PRURITUS

THE EFFICACY AND SAFETY OF 6% GABAPENTIN TOPICAL FORMULATION IN THE TREATMENT OF PRURITUS IN ADULT FILIPINO HEMODIALYSIS PATIENTS: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY

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Background: Uremic pruritus (UP) is a commonly reported problem of end-stage renal (ESRD) patients. Novel agents with good safety profiles to manage UP are needed.

Objectives: The objective of this study is to assess the efficacy and safety of topical gabapentin in the management of pruritus of hemodialysis patients.

Materials and Methods: This is a randomized, double-blind, placebo-controlled study. The inclusion criteria were: (1) ESRD patients on hemodialysis for at least eight weeks, and (2) baseline visual analog scale (VAS) pruritus score ≥ 5, unrelieved by antihistamines or emollients. Patients were randomized to either, (1) experimental (topical gabapentin) or (2) placebo group (propelyne glycol). Content of gabapentin capsules were dissolved in water and compounded to propylene glycol to yield 6% concentration. Primary endpoint was change in pruritus scores from baseline to one and two weeks using the VAS.

Results: Thirty patients (15 per group) were included in the analysis. Baseline characteristics were similar between the two groups. In the experimental group, mean pruritus scores significantly decreased at 1 week (mean score 2.7; range 0-5; $p<0.001$) and 2 weeks (mean score 1.3, range 0-5; $p<0.001$) from the baseline (mean score 5.9; range 5-8). Change in pruritus scores after 1 week was not significantly different ($p=0.8$) between experimental (mean change -3.2; range 0-7) and control groups (mean change -2.9; range -1-6). On the other hand, change in pruritus scores after 2 weeks were significantly higher ($p=0.01$) in the experimental group (mean change -4.6; range 0-7) versus the control group (mean change -2.6; range -1-5).
There were no reported adverse events.

Conclusion: Compared to placebo, decreased VAS pruritus scores was seen after 2 weeks

of topical 6% gabapentin use with no reports of adverse events. Longer follow-up may be needed to adequately assess possible late toxicity with topical gabapentin.