



Infectious hepatitis is a serious viral infection, most often seen in dogs less than one year old. It primarily causes damage to the liver. Although dogs with mild disease usually recover, the disease is often fatal in severely affected animals. Recovered animals can shed infection for many months and may be a risk to other dogs. An effective vaccine is available that can protect your dog from the disease.

What is canine infectious hepatitis?

Infectious hepatitis is caused by an *adenovirus*, related to the virus causing the cold in man. The disease is also known as canine adenovirus type 2 (CAV2). Animals become infected by breathing in the virus following contact with an infected dog or contaminated environment. The virus multiplies in the tonsils and then is rapidly spread through the body via the blood. Infection first localises to the liver and kidney and causes damage to the cells here. Virus can be shed in the urine for up to a year after the infection and this poses a risk to susceptible dogs who come into contact with the urine.

The infection can also affect the immune system and the immune system may start to react against the dog's own tissues (an auto-immune reaction).

What are the signs of infection?

Dogs that are infected usually develop the signs of disease within a week of being exposed to the infecting virus. The initial signs of infection are listlessness, reduced appetite and fever. Some dogs recover within 1 or 2 days and become immune to further infection.

Even if the liver is affected dogs may get better in 3-5 days with appropriate care. Clinical signs are very variable liver disease can cause jaundice, abdominal pain and depression. In severe cases spontaneous bleeding may develop.

Immune damage to the eyes can cause the development of a white colour to the front of the eye.

How do vets diagnose infectious hepatitis?

Your vet will probably suspect that your dog might have infectious hepatitis from the symptoms that you describe, your dog's vaccination history and the findings on physical examination. A blood test which shows a severe decrease in the white blood cell numbers (and possibly the presence of virus bodies in the cells) as well as tests to detect damage to the liver will help to confirm the diagnosis. If your pet recovers an increase in antibodies against infectious hepatitis in the blood will be seen.

Can infectious hepatitis be treated?

Currently, there is no direct treatment against the virus. Therapy is "supportive" and consists mainly of giving fluids by a vein in order to compensate for dehydration and correct for on-going losses of fluid by vomiting, diarrhoea and the refusal to drink during the disease. In addition, dogs are treated with drugs to stop vomiting, and with antibiotics, to prevent secondary infection with bacteria. If seizures are present then drugs may be used to control these but euthanasia may be the best option in very severely affected animals.

Will my dog get better?

Mild cases usually recover whilst severe cases usually succumb despite therapy. Remember that recovered dogs may be shedding virus for a long time after and therefore are a risk to other puppies and unvaccinated dogs.

Can infectious hepatitis 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 can interfere with vaccination so vaccination must be timed so that it is given as soon as maternal antibody levels

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start to drop 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. 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.