Tick Fever

In Northern Australia, Tick Fever is a term used to describe a disease caused by 2 parasites carried by ticks. Around the world there are a number of other parasites that also cause the symptoms of 'Tick Fever'. The parasites causing Tick Fever that we most commonly see are Babesia gibsoni and Babesia vogeli (Babesia) and Anaplasma platys (Anaplasma). Both these parasites are carried by Brown Dog Ticks, stay with the tick through its lifecycle as well as are passed to through the next generation of ticks. As ticks are great at reproducing this means they will pass on the parasites too.

Dogs will become infected with Babesia and/or Anaplasma after a bite from a tick carrying a parasite. There is also evidence that infection can occur through a bite wound from another infected dog.

The tick fever parasites enter the blood stream of the dogs. The Babesia parasite then enters the red blood cells whereas the Anaplasma parasite will enter the platelets. In these cells they reproduce and destroy the cells releasing the new generation of parasite to infect another cell.

Symptoms in dogs infected with Tick Fever parasites vary widely from very few symptoms in dogs that are mere 'carriers' of the infection to fever, disinterest in food, lethargy, enlarged lymph nodes (glands), enlarged spleen to life threatening anaemia, clotting problems due to destruction of platelets, organ failure and death.

Diagnosis of Tick Fever can sometimes be made on a blood smear examination in the vet clinic usually after suspicion of the disease from the history, symptoms, and a general blood test. In some cases very few of the blood cells are infected with the parasite so a blood test to look for the presence of the tick fever parasite DNA may be suggested for definitive diagnosis.

Treatment for Babesia involves 2 injection 2 weeks apart. Dogs need to be hospitalised to have these injections in case of reaction. Treatment for Anaplasma involves a course of antibiotics. Due to the risk of bleeding and anaemia, during the time of treatment it is very important to keep dogs quiet and reduce all activity.

Prevention and treatment of tick infestations can be achieved by a couple of good products recently released to the market. Nexgard is a monthly chew that will cover fleas and ticks. Bravecto is a longer acting flea and tick chew. Note that although Bravecto will be active against Paralysis Ticks on the east coast of Australia for 3 months, it will only give protection for 2 months against the Brown Dog Tick that carries Tick Fever parasites. The older products Frontline and Advantix will not give enough protection under a heavy tick burden. Tick collars will do a reasonable job in small dogs but they struggle getting enough product from the neck region of a large dog to its tail region. Like Frontline and Advantix, the collars will struggle under a heavy tick burden. Tick injections have been

used with success before Nexgard and Bravecto were on the market, however they are an off label product unregistered for use in dogs and aren't as successful against ticks as the newer products.

With the risk of infection from dog bite wounds it is important to keep your dog protected with some simple steps. Desexing your dog will reduce its desire to roam and good fencing is imperative to prevent other dogs visiting or your dog escaping. Dog obedience classes are very useful for socialisation training to reduce the risk that your dog will want to fight and walking your dog on a lead will enable you to more successfully control situations that arise with other dogs.