Anaplasmosis: An Emerging Tick Borne Disease

In previous columns, I have discussed Lyme Disease; however, today I will explain how another tick-borne threat called Anaplasmosis can infect our pets and people who are exposed to ticks.

Anaplasmosis is a bacterial disease that can be difficult to differentiate from Lyme Disease clinically, is prevalent in our geographic area and seems to be expanding its distribution. The fact that it also can affect people makes it especially important to prevent and control.

In my practice in Manchester, I diagnose Anaplasmosis on a weekly basis, often times more frequently than Lyme Disease. The disease is most common in the upper Midwest, East and Northeast regions of the United States. It is also prevalent in the Western Coastal areas.

The clock is indeed ticking (pun intended), as most disease outbreaks occur at the time that tick vectors emerge, most predominantly for us on the North Shore during April, May and June. Outbreaks occur again in the fall months.

The tick is the primary vector and the bacteria can affect people, dogs, cats, horses, ruminants and many other wildlife species. It is believed that transmission to susceptible animal or human hosts requires tick attachment and feeding of 24 hours or more. This is of practical importance as we recently have a new way of preventing attachment of the tick, which will be discussed when we consider prevention of this disease. It is also important because we do not have a vaccine for Anaplasmosis like the one we use to prevent Lyme Disease.

The results of our in-house laboratory testing mimic results of other reported studies. The clinical disease has most often been reported in older pets. Golden Retrievers and Labrador Retrievers are more often diagnosed, however, we see the disease in pets of all ages and in many different breeds.

The clinical signs of infection can result in a mild flu-like disease that becomes subclinical and has other vague symptom including fever, loss of appetite, lethargy and a general muscular pain that results in a resistance to

## movement.

The most common clinical sign alerting us to the disease is one that mimics Lyme Disease. In these cases we see joint pain and lameness, which is a result of joint inflammation caused by the bacteria. Less frequently, we see vomiting, diarrhea or respiratory signs like heavy breathing or coughing. Infrequently, central nervous system disease has been observed including seizures and incoordination.

We recommend that pets that are exposed to ticks be tested for the disease bi-annually, at the same time we test for Lyme Disease. The treatment is an antibiotic given orally for one month. Many patients do not show clinical signs for the disease, however, they may still be hosts and might incur a greater risk from the disease if they are challenged by other diseases, such as Lyme disease, or by any entity, including certain drugs, that causes immunosuppression.

Prevention is the most important part of managing Anaplasmosis. We recommend a program which includes reducing exposure to ticks, carefully monitoring for ticks and using a product which prevents the tick from implanting on your pets. This year a topical product has been introduced which greatly reduces the chance of the tick attachment. Dogs that test positive for the disease and appear healthy should be monitored for clinical disease and treated at the discretion of your veterinarian. For more information about the other tick borne diseases, look up Lyme Disease and Ehrlichiosis on the "encyclopedia" section of my website <u>www.Manchestervet.com</u>.