

Canine Anaplasmosis

Introduction

Canine anaplasmosis, or infectious cyclic thrombocytopenia, is caused by one of two bacteria (*Anaplasma phagocytophilum* or *Anaplasma platys*) that infect the dog's platelets (blood clotting cells). Both bacteria have a world-wide distribution and are commonly seen in the upper Midwest. In the United States, disease outbreaks tend to be seasonal and coincide with the emergence of ticks in spring and early summer, and then again in fall. Most infections don't cause any illness or result in a flu-like disease that is self-limiting. Only a few dogs exposed to it become seriously ill.

Clinical Signs

There are three phases of illness. The acute phase tends to be mild and occurs 1 to 3 weeks after the dog is bitten by an infected tick. The anaplasma bacteria begin multiplying within platelets, the immune system destroys the infected platelets, and the dog's platelet count decreases. Dogs may become lethargic, have a poor appetite, have muscle tenderness or be reluctant to move, and may develop enlarged lymph nodes. A fever may be present as well. This phase is rarely life threatening. Most dogs clear the organism on their own after phase one, but some will go on to the next phase.

The second phase is considered the "subclinical phase", during which the dog appears normal. The bacteria are typically hiding in the spleen during this time. As a result, an enlarged spleen is a common physical exam finding. Dogs can stay in the subclinical phase for months or even years. The only hint of infection is a somewhat reduced platelet count and/or elevated globulin level on a blood test.

The final phase is the chronic phase when the dog gets sick again. During this phase up to 60% of dogs infected will have abnormal bleeding due to reduced platelets. You might notice bruising, blood in the urine, a bloody nose, or other signs.

Diagnosis

Even in a dog with symptoms, abnormalities in laboratory tests can vary during the acute phase of the disease. If a dog tests positive on our in-house test we will do a complete blood count (CBC) to screen for decreased platelets or red blood cells. If the CBC is normal the dog is then monitored for symptoms of disease. Should symptoms occur, more testing is needed.

