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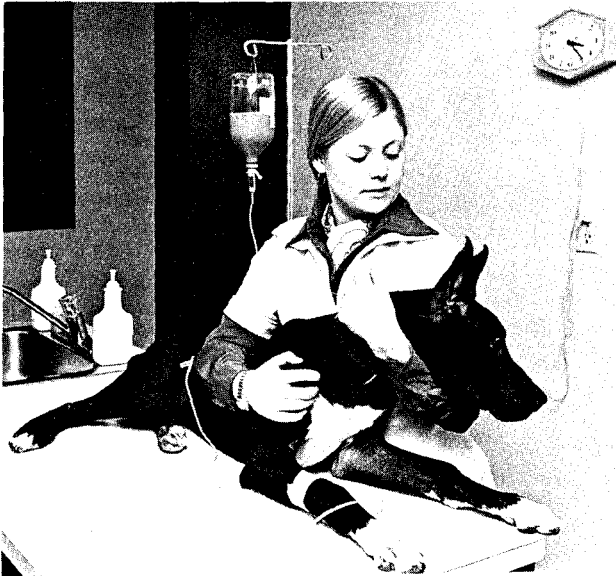
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Infectious Canine Hepatitis

INTRODUCTION

Infectious canine hepatitis (ICH) is a viral disease which infects both dogs and foxes. Dogs of *all ages* are susceptible to ICH and may die from it.

The canine hepatitis virus does not produce human hepatitis, thus is *not* considered of public health significance.



This veterinarian is administering a blood transfusion, essential treatment for a dog seriously ill from infectious canine hepatitis.

ETIOLOGY

Exposure usually occurs by ingestion of the virus. Direct transmission may occur during acute illness when the virus is present in all secretions and excretions, or the virus may localize in the kidney and be transmitted in the urine for months afterwards.

The incubation period (i.e., length of time from exposure to onset of clinical symptoms) is 5 to 9 days.

CLINICAL FINDINGS

Signs of infectious canine hepatitis may vary from slight fever to severe liver damage and internal hemorrhaging. The

first sign is a temperature above 104°F, lasting 1 to 6 days. Commonly, a "saddle" temperature curve is seen, with an initial elevation for a day followed by a secondary rise.

Other clinical signs that may appear are depression, loss of appetite, thirst, eye irritation, and a watery discharge from the eyes and nose.

As the illness becomes more severe and liver damage progresses, blood clotting time increases and abdominal tenderness is pronounced and painful. At this point control of internal hemorrhaging becomes of paramount importance to the veterinarian. Upon recovery, dogs eat well but regain their weight slowly. Seven to 10 days later, about 25 percent of the recovered dogs develop "hepatitis blue eye," a transient cloudiness of one or both eyes, which will usually disappear.

Mortality is estimated at 10 percent.

TREATMENT

In the seriously ill dog, blood transfusions are essential. In addition, body fluids should be replenished and antibiotic therapy undertaken. After recovery from acute illness, the live virus persists in the kidneys for months and perhaps years and is eliminated in the urine. In this way infected urine serves as a source of the virus, via the mouth of a susceptible dog. The natural habits of dogs enhance this transfer of the virus.

IMMUNIZATION

Passive protection is transferred from an immune bitch to her puppies via the colostrum secreted by the bitch's mammary glands following birth; however, this colostrum protection can interfere with vaccination, or active immunity. In one study, approximately 50 percent of randomly selected pups responded to ICH vaccination at 6 weeks of age (i.e., maternal antibodies did not interfere, and vaccination was effective), 75 percent responded by 8 to 10 weeks, and 95 percent responded by 12 weeks of age or older. Maternal antibodies occasionally persisted for 16 weeks.

Vaccination against ICH is recommended at the time of distemper immunization. The combined canine distemper and canine hepatitis modified live virus vaccine at least should be administered at 6 to 8 weeks of age and at 12 to 16 weeks. However, vaccination at 2 week intervals during

the critical period (6 to 16 weeks of age) approaches the ideal immunization schedule. The dog should be revaccinated annually thereafter.

Remember, vaccinations and booster vaccinations both are important to your dog's health and well being. The vaccination program of choice for your puppy should be established by your veterinarian for he/she knows the immunization schedule best-suited to your area.

"Hepatitis blue eye" occasionally will occur following vaccination. The majority of these corneal edemas are transient and will resolve themselves within a few days after onset. Your veterinarian should be notified if "hepatitis blue eye" is observed.

VACCINATION FAILURE

Although occasional vaccination failures are due to inadequate vaccination or to colostral interference, some dogs are infected by exposure to ICH virus after vaccination but before immunity has been established. Since the interval required for vaccination to establish protection is not known, 10 days should be allowed. To prevent vaccination failure, it is absolutely necessary to keep puppies isolated from exposure to ICH until 10 days after vaccination.

In addition, the puppy may have been exposed to the ICH virus before vaccination and be in the incubation stage without clinical signs of infection being present when vaccinated. The veterinarian could immunize your puppy, and a few days later clinical signs of ICH could appear. It is important to remember that the ICH vaccine will *not* produce the illness.

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