

Metacam Risks in Cats

What is Metacam?

Metacam® is the veterinary brand name for meloxicam, a non-steroidal anti-inflammatory drug (NSAID) used to reduce pain and inflammation. This article deals with two versions: Metacam Solution for Injection (for cats) and Metacam Oral Suspension (for dogs).

Metacam's FDA Approval Status

Metacam Solution for Injection was approved for **one-time use only in cats** on 28 Nov 2004 (NADA 141-219). Metacam Oral Suspension was approved **for dogs only** on 15 Apr 2003 (NADA 141-213). As of July 2006, the approval status of both medications has not changed.

There is a misconception that using medications in a non-FDA-approved fashion is illegal. This is simply not so; the FDA regulates drug manufacturers, not the practice of veterinary medicine. Veterinarians may prescribe any drugs they have reason to believe are safe and effective, even if the particular use is not FDA approved (this practice is known as "off-label" or "extralabel" use). However, you and your cat do not have any FDA assurance that the drug is safe and effective.

Common uses of Metacam in Cats

Metacam is commonly used in cats for two cases:

(a) Metacam Solution for Injection (or simply "Metacam Injection") is used to provide post-operative relief of pain and inflammation for up to 24 hours following procedures such as dentistry, spaying and neutering. Vets often prescribe a few daily follow-up doses of Metacam Oral for continued pain relief, although this is not an FDA approved use.

(b) Metacam Oral Suspension (or simply "Metacam Oral") is often prescribed to relieve arthritis pain in cats. Although this is also not an FDA approved use, it is known to be effective, albeit with some risk.

Low Safety Margin = Higher Risks

According to the manufacturer's product sheet,¹ Metacam has a narrow margin of safety (also known as *therapeutic index*) in cats, meaning that there is very little difference between a safe, effective dose and a toxic dose. Repeated doses of Metacam Oral in cats have been known to result in death, as documented in the clinical tests³ submitted to the FDA.

The narrow safety margin in cats is reflected in the FDA's Adverse Drug Experience (ADE) reports⁴ for Metacam Oral, which summarize drug side effects reported by veterinarians. Of 842 reports for dogs, 19 cases of kidney failure and no deaths were reported. However in 320 cats, 105 cases of kidney failure, 48 deaths and 35 cases resulting in euthanasia have been reported. This clearly indicates that Metacam poses a much greater risk in cats than in dogs.

The use of Metacam poses not only a significant health risk to the cat, but also exposes the cat owner to significant financial risk. The treatment of kidney failure requires days of hospitalization, and the outcome may be death. Whether the cat survives or not, the hospital bill can easily exceed \$1,000.

Because of Metacam's narrow safety margin, veterinarians will order blood tests to check your cat's kidney and liver

functions and general state of health. Don't try to save money by refusing these tests; it's essential to know if your cat is at greater risk. Should side effects occur, your vet is likely to order another round of tests to check the drug's impact on your cat. Be prepared for these costs.

Problems with Smaller Cats

The post-surgical use of Metacam Oral in smaller cats (under 10 lbs.) poses a unique problem. The product sheet for Metacam Oral² warns against administering the drug directly into the mouth for dogs weighing less than 10 lbs, as this may cause an accidental overdose. Instead, it must be mixed with food to ensure slower absorption. The Metacam Injection used during surgery may cause loss of appetite, and the cat won't eat his oral dose. So you're likely to try to administer the dose directly into the mouth, but if your cat weighs less than 10 lbs. (and many do), this only increases the risk of overdose.

Questions for your Vet

Given the clearly documented risks of Metacam Oral in cats, it is wise to ask your veterinarian the following questions if he or she recommends its use:

- ♦ Are my cat's blood tests (especially liver & kidney functions) OK?
- ♦ What side effects should I look out for?
- ♦ Under what conditions should I discontinue the medication?
- ♦ Who do I call on evenings or weekends if my cat has a reaction?
- ♦ Is there a 24-hour emergency animal hospital in the area?
- ♦ May I have copies of the Metacam product sheets?
- ♦ Persians are a more delicate breed, are you sure this is safe?
- ♦ My cat weighs less than 10 pounds, are you sure this is safe?
- ♦ What other pain medications are FDA-approved in cats?
- ♦ What pain medications were you using prior to Metacam Oral's release in 2003?
- ♦ Are these medications safer and/or cheaper than Metacam?

Conclusion

There are clearly documented risks associated with the off-label use of Metacam Oral in cats which may lead to kidney failure and death. These risks should be carefully discussed with your veterinarian before proceeding with any Metacam treatment. For post-operative pain relief, explore other alternatives with your veterinarian before agreeing to the use of Metacam.

Acronyms

ADE	Adverse Drug Experience
FDA	The United States Food and Drug Administration
NADA	New Animal Drug Application

References

- [1] *Product sheet: Metacam Solution for Injection for Cats* Boehringer Ingelheim Vetmedica, Inc. (revised October 2004) http://www.bi-vetmedica.com/product_sites/METACAMIN/Cats/documents/Metacam_Cat_RP.pdf
- [2] *Product sheet: Metacam Oral Suspension for Dogs* Boehringer Ingelheim Vetmedica, Inc. (revised January 2005) http://www.bi-vetmedica.com/product_sites/METACAMORAL/documents/Metacam_Oral_Susp_rp.pdf
- [3] *Freedom of Information Summary for Supplemental NADA 141-219* (Metacam 5 mg/mL Solution for Injection for cats), 28 October 2004 FDA Center for Veterinary Medicine See "Tolerance Study in Cats on Meloxicam", pp. 24-26 <http://www.fda.gov/cvm/FOI/141-219s102804.pdf>
- [4] *Adverse Drug Experiences (ADE) Report, 9 June 2006* FDA Center for Veterinary Medicine See "meloxicam oral", pp. 48-64 http://www.fda.gov/cvm/Documents/ade_web_rpts_MN.pdf

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