

Feline Hemoplasmosis

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In the Literature

Novacco M, Sugiarto S, Willi B, et al. Consecutive antibiotic treatment with doxycycline and marbofloxacin clears bacteremia in *Mycoplasma haemofelis*-infected cats. *Vet Microbiol.* 2018;217:112-120.

FROM THE PAGE ...

Mycoplasma haemofelis is the most pathogenic of the feline hemoplasmas¹ and can cause life-threatening hemolytic anemia in immunocompetent cats. Clinical hemoplasmosis is often successfully managed with a course of an appropriate antibiotic (eg, tetracycline, fluoroquinolone), but infection is only eliminated in a minority of cases. Clearance of infection may be desirable in cases in which the cat poses a risk to others, there is concern regarding risk for zoonotic spread to an immunocompromised owner,² clearance of infection is a requirement of rehoming (eg, for experimentally hemoplasma-infected cats), and/or the cat is immunocompromised by concurrent infection (eg, FIV, FeLV) or following chemotherapy.

This study sought to optimize the antibiotic treatment protocol required to consistently eliminate bacteremia. Fifteen cats chronically infected with *M haemofelis* were included and treated with doxycycline (5 mg/kg PO q12h for 28 days), followed by marbofloxacin (2 mg/kg PO q24h for 14 days) if still bacteremic. To accurately detect bacteremia, quantitative *M haemofelis* real-time PCR was performed on a weekly basis. Five of the 15 cats cleared bacteremia following doxycycline therapy alone. The remaining cats cleared bacteremia following subsequent marbofloxacin administration, which was initiated up to 4 weeks following discontinuation of doxycycline. Following clearance of infection, 5 cats were immunosuppressed with steroids for 3 weeks in an attempt to induce relapse. No cats relapsed following immunosuppression.

The decision to treat should be based on a firm diagnosis and clinical requirement. Cats should be closely monitored, and the risks for adverse effects should be minimized.

Administration with food is recommended, as esophagitis and esophageal stricture have been reported in cats receiving doxycycline in the management of hemoplasmosis.³ Administration of a fluoroquinolone as part of an elimination protocol should be based on the demonstration of persistent infection by real-time PCR testing following an extended course of doxycycline.

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** If *M haemofelis* infection persists and/or poses a risk to the cat or the owner, a combination of doxycycline, followed by marbofloxacin if the patient is still bacteremic, should be considered.
- 2** It is important to note that a delay between one course of antibiotics and the next does not appear to affect patient outcome, and doxycycline alone may be sufficient in clearing infection, as a significant number of study cats (33%) did not require additional treatment with a fluoroquinolone.
- 3** Repeat testing on multiple occasions may be required to confirm clearance of infection.

References

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2. dos Santos AP, dos Santos RP, Biondo AW, et al. Hemoplasma infection in HIV-positive patient, Brazil. *Emerg Infect Dis.* 2008;14(12):1922-1924.
3. McGrotty YL, Knottenbelt CM. Oesophageal stricture in a cat due to oral administration of tetracyclines. *J Small Anim Pract.* 2002;43(5):221-223.