

Reconsidering NSAIDs in Cats

Data are limited regarding feline dosages, patient selection, and outcome of long-term NSAID use in certain disease states. Lack of approved products, concerns over adverse effects, and lack of knowledge regarding NSAIDs may contribute to undertreatment of chronic feline pain.

Approved for use in canine osteoarthritis, tepoxalin (Zubrin, zubrinfordogs.com) is a dual inhibitor of cyclooxygenase and lipoxygenase; no data exist for dosing in cats, but its relatively short half-life (4.7 hr) and dual action make it promising. Meloxicam (Metacam, bi-vetmedica.com) is a cyclooxygenase inhibitor licensed for cats in some countries. This study compared clinical tolerance of tepoxalin ($n = 57$) and meloxicam ($n = 22$) in cats. Median dosages were 13 and .029 mg/kg/day and mean treatment duration of 73 and 327 days for tepoxalin and meloxicam, respectively. Adverse events were reported in 9% prescribed tepoxalin and 18% prescribed

meloxicam; the primary effect was vomiting, which stopped with drug discontinuation. Both drugs were well tolerated, and no significant changes were noted in serum biochemistry panel, urinalysis, or hematologic tests. Low-dose meloxicam may be used for an extensive period in cats, and some cats may receive tepoxalin for extended periods without severe consequences.

■ Commentary

In 2010, the FDA issued its warning for meloxicam and risk for acute renal failure and death and that additional injectable or oral meloxicam should be avoided.¹ Unfortunately, this created controversy, particularly because the International Society of Feline Medicine and American Association of Feline Practitioners concurrently published consensus guidelines supporting the drug and its role in chronic pain in cats. Other commonly used drugs (eg, buprenorphine, fentanyl, polysulfated gly-

cosaminoglycan, gabapentin) are also not licensed for chronic pain in cats but remain safe, albeit sometimes less effective. Although risks should be considered, this study emphasized that more data concerning long-term benefits and risks are necessary before making sweeping assumptions about one drug. This emphasized the importance of multimodal and integrative medicine in any chronic pain case to keep medications at their smallest effective dose.—*Heather Troyer, DVM, DABVP, CVA*

■ ■ Source

Evaluation of the clinical use of tepoxalin and meloxicam in cats. Charlton AN, Benito J, Simpson W, et al. *J Feline Med Surg* 15:678-690, 2013.

1. **Metacam 5mg/mL Solution for Injection for Dogs and Cats Package Inserts.** U.S. Food and Drug Administration; <http://www.fda.gov/downloads/AnimalVeterinary/Products/ApprovedAnimalDrugProducts/DrugLabels/UCM050397.pdf>; accessed Dec 2013.

Pancreatic Insufficiency Diagnosis

Exocrine pancreatic insufficiency (EPI), a heritable condition, results from autoimmune destruction of pancreatic acinar cells and is most common in young-adult German shepherd dogs (GSDs) and rough-coated collies (RCCs). Signs include polyphagia, weight loss, and soft voluminous feces. Diagnosis is based on signs, serum trypsin-like immunoreactivity (TLI) below reference range, and resolution with pancreatic enzyme supplementation. This study documented 3 cases in which EPI signs were present but serum TLI was normal. Case 1 was an intact male GSD (6 months of age), case 2 was an intact male RCC (5 months of age), and case 3 was an intact male GSD (18 months of age). Each had chronic soft



feces or diarrhea, polyphagia with marginal weight gain, and chronic intestinal parasitism unresponsive to appropriate treatment. All had complete resolution when supplemented with pancreatic enzymes, and all had normal baseline serum TLI concentrations and low-normal serum pancreatic lipase immunoreactivity (cPLI).

Serum TLI remained within range after a 12–20-month follow-up period during which none experienced progressive signs. Isolated enzyme deficiencies may have been present in these study dogs. Although rare, isolated pancreatic enzyme deficiency should be considered in young dogs with persistent, nonresponsive diarrhea suggestive of EPI but with serum TLI concentrations in the normal range.

■ Commentary

This case report series exemplified that there are clinically relevant differences between cPLI and TLI levels. EPI diagnosis is often simple; however, there are cases in which EPI is suspected but the TLI result is not low enough to support the diagnosis. In cases in which EPI is suspected based on signs and breed predisposition but not confirmed by a low TLI result, a cPLI test should be submitted.—*Dara Zerrenner, VMD, MS, DACVIM*

■ ■ Source

Suspected isolated pancreatic enzyme deficiencies in dogs. Viviano KR, Ziglioli V. *JVM* 27:588-591, 2013.

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