

# Gabapentin

## BRAND NAME: NEURONTIN

AVAILABLE IN  
100 mg, 300 mg,  
and 400 mg  
CAPSULES,  
600 mg and 800 mg  
TABLETS and  
ORAL SOLUTION  
(some products not  
appropriate for dogs)

## 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 mostly 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. It can also be used as an adjunctive treatment in seizure management as well as to relieve anxiety associated with travel, veterinary visits or other stressful situations.

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

## HOW THIS MEDICATION IS USED

Gabapentin is usually used for management of chronic pain, especially nerve-related pain. It is also used (primarily in cats) to relieve anxiety associated with veterinary procedures, travel, and other fear-generating situations. Gabapentin can also be used as an adjunctive medication in seizure management. Dosing protocols are generally different depending on which use one is pursuing, with the anti-seizure doses tending to be higher and more frequent.

Gabapentin may be given with or without food. If a dose is skipped, one should not double up on the next dose; however, if one is not sure if a dose was accepted, the only consequence to dosing extra will likely be sedation and incoordination, manageable with confinement.

Gabapentin's peak activity occurs approximately 2 hours after oral dosing.

## SIDE EFFECTS

Sedation and incoordination are the chief side effects of concern though they are temporary and resolves in a few hours. Cats may also vomit or drool but, again, these side effects should resolve within 8 hours of medication administration.

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.

The sedation side effect is promoted by combining gabapentin with other sedating medications such as antihistamines, mirtazapine, CBD, or narcotic pain relievers.

## 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>