

Gabapentin

BRAND NAME: NEURONTIN

AVAILABLE IN
100 mg, 300 mg,
and 400 mg
CAPSULES,
600 mg and 800 mg
TABLETS
and ORAL SOLUTION

BACKGROUND

The original use of this medication was for treating partial seizures in humans but not long after its introduction, it was found to have use in treating “neuropathic pain” (the burning and tingling sensations that come from damaged nerves.)

As with many human drugs, this one has found its way into veterinary medicine where it is also used as a seizure control drug, either alone or in combination with other anti-seizure drugs, or as an adjunct in the control of chronic pain, especially arthritis pain. Gabapentin is also used in animals preoperatively to minimize pain experienced after surgery.

The actual chemistry of how this drug works in the body is still unknown.

HOW THIS MEDICATION IS USED

Gabapentin can be used in both dogs and cats. The dosing is very different depending on if gabapentin is being used for seizure control or for pain management. For pain control gabapentin is typically started at once daily dosing but can be increased to two or even three times daily. Further, anti-seizure doses are three to ten times higher than analgesic doses at least to start.

Gabapentin’s anti-seizure capabilities have met with mixed reviews among veterinary neurologists. For pain control, gabapentin is usually used in conjunction with other pain relievers which may later be tapered away. Unfortunately, it is common to develop tolerance to gabapentin so that the pain relief dose must be increased as time goes on. How long a dose is adequate before it must be increased is highly individual.

SIDE EFFECTS

Sedation is the chief side effect of concern though it is usually temporary and resolves in a few days after the patient's body gets used to the medication. Diarrhea has also been reported.

In mice, male mice on gabapentin were found to have an increased incidence of pancreatic cancer. It is unknown if this finding holds for other species. This information has not hindered FDA approval for human use of gabapentin.

Gabapentin can cause a false positive reading on urine dipstick tests for urinary protein.

INTERACTIONS WITH OTHER DRUGS

For chronic pain relief, gabapentin is best started in combination with other pain relievers but after a time often the other pain relievers can be discontinued and gabapentin is effective as a sole agent. This may not be possible for conditions where the pain is progressively worse.

Oral antacids will hinder absorption of gabapentin into the body by up to 20% so it is important to separate administration of these two medications by at least 2 hours.

Concurrent use of hydrocodone or morphine, both narcotics, with gabapentin can increase the effectiveness of gabapentin. Concurrent use of gabapentin with hydrocodone will decrease the effectiveness of the hydrocodone.

CONCERNS AND CAUTIONS

Gabapentin may be given with or without food.

Doses for cats are small enough that a special compounding pharmacy may need to prepare an appropriate product.

Gabapentin is removed from the body via the kidneys. If it is to be used in a patient with kidney insufficiency the dose will need to be modified or another product should be selected.

Gabapentin is not safe for use in pregnancy but should be safe for use in lactation.

Gabapentin should not be abruptly discontinued after long term use as seizures can be precipitated. Instead gabapentin should be gradually tapered off over a couple of weeks.

Gabapentin oral suspension is sweetened with xylitol which has toxic properties in the dog. The issue can be avoided by having liquid formulations compounded rather than using the commercially available oral liquid.



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Additional drug and general pet care information can be found on our world wide web site:

<http://www.marvistavet.com>