

## WHITE PAPER

## **Topical Gabapentin**

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Topical Gabapentin is used for the treatment of chronic pain conditions including but not limited to postherpetic neuralgia (PHN), complex regional pain syndrome (CRPS) and vulvodynia (VVD). Multiple studies have already demonstrated the efficacy of oral gabapentin in treating chronic neuropathic pain.<sup>5</sup> However, oral gabapentin is limited by dose-dependent toxicity which can cause systemic adverse effects.

Boardman noted, "topical application seemed to largely circumvent the more common systemic adverse effect of oral therapy, such as sedation, fatigue, dizziness, and confusion."The use of topical analgesic therapy allowed for higher concentrations of medication locally while reducing the likelihood of systemic side effects common to the drugs used.<sup>4</sup> It has also been noted that topical gabapentin is a good and effective option for chronic pain condition.

In a retrospective study of 35 patients with VVD found that topical gabapentin led to a >50% reduction in pain within 8 weeks in 28 (80%) of the patients studied.<sup>2</sup> Patients were instructed to apply 0.5ml of gabapentin cream (2%, 4%, or 6%) three times daily. Boardman notes, that this treatment "will be effective, easy to use, well-tolerated and associated with high compliance," for women with vulvodynia.

Similarly, in another study 20 of the 23 patients benefited from topical gabapentin, with a reduction in mean  $\pm$  SD pain scores from 8.2  $\pm$  1.4 to 5.6  $\pm$  1.7 after 1 month (11 achieved a clinically meaningful 30% reduction in pain).<sup>3</sup> It was also noted that pain relief was achieved within 1 h of topical application for patients with PHN.

Gabapentin has been postulated to offer a novel therapeutic option for topical or local treatment of pain of peripheral origin.<sup>1</sup> Topical Gabapentin has been shown to be both effective and well-tolerated, thus leading to a reduction in pain, increasing patient compliance and improving quality of life.

## **References:**

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