sample. However, the eggs may be shed intermittently, therefore, false negatives are possible. Also evaluation of the lungs and collection of a lung sample is not possible or safe if the dog has severe respiratory difficulties, as general anaesthesia will be too risky. Recently a blood test has been developed allowing veterinarians the ability to detect the worm's presence in the dog







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#### Prevention Vs Treatment

Awareness of Lungworm among veterinarians is spreading, however, due to its recent geographical expansion, its potential as a diagnosis for a dog's symptoms may be overlooked. Also as mentioned previously, a dog can be infected with Lungworm for many months prior to having a severe episode of coughing or abnormal respiratory patterns, which may warrant examination by a veterinarian. Unfortunately, at this point, the changes in the lungs and heart may be too progressed and full recovery is unlikely. Although there are multiple successful treatments for canine lungworm currently on the market, prevention rather than treatment of the infection is strongly recommended due to its ability to cause severe and possibly life threatening disease.

#### **Drugs for Prevention**

Recent studies have focused on different drugs that can be used as either a monthly preventative or as a treatment in the face of infection. Based on these studies it has been proven that treatments containing imidacloprid and moxidectin are safe and highly efficacious as a treatment and/or monthly preventative. There are spot on treatments available that not only treat and prevent lungworm but also fleas, lice, demodex, scabies, ear mites, heartworm, and gastrointestinal parasites.



If you have any questions or concerns regarding lungworm infection and/ or would like to hear more information about the different preventative/ treatment options, please do not hesitate to ask your veterinarian or nurse.

MKTG/Pets/Collateral/InformationSheets/Dog/Lungworm



