



### ABOUT THE DISEASE

**Ehrlichiosis** most commonly refers to the disease in canine patients caused by *Ehrlichia canis* which is transmitted by the brown dog tick (*Rhipicephalus*). This disease is most commonly seen in the southwest and gulf coast, which has the highest distribution of brown dog ticks.

Canine patients are infected when the tick feeds on another infected canine patient at some point in the tick's lifecycle. It is possible to be transmitted through blood transfusions as well, but very rare as blood donors are often screened.

Acute (sudden) symptoms include:

- Fever
- Unwillingness to eat (anorexia)
- Depression/lethargy
- Swollen lymph nodes
- Swelling of the limbs (edema)
- Difficulty walking
- Coughing or respiratory difficulty
- Spontaneous hemorrhage

Chronic (ongoing) symptoms include:

- Bone marrow suppression/malformation
- Enlarged spleen
- Kidney inflammation (glomerulonephritis) or kidney failure
- Inflammation of the lungs, eyes, and brain
- Severe weight loss
- Nose bleeds and/or small hemorrhages

### OBTAINING A DIAGNOSIS

Most all veterinary clinics have the ability to test for **ehrlichiosis** antibodies with simple in-house testing. However, it may take upwards of one week for patients to start to develop antibodies in an acute infection.

In cases where it is suspected that the patient has not yet had time to generate antibodies, and therefore show a false-negative on in-house testing, there is a specific reference laboratory test available. This test utilizes PCR technology, which specifically looks for the DNA of the organism.

If a patient tests positive and is treated successfully, they should be tested again in 6 months to confirm a low or negative status. If a patient has a low positive, blood should be tested again in 6 months to ensure a negative result.

### TREATMENT

As with most tick-borne diseases, **ehrlichiosis** is treated best with the antibiotic doxycycline. The treatment course often takes 6-8 weeks.

If a patient has tested negative using in-house testing, but the disease is still suspected, treatment should be started pending the reference laboratory's PCR test.

In severe cases, patients may require supportive therapy such as steroid medications, hospitalization, whole blood transfusions, and other broad-spectrum antibiotics.

### TIPS FOR SUCCESS

- Adequate tick prevention is the most effective means of controlling **ehrlichiosis**.
- Treatment often spans many months with recheck laboratory testing to ensure a negative status.