

# Lungworm – Uuuuurgh!

**Andre Hess MRCVS**

## **My first case**

Just thinking about worms in your dog's lungs is the stuff of nightmares. One would expect to find a coughing dog in severe distress, possibly even spewing of blood with worms wriggling about in it. But this is almost never what is seen.

It was only a handful of years ago that I diagnosed my first case, and it was very soon underlined that it is a difficult disease to identify.

Cyril was brought to see me one Monday morning, bleeding from the gum-line of a single premolar tooth. I can still picture it, blood dribbling from the corner of its mouth, on the right side. He was very young and boisterous, and it was not inconceivable that the bleeding was associated with an accident at home (chewing on something sharp, for instance), or even teething. We applied a powder coagulant – the bleeding stopped – and the dog went home like nothing was the matter.

A week later, however, he was brought back with a swelling high up on one of his hind legs. There was no sign of trauma to the skin, or inflammation. Running my hand over it, my 'muscle-memory' immediately let me know that it was fluid, possible blood or serum, but not pus. I was right. A needle aspirate produced whole blood, which did not clot. Now, there is a long list of diseases that can produce spontaneous bleeding like this. That list is for a different article, however, but includes all the bleeding tendencies, ingestion of rat-poisons, and auto-immune diseases. What to do?

When in doubt, reach for the Vit K – it is a powerful coagulant, and collect blood for Haematology testing, so we could get to the bottom of it. At that point we did not yet know that Haematology would provide little in the way of clues to what caused the bleeding. It worked.

But then it hit us, all three vets simultaneously. Were we looking at this new thing we'd been reading about, called Lungworm? And how do we know? There was no easily available test yet.

My view on situations like this is: when in doubt, *treat!!*

And this is what I did. The dog is now five years old, and I saw him recently for his vaccinations.

### **The first things we need to know about Lungworm**

- ≡ The symptoms produced by a Lungworm infestation are immensely varied, and the disease is not easy to identify, especially on the first visit to the vet. Don't blame your vet for not recognising Lungworm straightaway!
- ≡ Lungworm is much less common than other kind of parasitic worms like tapeworm, roundworm, and threadworm. It is certainly less common than fleas and ticks.
- ≡ For the dog to get Lungworm, it has to eat the snail or slug. Until recently we assumed that the slime-trail was also a source of the infestation, but this has been shown not to be the case.
- ≡ There are several kinds of Lungworm your dog may get from eating slugs and snails.

- ≡ Lungworm infestation can be life threatening. Bleeds may occur anywhere in the body, including in the brain.
- ≡ The treatment of choice is Advocate. If you are using Advocate already, it is a very good preventative. It is wise to use it routinely in areas where the incidence is high. In areas where there is a lot of damp Lungworm is becoming more common.
- ≡ Lungworm cannot be passed on to humans.
- ≡ To find out more about lungworm, and how your area is affected, the following website is useful: **[www.lungworm.co.uk/learn-about-lungworm/](http://www.lungworm.co.uk/learn-about-lungworm/)**

## **Discussion**

There are several kinds of Lungworm that can affect dogs in the UK. These are *Angiostrongylus vasorum* (the most likely one to be involved), *Crenosoma vulpis* (the fox lungworm), and *Oslerus osleri* (very rare). The cat lungworm *Aleurostrongylus abstruthis* does not occur in dogs.

The life cycle of the lungworm is complicated and includes the egg stage and many larval stages, which each requires several stages before emerging as the adult worm. Each of these stages may occur in different tissues and sites in the body. This accounts for the confusing range of symptoms, which makes diagnosis difficult.

The complicated life cycle also has an impact on the testing for the disease. The larvae are not consistently present in the faeces, so looking for it there is usually unrewarding. Such a test requires stools collected over 3 days – while you have an increasingly and mysteriously

ill dog. Also, the dog may be ill before the larvae emerge in the faeces. This means that relying in stool sample for diagnosis and screening is unwise. This is apart from the fact that the vet does not necessarily have lungworm in mind when a middle aged dog is presented with a heart murmur or retinal bleeding, for instance.

Other tests include: clotting tests and endoscopic examination of the lungs.

### **But there is good news!**

There is now a 15 minute blood test that can be done in the surgery while you wait. And we need to thank those scientists from the bottom of our hearts. They are our heroes, not the self-promoting quacks (some even have degrees, usually from unaccredited universities in the USA ) with fancy websites selling dodgy 'science' and dodgy goods. Just thought I'd get that in at this point!

### **Conclusion**

The advice from the Health Subcommittee is:

- ≡ Use Advocate as a routine. It is a spot-on preparation that kills the larvae and young adult stages of the lungworm. Advocate is safe and does almost everything else you need it to do.
- ≡ Milbemax is useful, but requires a different dosing program where lungworm is suspected.

- ≡ Check the lungworm website, whose address is given above, to find out the incidence of lungworm in your area (all you have to do is put in your postcode). Please keep in mind that many cases go treated, but undiagnosed, so will not appear in the statistics.
- ≡ Watch your puppies! They are the ones most likely to eat snails and slugs.
- ≡ When in the vet's consulting room, with a dog that is strangely ill, always mention lungworm.
- ≡ Ask your vet for advice on prevention of lungworm. They have the latest information.