

Diagnosing *M. Hemofelis* with Wright-Giemsa staining

TVMDL's tips help identify this difficult to diagnose organism



Protecting Animal and Human Health through Diagnostics

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Infection with *Mycoplasma hemofelis* (*M. hemofelis*), formerly called *Hemobartonella felis*, can cause severe hemolytic anemia and even death in cats. A veterinarian may see a cat that is brought in because it was in a fight, or shows clinical signs of lethargy, anorexia and fever. Those scenarios may indicate the need to submit an air-dried blood smear for hemoparasite exam with Wright-Giemsa staining at the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL).

Diagnosis is based on a clinical pathologist's identifying the erythroparasite on the blood smear. *Mycoplasma hemofelis* is an epicellular bacterial parasite that appears as basophilic round, rod or ring-shaped structures on the erythrocyte. These small structures can be difficult to identify.

Sending the sample

To achieve the most complete and accurate diagnosis, it is important to send a properly prepared slide for review. The organism will fall off the cell in samples sent in EDTA (purple top tube) and no diagnosis can be made. A prepared smear prevents this problem.

- Send 2 thin, air-dried blood smears
- Ensure smears are unfixed and unstained
- Protect the specimen from moisture, condensation or formalin vapors

About TVMDL:

The Texas A&M Veterinary Medical Diagnostic Laboratory protects animal and human health through diagnostics.

An agency of the Texas A&M University System, TVMDL comprises two full-service laboratories, in College Station and Amarillo, and two poultry laboratories, in Center and Gonzales.

TVMDL is among 12 core laboratories in the National Animal Health Laboratory Network, a group of state and regional laboratories designed to provide a nationwide surge testing, response, and recovery capacity in the event of an animal disease outbreak.

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For this diagnosis, TVMDL charges \$7.00 with a \$6.00 accession fee. If the sample arrives prior to 11 a.m. the slide can be read and interpreted that day.

Diagnosing feline infectious anemia

Clinical pathologists identify *M. hemofelis* by sight: small blue cocci, rings, or rods on the edges or across the faces of red cells. Untrained individuals may mistake stain precipitate for organisms.

Due to the cyclic nature of the parasitemia, infection may be missed in samples where the organism is present in low numbers. A real-time polymerase chain reaction (PCR) assay for *M. hemofelis* is undergoing validation at the TVMDL Amarillo laboratory. The assay is a TaqMan real-time PCR test.

Until that time, trained and experienced clinical pathologists are the primary means of diagnosis.

For more information on TVMDL's feline infectious anemia testing, contact the College Station laboratory toll free at 1.888.646.5623, or the Amarillo laboratory at 1.888.646.5624.

A full list of services offered is available at tvmdl.tamu.edu.

