

Hemobartonellosis in Cats

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BASIC INFORMATION

Description

Hemobartonellosis is a relatively common bacterial infection of cats in North America and is also called *feline infectious anemia*. The infection causes anemia by destruction of red blood cells (RBCs). The *Hemobartonella* organism is most commonly spread by blood-sucking parasites such as mosquitoes, lice, fleas, and ticks. It may also be spread via bite wounds or transmitted to unborn offspring in pregnant females. Cats that are also infected with feline leukemia virus are at a higher risk for more severe infection.

Causes

Hemobartonella felis (newly renamed *Mycoplasma haemophilus*) is transferred via blood-sucking insects or by entry into the body through the mouth, in bite wounds, or through blood transfusions. The parasites are active in the blood 2-17 days after infection and can remain active for 3-8 weeks. The cat's immune system attempts to clear infected RBCs by destroying these cells in the spleen. The RBC destruction results in anemia that may be mild to severe.

Clinical Signs

Clinical signs appear within 7-30 days but may be cyclical, which sometimes makes the disease difficult to recognize. Signs may become worse during times of stress, such as illness or surgery. Signs of anemia vary, depending on whether the anemia is mild or severe, and may include lethargy, weakness, loss of appetite, cyclical fevers, jaundice, pale gums, and weight loss. Severe anemia can cause marked depression and even death.

Diagnostic Tests

The diagnosis of *Hemobartonella* infection can be difficult due to its cyclical nature. Occasionally the organisms are seen in a drop of blood examined under the microscope, but their absence does not rule out the infection. Because the organisms are hard to find, more sophisticated testing is often necessary and may

require sending samples to a diagnostic laboratory. Cats diagnosed with hemobartonellosis are also tested for feline leukemia virus, because the latter infection may make the disease worse and recovery more difficult.

TREATMENT AND FOLLOW-UP

Treatment Options

Because diagnosis can be difficult, if hemobartonellosis is highly suspected, treatment may be started while laboratory tests are pending. The infection is susceptible to tetracycline-type antibiotics (such as doxycycline), with clinical improvement noted within just a few days. The parasite is never completely eliminated from the blood, however, so cats may become chronic carriers. Relapse of infection is uncommon but can occur.

In severe cases of anemia, blood transfusions may be indicated. Low-dose steroids (such as prednisone) may also be given if immune-mediated destruction of RBCs is also present. Healthy carrier cats usually are not treated.

Follow-up Care

Cats receiving tetracycline antibiotics are monitored for side effects to the drugs, including fever, decreased appetite, gastric upset, esophageal irritation, and liver disease. If oral tablets are administered, dosing is followed with several milliliters of water to prevent the tablets from sticking in the esophagus and causing inflammation. If tetracycline antibiotics are not well tolerated, other antibiotics may be tried. Periodic rechecks and monitoring of RBC levels are also needed. Strict external parasite control is a must for all cats.

Prognosis

Prognosis is good if the initial diagnosis is made before the cat becomes severely anemic. Severely affected cats may need a longer hospitalization and multiple transfusions to recover. Concurrent risk factors, such as leukemia virus infection, make the prognosis more guarded (uncertain).