Infectious Canine Hepatitis: Canine Adenovirus Type 1 (CAV-1) in Dogs

Drs. Foster & Smith Educational Staff

Canine hepatitis is a disease of the liver and other body organs caused by canine adenovirus type 1 (CAV-1). The virus is found worldwide and is spread by body fluids including nasal discharge and urine. Recovered patients can shed the virus for up to nine months in the urine. The primary mode of transmission is by direct contact with an infected dog. Contaminated runs, cages, dishes, hands, boots, etc., can also serve as a source of transmission.

What are the symptoms?

Initially, the virus affects the tonsils and larynx causing a sore throat, coughing, and occasionally pneumonia. As it enters the bloodstream, it can affect the eyes, liver, and kidneys. The clear portion of the eyes, called the cornea, may appear cloudy or bluish. This is due to edema within the cell layers forming the cornea. The name 'hepatitis blue eye' has been used to describe eyes so affected. As the liver and kidneys fail, one may notice seizures, increased thirst, vomiting, and/or diarrhea.

What are the risks?

Unvaccinated dogs of all ages are at risk, however, the disease is most prevalent in patients less than one year of age. Death can result as soon as two hours after the initial signs. Death can be so sudden it may appear as if the patient was poisoned.

What is the treatment and prevention?

There is no specific treatment for infectious canine hepatitis. Intravenous fluids and supportive care are indicated. Fortunately, excellent vaccines are available to immunize puppies as well as adults. The vaccines may contain adenovirus type 1 or type 2. Adenovirus type 2 (CAV-2) is a cause of cough in the canine. Because the viruses are similar, vaccines against one cross protect against the other. Modern vaccines contain either CAV-1 or CAV-2, but not both. However, either one protects against both hepatitis and cough.

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