Meloxicam

Metacam®, Loxicam®, OroCam®, Mobic®, Mobicox® and Elixoral® are other (generic) names for this medication.

How Is This Medication Useful?

Meloxicam is used in dogs and cats to treat pain and inflammation due to osteoarthritis or after surgery or injuries. It also has been used for anti-cancer effects and to reduce fever.

Carprofen is commonly known as an "NSAID" (non-steroidal anti-inflammatory drug), which is COX-2 preferential. COX-2 preferential NSAIDs were designed to have fewer side effects than those that are not preferential. Other drugs in the NSIAD category include aspirin, piroxicam, deracoxib, and firacoxib,

Are There Conditions or Times When Its Use Might Cause More Harm Than Good?

Though meloxicam is not approved for oral use in cats in the US, it is approved for injectable use in the US, and is approved for oral use in cats in other countries. Studies have shown that it can be given orally to cats for 6 months or longer, even in cats with chronic kidney failure, and most of those cats tolerate it well, despite the "black box" warning on the US product to not use meloxicam in cats for extended periods of time. The controversy surrounding long term use of meloxicam in cats seems to be a problem only in the United States. The International Society for Feline Medicine (IFSM) and the American Association of Feline Practitioners (AAFP) guidelines for long-term NSAID use in cats suggests that benefits of treatment often outweigh the risks.

Meloxicam should not be used in animals who are allergic to it or severely allergic to other drugs like it.

Use this drug very cautiously, if at all, if your dog or cat active stomach problems or gastrointestinal ulcers or has had these kinds of ulcers in the past. Meloxicam may make these ulcers worse or reappear. In general, we do not give meloxicam to animals who are not eating, unless we understand why they are not eating, and determine that NSAIDs will either not likely increase the likelihood or side effects, or if benefits are decided to outweigh risks. For example, in cases of end stage cancer, positive effects of the drug (anti-inflammatory effects, possible anti-neoplastic effects), can be deemed to likely outweigh the risks.

Speak with your veterinarian if your cat is taking any of the following medications: Other anti-inflammatory drugs such as NSAIDs or corticosteroids (e.g., prednisone, methylprednisolone, dexamethasone, etc.); furosemide (Lasix®, Salix®); digoxin, methotrexate, sulfa drugs or oral antidiabetic drugs. In general, meloxicam is not used simultaneously with these other drugs.

If your animal has or has gastrointestinal, kidney or liver problems, talk to your veterinarian about the risks of giving your dog or cat meloxicam. Meloxicam only very rarely causes liver problems in dogs. I you notice that your pet does not feel well or becomes yellow around the whites of the eyes while taking meloxicam, please stop giving the drug and call your vet right away.

It is not known if meloxicam is safe to give pregnant, lactating or breeding dogs or cats, though we know that most NSAIDs are secreted in the milk, and will be ingested by nursing puppies and kittens. Talk to your veterinarian before using this drug in those animals.

What Side Effects Can Be Seen With Its Use?

Meloxicam is safe to use in the vast majority of dogs and cats, and the risk of side effects occurring appear to be less than 1%. But rarely, serious side effects and sometimes death have been noted.

The most commonly reported side effects in cats taking meloxicam are usually related to the kidneys. Kidney problems may present as lethargy, decreased appetite, vomiting, ulcers in the mouth, or an

acetone like odor to the breath. Kidney side effects may be made worse by low blood pressure, dehydration or anesthesia, especially when high doses are used. The most commonly reported side effects of meloxicam in dogs are gastrointestinal problems, which can present as decreased appetite, vomiting (including blood in the vomit), diarrhea, or blood in the stools. If you note any of these problems in your dog or cat, stop giving meloxicam and contact your veterinarian. If your pet has cancer and is not eating at the time meloxicam is started, side effects due to kidney and/or gastrointestinal disease can be difficult to detect without doing bloodwork.

Tell your veterinarian immediately if your dog or cat's water intake or urinary habits have changed. Also immediately contact your veterinarian if your dog or cat is lethargic (lacks energy).

How Should It Be Given?

The successful outcome of your animal's treatment with this medication depends upon your commitment and ability to administer it exactly as the veterinarian has prescribed. If you have difficulty giving doses consult your veterinarian or pharmacist who can offer administration techniques or change the dosage form to a type of medication that may be more acceptable to you and your animal.

Some other drugs can interact with this medication so tell your veterinarian about any drugs or foods that you currently give your animal. Carprofen should not be administered with diuretics in most cases, and should never be given with other NSAIDs or corticosteroid anti-inflammatories. Do not give new foods or medications without first asking your veterinarian. Due to its long lasting effects, it is recommended that other NSAIDs be stopped at least 48 hours prior to giving meloxicam, and sometimes as long as 3-5 days.

The following drug interactions have either been reported or are theoretical in humans or animals receiving meloxicam and may be of significance in veterinary patients. Unless otherwise noted, use together is not necessarily contraindicated, but weigh the potential risks and perform additional monitoring when appropriate.

- **ACE Inhibitors** *(e.g.,* **enalapril, benazepril**): NSAIDs can reduce effects on blood pressure.
- **Anesthetics, Inhalant**: May increase the risk for NSAID kidney toxicity.
- **Anticoagulants** (*e.g.*, **heparin**, **warfarin**, etc.): Increased chance for bleeding.
- **Aspirin and other NSAIDs**: May increase the risk of gastrointestinal toxicity.
- **Corticosteroids** (*e.g.,* **prednisone**): May increase the risk of gastrointestinal toxicity; avoid use with NSAIDs.
- **Digoxin**: NSAIDS may increase serum levels, and increase toxicity.
- **Fluconazole**: has increased plasma levels of celecoxib in humans and potentially could also affect meloxicam levels in dogs.
- **Furosemide**: NSAIDs may reduce diuretic effects of furosemide, and increase risk for kidney toxicity.
- **Methotrexate**: Serious toxicity has occurred when NSAIDs have been used concomitantly with methotrexate; use together with extreme caution.
- **Nephrotoxic Drugs** (*e.g.*, **furosemide**, **aminoglycosides**, **amphotericin B**, etc.): May enhance the risk of nephrotoxicity (kidney toxicity).

Dogs and cats usually receive this medication once a day by mouth. If you miss a dose of this medication, you should give it either as soon as you remember or with the next dose. Do not double a dose, as this can be toxic to your pet. It is OK to give this drug only as needed if directed to do so by your veterinarian.

Giving this medication with food might reduce the chances of stomach problems occurring.

What Other Information Is Important About This Medication?

If meloxicam is used long term in your pet, bloodwork at least once or twice a year is recommended, to monitor for side effects. In addition, bloodwork within 30 days of starting the medication might be recommended in some cases. When NSAIDs are used chronically in dogs, drugs to protect the stomach (omeprazole, antacids, or misoprostol) have been used in an attempt to prevent or limit GI adverse effects but it is still not clear what effect they actually have in this regard.

Because the chewable formulation of this drug may be very appealing to dogs, be sure to store in a secure area to prevent an accidental overdose.

Keep the tablets stored in the original prescription vial at room temperature; do not expose them to high heat.

Keep this medication away from children.

References:

Plumb Veterinary Drug Handbook – 2014®.