



Amantadine

What is Amantadine?

Amantadine is a drug with multiple uses and varied mechanisms of action. It is not licensed for use for pain in dogs but contributes to pain relief by reducing the development of sensitisation to pain in the central nervous system (e.g. brain and spinal cord).

Why use Amantadine?



Pain can develop due to 'over-amplification' of the signals by the nervous system, termed 'central sensitisation'. Central sensitization is a major component in the development of chronic and neuropathic pain; both of these can be very difficult to treat.

There are several drugs which are used to treat neuropathic pain, but the choice may vary depending on the origin of the pain. The first-choice drug for known nerve damage should be a gabapentinoid (such as gabapentin or pregabalin). This group of drugs is not effective for osteoarthritis pain so the first choice for progressive osteoarthritis pain that in dogs that are otherwise well managed should be amantadine.

Which patients should receive Amantadine?

Amantadine should be considered as part of the initial multimodal therapy for any patient that has moderate to severe chronic pain and as an add-on drug for patients that have worsening chronic pain despite presumably adequate pain control and no worsening of the inciting disease. The first-choice drug treatment for dogs and cats with chronic osteoarthritis pain is usually a non-steroidal anti-inflammatory drug (NSAID). Therapy with an NSAID alone may become ineffective in more advanced osteoarthritis.



Our guide to... **Amantadine**

What is the dosage for Amantadine?

Because of its mechanism of action, amantadine should be used as part of a multimodal protocol with other pain killers (typically NSAIDs). There is no published clinical evidence of its effectiveness in dogs when used alone. However, in some cases, dogs are intolerant of NSAIDs and amantadine is used alone in these individuals.

The dosage for dogs and cats is 3 to 5 mg/kg orally once to twice daily, with twice daily being preferable.

Data from recent studies indicate that twice daily dosing is probably more effective in dogs and cats. To decrease the central sensitization component of chronic pain, treatment duration probably needs to be long; thus, **the current minimum recommended duration is 21 days.** Long duration therapy may be necessary, and many patients may need amantadine for life.



What are the adverse effects of Amantadine?

Adverse effects or drug interactions in dogs or cats receiving amantadine are uncommon. It is reported that some dogs may develop agitation, vomiting, flatulence, or diarrhoea (which may be watery), particularly in the early days of amantadine therapy. Amantadine can be stopped without a withdrawal period. We recommend blood testing every 6 months when receiving this drug because changes in organ function can affect how well the drug is tolerated.



How is Amantadine supplied and what does it cost?

Amantadine is moderately expensive. Amantadine is supplied as tablets and capsules of various strengths.

**For more information contact our
Therapy and Fitness Centre Team**

Call: 01582 853878

Email: therapyandfitness@vetspecialists.co.uk

Visit: vetspecialiststherapy.co.uk