# **Maladaptive Pain in Cats**

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#### In the Literature

Adrian D, Papich M, Baynes R, Murrell J, Lascelles BDX. Chronic maladaptive pain in cats: a review of current and future drug treatment options. *Vet J*. 2017;230:52-61.

### FROM THE PAGE ...

Chronic pain should not be characterized by duration of pain but instead by changes that occur in the nociceptive components of the CNS in response to ongoing stimuli.<sup>1</sup> These changes can lead to maladaptive pain, which has no protective purpose and can lead to a debilitating pain syndrome that is difficult to treat; this contrasts with acute pain, which protects the patient from further tissue damage by promoting limited movement of injured tissue.<sup>1</sup> Although maladaptive pain is likely to occur in cats,<sup>2</sup> there are few proven treatment options.

This review provides a comprehensive discussion of published literature on maladaptive pain and its treatment in cats, with supporting information from other species, including a clear and detailed explanation (with illustrations) of maladaptive pain and the importance of understanding that the disease and its treatment are multifactorial. The importance of pain assessment is discussed, as are potential therapies.

Aside from NSAIDs, few drugs have been proven to be effective in cats—or other veterinary species—for the treatment of chronic or maladaptive pain, and even those proven in humans are not always effective, primarily because of the complexity of the disease. In addition, the common use of acute pain models to test drugs for chronic pain therapy can skew interpretation of a drug's utility.<sup>3,4</sup>

Because of the preservation of the mammalian pain pathway components across species,<sup>5</sup> it is not considered to be anthropomorphization or malpractice to use drugs with proven efficacy in other mammalian species. However, adverse effects may not be the same across species, and safety studies are often more critical than are efficacy studies. Use of this evidence-based review in combination with treatment protocols from pain management experts<sup>6-9</sup> to provide feline patients with evidence-guided pain relief may be beneficial.

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## ... TO YOUR PATIENTS

Key pearls to put into practice:

- Feline chronic pain should be treated early, and multimodal analgesia should be used, as chronic pain is often actually maladaptive pain, which can be complicated to treat.
- 2 When designing treatment protocols, clinicians should use evidence-based medicine while also embracing experience-based treatment recommendations from experts.
- Assessment tools for owners to evaluate pets at home should be recommended. For example, having owners videotape their cat at home before and after treatment and sending the videos to the veterinarian to evaluate may be helpful. Clinicians should be cautious of placebo effects<sup>10</sup> but also understand the ability of owners to detect qualityof-life changes in their pet.<sup>11</sup>

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