

The following pain management protocol is tiered to ensure a global relevance, recognizing that not all analgesic modalities are available to veterinary practitioners and vary from region to region around the world. Its implementation will be guided by the various analgesic modalities available along with the needs of the individual patient requiring treatment. This protocol is reproduced from the WSAVA Pain Committee guidelines, a succinct yet comprehensive review of pain assessment, various pain modalities, and the treatment of various clinically painful scenarios in both dogs and cats. The WSAVA Pain Committee Guidelines are published in the Journal of Small Animal Practice and is available for open access at the Pain Committee pages of www.wsava.org.

NEUROPATHIC PAIN

Neuropathic pain is classically difficult to treat and recommendations are based on the human literature and an increasing body of evidence from veterinary medicine. Gabapentinoids (gabapentin or pregabalin) have been used as the first line of treatment with significant improvements in QoL. Non-steroidal anti-inflammatory drugs have been used in combination with gabapentinoids when an inflammatory condition is also suspected. Antagonists of NMDA receptors (i.e. amantadine) have also been used for the treatment of OA in dogs that were refractory to NSAID treatment alone suggesting a potential component of neuropathic pain in these cases. The role of anti-NGF mAbs in neuropathic pain has not been investigated, but a benefit might exist. Opioids may exacerbate chronic neuropathic pain via neuroinflammation and glial amplification. Several physical modalities are directed at addressing neuropathic pain of myofascial origin. These include use of heat and cold therapy, acupuncture and trigger point needling, stretching, massage and exercise. All these modalities need further research in veterinary medicine.

Chronic Neuropathic Pain

In patients with neuropathic pain conditions such as intervertebral disc disease, chronic postoperative pain following amputation or thoracotomy, Chiari-like malformation, syringomyelia, diabetic neuropathy, orofacial pain syndrome, FHS, among others, multimodal analgesia is likely to provide the greatest benefit. An approach based on trial-and-error might be needed to define the best treatment for a patient. Non-pharmacologic techniques should be included in the treatment of neuropathic pain states. Pharmacological treatments in dogs and cats can be started with the combination of a NSAID with one or more of the following adjuvant analgesics: gabapentin, pregabalin, amantadine and amitriptyline. The final treatment combination and how long treatment is continued will be based on patient response and adverse effects. Dosage regimens of analgesics can sometimes be slowly tapered down while monitoring to ensure signs of pain do not re-emerge.

Acute on Chronic Neurological Pain

In dogs and cats presenting with severe clinical signs of hyperalgesia and allodynia, hospitalisation might be required for the application of neuro-modifying techniques (e.g. local anaesthetic blocks and/or administration of IV analgesics such as lidocaine (1 mg/kg bolus with 30 µg/kg/minute CRI - use with caution in cats) or ketamine (bolus of 0.5-1 mg/kg followed by a CRI of 2-10 µg/kg/minute) in combination with systemic opioids until clinical signs have improved.

For additional pharmaceutical dosing information, see the dosing tables in the WSAVA Pain Committee Treatise at www.wsava.org