



Leptospirosis is a serious bacterial infection affecting the gastrointestinal tract or liver and kidneys of young dogs. Until recently the disease was uncommon as a result of an effective vaccination programme in the UK. However, we have recently seen development of infections caused by new types of leptospira not covered by the old vaccine. Leptospirosis is zoonotic - if your vet diagnoses leptospirosis in your dog, you should seek advice from your General Practitioner.

What is leptospirosis?

Leptospirosis (like Weill's disease in man) is caused by a spiral shaped bacterium (leptospira). Leptospira organisms are carried by rats and shed in their urine - they do not usually last long outside the rat but can persist in wet environments. The likelihood of infection is increased in dogs which spend a lot of time in water.

What are the signs of leptospirosis?

The signs of disease are often dramatic and come on suddenly. In some forms of the disease there is vomiting and bloody diarrhoea. In others liver damage is severe and jaundice develops. Sometimes the kidneys are affected with acute renal failure developing. Animals may die quickly before signs of disease have had time to develop.

How will my vet diagnose leptospirosis?

Your vet will probably suspect that your dog might have leptospirosis from the symptoms that you describe, your dog's vaccination history and the findings on physical examination. A blood test may show a severe decrease in the white blood cell number and/or damage to the liver and kidneys. The bacteria can be seen in special samples prepared from a urine sample.

Is there any treatment for leptospirosis?

Therapy is "supportive" and consists mainly of injecting the dog with fluids and electrolytes via a vein in order to compensate for dehydration and correct for on-going losses of fluid by vomiting. In addition, dogs are treated with drugs to stop vomiting, and with antibiotics to control the bacterium.

Will my dog get better?

Early detection of the disease before your dog deteriorates severely and the institution of good medical therapy, will give your dog a good chance of survival. However, some dogs do not survive despite proper medical care and early diagnosis. The disease appears to be more severe in young pups and in those that have had no vaccination against leptospirosis or have only just begun their vaccination course.

Can leptospirosis be prevented?

It is essential to vaccinate your dog according to your vet's recommendations. Pups that are born to vaccinated dams usually have antibodies from their mothers (maternal antibodies) that protect them against infection during the first few weeks of their lives. The pup is in danger after the level of maternal antibodies declines in his blood and that is when he should be vaccinated. Maternal antibodies prevent active vaccination, therefore a vaccine should be injected when the maternal antibodies are no longer protective and that time differs between pups. The vaccination is repeated in order to make sure that the dog has had an effective vaccine dose and to boost this effect. Additionally, dams can be vaccinated before they become pregnant.

Dogs that have recovered from infection may continue to spread the bacterium for many months and pose a risk for other animals and humans.

To prevent the spread of infection, sick dogs should be isolated from other dogs and cages and pens should be properly disinfected and cleaned. Pups who have not completed their vaccination schedule should be prevented from any exposure to potentially infected animals or their environment.



If you want any other information on health issues concerning your dog please contact Hampden Veterinary Hospital on 01296 423666 and we will be happy to advise you.