

Meloxicam: OK for Long-Term Use Despite 'Black Box' Warning?

Meloxicam was deemed dangerous enough by the FDA to give it a 'black box' warning, but now two positive studies have emerged, prompting many veterinarians to take a second look ... Be prepared with the facts, just in case your vet suggests this treatment for your pet's arthritic pain ...

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Meloxicam, an NSAID pain reliever with an FDA black box warning for use in cats, is resurfacing in the news as an appropriate option for treating osteoarthritis (OA) in kitties
- Since the 2010 boxed warning, at least two studies have been conducted on the use of meloxicam for feline OA – both with positive results. Unfortunately, these studies were sponsored and/or supervised by the manufacturer of METACAM® (meloxicam), Boehringer Ingelheim Vetmedica Inc. (BIVI)
- Based on these studies, many veterinarians are now taking a second look at prescribing meloxicam for arthritic cats ... despite the black box warning. If your vet should suggest this drug for your kitty, we recommend inquiring instead about alternative, less risky treatments
- There are a number of safe, natural treatments and supplements that can be tremendously beneficial in relieving the pain of arthritis and improving a kitty's mobility

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Eighteen months ago, I wrote about the FDA's October 2010 announcement of the addition of a "Boxed Warning" (also commonly referred to as a "black box warning") on METACAM® (meloxicam) labels. For those of you unfamiliar with meloxicam, it's a non-steroidal anti-inflammatory (NSAID) drug used in veterinary medicine primarily to control postoperative pain and inflammation associated with orthopedic surgeries, spays, and neuters.

METACAM® is manufactured by Boehringer Ingelheim Vetmedica Inc. (BIVI). The boxed warning is for the drug in two forms (both liquid): METACAM® Solution for Injection and METACAM® Oral Suspension.

The drug in both forms is FDA-approved for dogs – the oral form is more often used to treat the symptoms of canine osteoarthritis. The injectable was approved for one-time use only in cats to manage postoperative pain. The oral form was not approved for use in cats at all. However, veterinarians are allowed to use medications in an "extra label" or "off label" manner, meaning they can legally prescribe oral meloxicam for cats.

Why Meloxicam Received a Black Box Warning for Use with Cats

According to the FDA:

"Boxed warnings on prescription drug labels highlight for prescribers certain contraindications or adverse drug events, especially those that may cause death or serious harm. A contraindication occurs when the risk of using the drug in a patient outweighs any benefit."

The METACAM® boxed warning reads as follows:

WARNING

Repeated use of meloxicam in cats has been associated with acute renal failure and death. Do not administer additional injectable or oral meloxicam to cats. See Contraindications, Warnings, and Precautions for detailed information.

The FDA gave as the reason for the meloxicam boxed warning "many cases of kidney failure and death in cats associated with repeated use of METACAM®."

I typically pay attention to boxed warnings because it takes a considerable amount of irrefutable evidence to prompt the FDA to exert this level of influence over a drug company.

Study Touts Benefits of Daily Use of Meloxicam for Cats

Recently I came across a news article titled "Drug to Relieve Pain of Feline Osteoarthritis Identified." The "identified" drug, as it turns out, is meloxicam, and the article cited a recent study published in *The Veterinary Journal*¹ that concluded:

"Daily oral meloxicam administration of 0.025 and 0.05 mg/kg for 4 weeks significantly improved night-time (17:00–06:58 h) physical activity in cats suffering from OA, which suggested that meloxicam provides clinically relevant pain relief."

The study was conducted at the Faculty of Veterinary Medicine, Université de Montréal, Saint-Hyacinthe, QC, Canada, and was sponsored by none other than Boehringer Ingelheim Vetmedica Inc., the company that makes METACAM®. In fact, there's even a "Conflict of Interest Statement" at the end of the study indicating that one of the listed authors is an employee of BIVI and actually supervised the study for the company.

Needless to say, I don't have a great deal of confidence in the Canadian study, however, after a bit more poking around I found a 2011 retrospective case-control study published in the *Journal of Feline Medicine and Surgery* and conducted at The Cat Clinic in Melbourne, Australia.²

2011 Study Says It May Benefit Cats With Kidney Disease

This study concluded "a long-term maintenance dose of 0.02 mg/kg of meloxicam can be safely administered to cats older than 7 years even if they have CKD [chronic kidney disease], provided their overall clinical status is stable."

The authors of the study even went so far as to suggest long-term use of meloxicam "may slow the progression of renal disease in some cats suffering from both CKD and DJD [degenerative joint disease]."

The idea that meloxicam is — despite a U.S. FDA black box warning — not only entirely safe for senior cats with kidney disease, but can also slow the progression of failing feline kidneys, seems counterintuitive (to put it mildly). So I did a little digging on the study authors.

As it turns out, lead study author Richard A. Gowan is the inventor of "Use of meloxicam for the long-term treatment of musculoskeletal disorders in cats" and has assigned the patent rights to BIVI. Study author Amy E. Lingard works with Gowan at **The Cat Clinic** in Melbourne.

Study author Laura Johnston appears to be involved in the Richard Gowan/BIVI **patent**, and she and study author Wibke Stansen **work for BIVI**.

Study author Scott A. Brown works for the University of Georgia and has participated in at least one other **BIVI-sponsored study** involving meloxicam, and study author Richard Malik of the University of Sydney, has worked with Gowan and some of the others on at least one additional **BIVI-sponsored study** involving meloxicam.

Given the ties the authors of the 2011 study have to Boehringer Ingelheim Vetmedica Inc., I'm no more confident in this study than I am in the Canadian study.

How Many Vets Will Heed Recent Studies vs. FDA's Warning?

Most vets, including me, are always looking for new and safe ways to manage pain in felines, which can be tricky for many reasons. I tried this drug when it first came out as a means of controlling post-operative (short term) pain, but as more and more vets reported side effects, even when used once, I switched my post-surgical feline patients to injectable buprenorphine instead. While I would never prescribe or recommend meloxicam for cats as a means of controlling chronic pain, other veterinarians and organizations that were initially put off by the black box warning are giving the drug a second look. From the **Winn Feline Foundation**:

"In the European Union, Switzerland, Australia, and New Zealand, meloxicam is licensed for long-term treatment of chronic pain in cats. In the United States, meloxicam has a black box label for avoiding its repeated use due to an increased risk of acute renal failure and death. This unacceptable risk has not been a concern in other countries, possibly due to better patient selection and the lower doses used. Regardless of licensed or extra-label use of meloxicam, previous studies have shown that it can be administered safely to aged cats with or without chronic kidney disease (CKD), at least at low therapeutic doses and provided they are clinically stable and monitored carefully."

From Dr. Jennifer Coates of PetMD (the comments to this blog post are worth reading as well):

"I used meloxicam in a few patients and one of my own cats for a while with no ill effects, and it worked very well. But after the boxed warning was added to the label, I stopped recommending it in all but the most extreme, euthanasia-is-pending type cases."

*"Maybe I over-reacted. A **study** published last October offers a different perspective on meloxicam use in cats with both degenerative joint disease (osteoarthritis) and chronic kidney disease."*

In my November 2010 article, I quoted Dr. Robin Downing, an expert on veterinary pain management, who said "I do not use NSAIDs at all in old cats with pain, whether or not they have evidence of renal disease. With greater knowledge of and access to alternatives ... I just do not reach for NSAIDs any longer for this population of patients who are by definition at higher risk of renal disease." Dr. Downing now believes that used appropriately, meloxicam is safe for cats.

Safer Alternatives to NSAIDs for Arthritic Cats

Because cats are so physiologically unique, there are very few safe, effective pharmaceutical pain relievers that can be given long-term to control chronic conditions like arthritis. If your vet should happen to suggest meloxicam for your cat, I would certainly ask him or her what alternatives are available.

There are a number of things you can do to alleviate your arthritic kitty's pain and improve mobility. These include **chiropractic**, therapeutic massage, helping your cat stretch, acupuncture, and prolotherapy. There are also some newer therapies my rehabilitation technician has used with good success, including the **Assisi Loop**, a form of pulsed electromagnetic field therapy. Laser therapy can be very beneficial at controlling pain in kitties as well.

There are also certain supplements you can add to your pet's diet that provide the raw materials for cartilage repair and maintenance, including glucosamine sulfate, MSM and egg shell membrane; homeopathics, based on your kitty's symptoms, but may include Rhus Tox and Arnica; ubiquinol; turmeric; spirulina and astaxanthin; natural anti-inflammatory formulas; EFAC complex; and krill oil.

I recommend you work with a holistic vet to determine how to best treat the inflammation and pain caused by your pet's arthritis, as well as how to nourish remaining cartilage. Also ask your vet about **Adequan injections**, which can stimulate joint fluid very rapidly in pets with arthritis.

Sources and References

[NewsMedical March 6, 2013](#)

¹ [The Veterinary Journal February 2013](#)

² [Journal of Feline Medicine and Surgery, October 2011](#)
