Infectious Canine Hepatitis

The word “hepatitis” is a nonspecific medical term describing any inflammatory process of the liver. A number of different diseases can cause hepatitis. One infectious cause is Infectious Canine Hepatitis, or (ICH). This viral disease was first recognised as a unique disease of dogs in 1947.

Prevalence
ICH is found on a worldwide basis. It most commonly infects young dogs, but any dog without immunity is considered at risk for contracting the virus.

Causes/Transmission
The ICH virus infects the dog by contact with the oral or nasal surfaces. Following viral reproduction in the tonsils and lymph nodes of the head and neck, it spreads to all parts of the body. It preferentially infects cells of the liver, eye, and kidney.

During this early stage of infection, the virus is shed in the urine, faeces, blood, and oral and nasal secretions. Eventually, the virus localises in the kidneys; it may be shed into the urine for up to a year.

Clinical Signs
Once the dog is infected with ICH virus, the incubation period lasts 4-7 days. In many cases, especially for adult dogs, the signs of ICH may be completely inapparent. Dogs with mild illness may be slightly depressed and run a low-grade fever, with complete recovery after a few days. Dogs who continue to run a fever and do not resolve the infection within this time period will go on to show other signs: enlarged lymph nodes and tonsils, abdominal tenderness, diarrhoea, and coughing. Widespread hemorrhage and jaundiced skin develop in some of the more serious cases. Death from ICH is a possibility.

In some dogs, the virus invades the eye and stimulates the immune system. The inflammatory response that results leads to oedema in the cornea, or the clear surface of the eyeball. This gives the cornea a bluish cast. For this reason, ICH is sometimes called “Blue Eye.”

Diagnosis
A presumptive diagnosis can be made based on vaccination history, clinical signs, and laboratory findings. Conclusive diagnosis can be made when two separate blood samples (taken on different days) show a rise in antibody level to ICH virus.

Treatment
Most dogs infected with ICH will recover with good supportive care. This includes attention to nutrition, fluid intake, nursing care, and control of any secondary infections.

Prognosis
The more body systems that have become involved, the worse the prognosis.

Transmission to Humans
There is some serologic (blood test) evidence that ICH can infect humans. This still remains to be studied further. Even if this is proven true, there are no reported clinical signs of disease in humans related to ICH.

Prevention
Although no vaccine assures 100% protection, the hepatitis vaccine is generally considered safe, effective, and very beneficial in preventing ICH. Following completion of puppy immunisations, mature dogs receive a booster vaccination once every second or third year.