

Gabapentin and Patient-reported Medication Tolerance: A Case Series



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Introduction

- Peripheral neuropathic pain is an often difficult to treat condition, which may stem from its various etiologies.¹
- Gabapentin, while only FDA approved for PHN, is often prescribed for neuropathic pain outside of this indication^{2,3}
- There exists no formal literature about developing tolerance to gabapentin, but observations by clinicians have noted a predictable decrease in efficacy with time.

Objectives

- Identify instances of medication tolerance to gabapentin, as reported by patients.
- Identify characteristics, shared between participants, that may indicate a higher likelihood of fostering tolerance to gabapentin.

Methods

- Following IRB approval, the Athena EHR was used to identify patients of SIHF Healthcare that had received a gabapentin prescription in the last 90 days.
- The generated list was then scrubbed of patients younger than 18 or older than 89.
- Patients with diagnoses of DPN, PHN or trigeminal neuralgia were then identified and later contacted with a series of questions about efficacy of gabapentin.
- Following the survey, which was conducted by phone, patients who consented then promptly had their responses deidentified.

Results

- 56 patients were identified that met all inclusion and exclusion criteria
- 16 of these 56 patients responded to the survey, with 3 (19%) reporting gabapentin as effective on start but required an increase in dose later to return efficacy.
- 5 of 16 patients (31%) responded that dose increases were needed as the medication lost effect over time.

Figure 1. Baseline demographics

	n(%)
Age (years), mean (SD)	53.9(10.9)
Sex	
Male	11 (68.75)
Female	5 (31.25)
Race	
White	12 (75)
African American	2 (12.5)
Declined	2(12.5)

Case 1:

- 45 y/o African American male
- Gabapentin was 100% effective in pain control at start, with loss of effect in 2 months
- Received 2 dose increases, endorses gabapentin is now only 50% effective for pain control

Case 2:

- 55 y/o white male
- Gabapentin was 85% effective in pain control at start, with loss of effect in 3 months
- Received 1 dose increase, endorses gabapentin is now 75% effective for pain control

Case 3:

- 59 y/o male who declined to state his race
- Gabapentin was 100% effective in pain control at start, with loss of effect in 1 year
- Received 1 dose increase, endorses gabapentin is now 100% effective for pain control again

Conclusions

- Three patients were identified who endorsed a loss in efficacy of gabapentin over time
- The only similar characteristic shared by the three patients was a diagnosis of painful diabetic peripheral neuropathy
- Due to deidentification of patient responses, glycemic control could not be assessed
- The achieved sample of 16 patients being lower than needed may be due to the pool of eligible patients being too restrictive.

References

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Disclosures

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