OTHER ANALGESICS

**Tramadol:**

* A weak mu opioid receptor agonist.
* In addition to opioid activity, it inhibits neuronal reuptake of norepinephrine may facilitate serotonin release.
* It is recommended for acute and chronic pain of moderate to severe intensity.
* Because of its inhibitory effects on serotonin uptake, tramadol should not be used in animals that may have received monoamine oxidase inhibitors such as selegiline, in animals on selective serotonin reuptake inhibitors, or in animals with a recent history of seizure activity.
* Oral bioavailability is 93% in cats but only 65% in dogs. Dogs eliminate and clear tramadol more rapidly than cats. The dosing interval must be adjusted in cats.
* Adverse effects include decreased seizure thresholds, nausea/vomiting, and, in some animals, altered behavior.
* Tramadol may be used alone to treat mild pain and adjunctively in a multimodal plan to treat moderate to severe pain.

**Gabapentin:**

* The mechanism of action appears to be voltage-dependent Ca2+ channel blocker, and it may increase central inhibition or reduce the synthesis of glutamate, even though it does not appear to interact directly with NMDA receptors.
* Adverse effects are usually mild and self-limiting (drowsiness, fatigue, and weight gain with chronic administration).

**Amantadine**:

* It exerts its analgesic effects through antagonism of NMDA receptors.
* Amantadine seems most efficacious in the management of chronic neuropathic pain with signs of hyperalgesia and allodynia.
* Animals suffering from opioid tolerance may also benefit.