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NORTH QUEENSLAND SPECIALIST EQUINE SERVICE

What is Ehrlichiosis?

Ehrlichiosis canis (E.Canis) is an infectious disease of dogs that occurs all around the world, particularly in tropical and subtropical areas. Ehrlichiosis occurs when a brown dog tick (*Rhipicephalus sanguineus*) infected with the bacteria, *Ehrlichia canis*, bites a dog. The disease does not transmit directly between dogs.

This disease was first detected in Western Australia in May 2020. This makes Ehrlichiosis a serious and lethal disease in Australia due to our dog population having not had previous exposure and no natural immunity to it. Since the detection there have been many cases reported. In 2020, there were cases in the Northern Territory, in Katherine and a remote community west of Alice Springs. In 2021, there were cases confirmed in northern South Australia. In January 2022, there was a case in Mt Isa, Queensland. This detection suggests that the disease has found its way into the Queensland tick population.

What are the clinical signs of Ehrlichiosis?

The severity of the disease is quite variable and there can be 3 different phases of disease including the acute (early) phase, Subclinical (no symptoms) phase and chronic (long-term) phase.

In the acute phase, clinical signs are non-specific and can last 2-4 weeks. These include:

- Fever
- Lethargy / weakness
- Enlarged lymph nodes
- Inappetence
- Unusual bleeding / bruising
- Weight loss
- Respiratory distress

These signs can develop anywhere from 1-3 weeks after having received a bite from an infected brown dog tick (*Rhipicephalus sanguineus*).

The subclinical phase is where the disease / organism is present however is not causing any clinical signs. These dogs often display no signs of illness and therefore make it very hard to diagnose Ehrlichiosis. These dogs may recover from the disease, remain infected without clinical signs or progress to the chronic phase of infection.

The chronic phase of Ehrlichiosis occurs when the dog's immune system is unable to eliminate the organism. These symptoms are similar to the acute phase. However, dog with the chronic phase of the disease tend to be more severe and often untreatable. These cases may have symptoms that also include:

- Anaemia / pale gums
- Inappetence

- Prolonged bleeding
- Fever
- Weakness
- Weight loss

How is Ehrlichiosis diagnosed?

The best method of diagnosis is based on clinical signs as well as taking a blood test which is then sent off for antibody detection. It can take 2-3 weeks for the immune system to develop antibodies to the disease which can make early diagnosis difficult.

Infection with *E. canis* (Ehrlichiosis) is a notifiable disease in Australia. This means the government and relative authorities must be notified of any suspicious or confirmed cases of Ehrlichiosis.

If you think a dog has ehrlichiosis, call your private vet or the Emergency Animal Disease hotline on 1800 675 888.

How is it treated?

Due to the disease being new to Australia and dogs having no natural immunity this makes the disease particularly deadly. Ehrlichiosis is treated with antibiotics, supportive care and may also require hospitalisation depending on the severity of the disease. Some dogs may also require a blood transfusion depending on how anaemic they are. Early treatment by your veterinarian provides the best chance of recovery.

How is it prevented?

There are no vaccines or other preventions against *Ehrlichia canis* itself. The only way Ehrlichiosis is prevented is by ensuring your dog is on adequate tick prevention to repel and kill the brown dog tick (*Rhipicephalus sanguineus*). It is strongly recommended that your dog is on either a topical or oral tick prevention product as well as a tick repellent collar. Check with your veterinarian which products are best suited for your dog.

Checking your dog for ticks regularly and carefully removing any is also important, as tick treatments may not always kill the tick fast enough to stop the dog becoming infected. You can check your dog for ticks by running your fingers through their coat and on the skin, paying attention to the head, neck, ears, chest, between their toes and around their mouth and gums.

For any additional advice relevant to your individual circumstances, please call the clinic on 4779 0233.