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# Efficacy and Safety of Pregabalin and Gabapentin for Pruritus: A Systematic Review and Meta-Analysis

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## Abstract

**Context:** Limited data existed on the efficacy and safety of novel antiepileptic drugs (pregabalin and gabapentin) in treating pruritus.

**Objectives:** To assess their role in managing either acute or chronic pruritus.

**Methods:** A systematic search was conducted in PubMed, EMBASE, the Cochrane Library, and Web of Science databases for relevant randomized controlled trials. Pooled odd ratio (OR) with 95% CI were performed using RevMan5.4 and R4.3.1.

**Results:** Analysis of 27 articles involving 2,016 patients showed significant reduction in pruritus incidence (OR, 0.30 [CI, 0.22-0.4]; $I^2$=1%) and improvements in VAS (MD, 2.76 [CI, 0.95-4.57]; $I^2$=98%) and 5-D scores (MD, 3.42 [CI, 2.10-4.75]; $I^2$=92%) with pregabalin/gabapentin compared to controls. Adverse effects mainly included dizziness, somnolence, nausea and vomiting, dry mouth, constipation, and anxiety, with no significant difference between the groups (OR, 1.08 [CI, 0.32-3.59]; $I^2$=76%).

**Conclusion:** The novel antiepileptic drugs pregabalin and gabapentin demonstrated significant therapeutic value in the treatment of pruritus, with a favorable safety profile. Compared to commonly used pruritus treatments such as antihistamines and antidepressants, these medications offered a promising alternative.

**Keywords:** Pruritus; gabapentin; meta-analysis; novel antiepileptic drugs; pregabalin; randomized controlled trial.

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