Analgesia for Cats with Osteoarthritis

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In the Literature

Monteiro BP, Klinck MP, Moreau M, et al. Analgesic efficacy of an oral transmucosal spray formulation of meloxicam alone or in combination with tramadol in cats with naturally occurring osteoarthritis. *Vet Anaesth Analg.* 2016;43(6):643-651.

FROM THE PAGE

Although osteoarthritis (OA), which can be very painful, is well documented in cats,¹⁻⁷ chronic pain is commonly undertreated in this species.³ Various factors, including cats' ability to hide pain and a lack of information regarding analgesic drug use, contribute to undertreatment.³

In this study, indicators of pain (eg, mobility, lameness) markedly improved when cats with documented OA were treated with oral transmucosal meloxicam. Addition of tramadol did not further improve these pain indicators, but when hypersensitivity (central sensitization) was simulated, the addition of tramadol increased analgesia levels. Tramadol's effect on hypersensitivity could be due to serotonin-norepinephrine reuptake inhibition (SNRI) rather than the drug's opioid effects.⁸ An increased incidence of typical opioid-mediated adverse effects (eg, anorexia, depression) occurred with the addition of tramadol. A repeat study using an SNRI with no opioid effects could be useful.

Of note is the often-profound variability between cats in behavior, degree of pain relief, and incidence of adverse effects. This high variability in responses among cats is not unusual,⁹ which adds to the difficulty of studying cats.

Use of stair exercise to stress joints likely improved the ability to detect lameness using pressure mats, and collection of mobility data when humans were not present with the cats increased the likelihood of recording true cat behavior. Although there was variability between cats and the sample size was small, the positive response to analgesic treatment of OA with meloxicam should inspire practitioners to treat this painful disease.

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... TO YOUR PATIENTS

Key pearls to put into practice:

- Screen older cats for OA, especially if the cat's behavior changes, mobility decreases, or the cat is reluctant to go up and down stairs or jump to favorite perches.⁶ As many as 61% of cats older than 6 years¹ and 90% of cats older than 12 years² may have OA.
- 2 Do not be afraid to treat cats with chronic pain. Early warnings about the high incidence of adverse effects of meloxicam in cats were based on repeated administration of a very high dose (0.3-0.6 mg/kg).¹⁰ Use doses similar to those in this study (0.05 mg/kg), or consider other NSAIDs (eg, robenacoxib).
- B Hypersensitivity can occur with acute or chronic pain. Combination therapy (in this case, meloxicam and tramadol) is almost always required for effective treatment.¹¹
 - Transmucosal meloxicam spray is only FDA-approved for use in dogs.

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