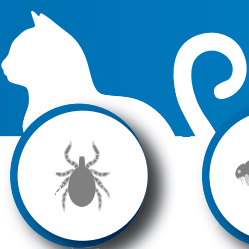


# HAEMOPLASMOSIS IN CATS



## Clinical signs

Clinical signs on the degree of anemia, the stage of infection and the immune status of infected cats

- Lethargy
- Weakness
- Reduced appetite
- Dehydration
- Intermittent pyrexia
- Pallor due to anaemia
- Tachycardia, tachypnoea, weak pulses when severe anaemia is present
- Hepatosplenomegaly
- Icterus is uncommon
- In chronic or subclinical infections few clinical signs may be present and anemia (if present) may be mild

## Clinical pathology

- Regenerative macrocytic hypochromic anaemia
- Leucopenia, lymphopenia, eosinopenia and monocytosis
- Possible positive Coomb's test
- Autoagglutination
- Hyperbilirubinaemia
- Mildly increased liver enzyme activity

## When to suspect infection?

Male, non-pedigree cats with outdoor access (prone to roaming and fighting behaviour) are predisposed to infection with *M. haemofelis*.

## How can it be confirmed?

- **Blood smear cytology**, stained with Romanovsky type stain – haemoplasmas may be seen on the surface of erythrocytes but this is very insensitive. Especially prolonged EDTA storage might detach parasites from erythrocyte surface and making the test negative. The test cannot differentiate haemoplasma species, is inexpensive but time consuming.
- **PCR** – the method of choice. More sensitive and specific than cytology. Quantitative PCR (qPCR) allow quantification of haemoplasmas – valuable in monitoring treatment response.
- **Serology** – only in experimental settings, difficult to develop due to inability to culture haemoplasmas in vitro. Currently not appropriate for routine diagnostics.

## HAEMOTROPIC MYCOPLASMAS

- Haemoplasmas are haemotropic bacteria that parasitise red blood cells.
- Three main haemoplasmas infect cats: *Mycoplasma haemofelis*, '*Candidatus Mycoplasma haemominutum*' and '*Candidatus Mycoplasma turicensis*'.
- *Mycoplasma haemofelis* is the most pathogenic form.
- Cats get infected probably during fights or by vector transmission. Blood transfusion is another possibility.
- Feline haemoplasmas are distributed worldwide.
- Infection with '*Ca. M. haemominutum*' is more prevalent in older cats because they have an increasing chance of acquiring chronic subclinical infection.

# HAEMOPLASMOSIS IN CATS

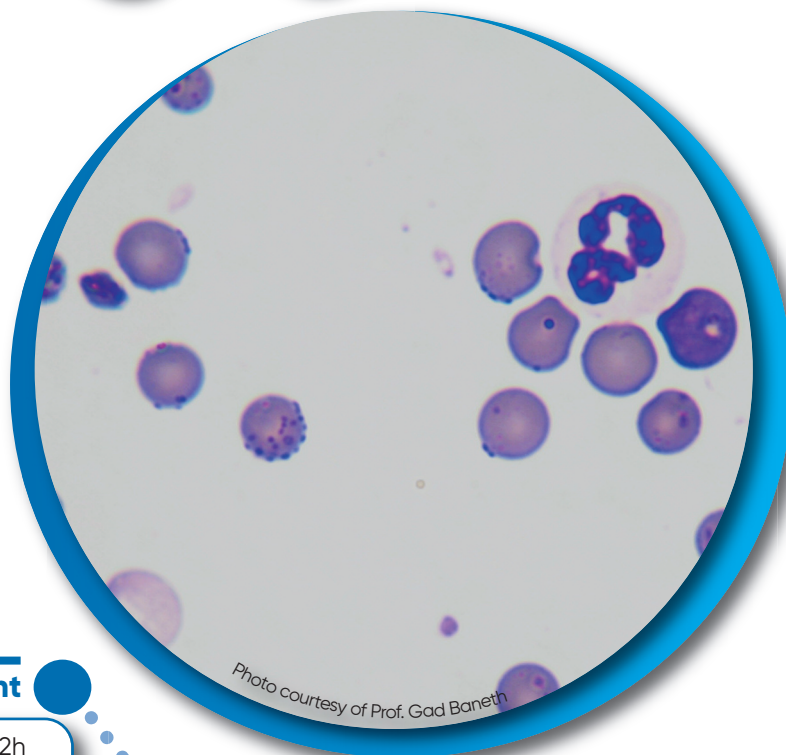
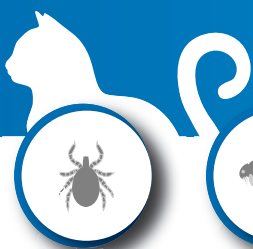


Photo courtesy of Prof. Gad Baneth

## Disease management

- Doxycycline 5 mg/kg q12h PO or 10 mg/kg q24h PO for 21 days. Sometimes longer treatment is necessary in an attempt to clear the infection.
- Pradofloxacin 5 mg/kg q24h PO or 10 mg/kg q24h PO for 14 days (may be more effective in the long-term clearing of infection).
- The response to antibiotic between different haemoplasmas can differ.
- Corticosteroids (Prednisolone 1 mg/kg PO q24h) sometimes needed as an adjunct therapy for immune-mediated component of anaemia but most cats recover without their use.
- Supportive care as needed - correction of dehydration or blood transfusion in severe anaemia.

## HAEMOTROPIC MYCOPLASMAS

### Zoonotic potential

- Haemoplasma infections in humans have been proven - with novel haemoplasmas as well as with the species that originate from animals, including cats.
- Zoonotic potential especially for immunocompromised people can not be ruled out.

### Prevention

- Screening of blood donors by PCR.
- Keeping cats indoors where applicable.
- Preventative tick and flea treatment although the vector route of infection was not clearly demonstrated.
- There are no vaccines for haemoplasmas available.

To download the FECAVA fact sheets on vector-borne diseases, please visit our website: [www.fecava.org](http://www.fecava.org)  
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