The efficacy of gabapentin/pregabalin in improving pain after tonsillectomy: A meta-analysis.
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Abstract

OBJECTIVES/HYPOTHESIS: Gabapentin and pregabalin are useful for treating neuropathic pain because of their antiallodynic and antihyperalgesic properties, which may be beneficial in managing acute postoperative pain. The goal of this meta-analysis was to perform a systematic review of the literature on the effect of gabapentinoids on postoperative pain following tonsillectomy, and its adverse effects in patients.

DATA SOURCES: MEDLINE, SCOPUS, and Cochrane database.

METHODS: Two authors independently searched the databases from their inception of article collection to May 2015. Included in the analysis were studies that compared preoperative gabapentinoid administration (gabapentinoids groups) with a placebo or pain control agent (control group) during a 24-hour postoperative period, the outcomes of interest being postoperative pain intensity; rescue analgesic consumption; or adverse effects such as sedation, nausea and vomiting, dizziness, and headache.

RESULTS: The pain score reported by the physician during the first 8 hours, as well as the need for analgesics during 24 hours postoperatively, were significantly decreased in the gabapentinoids group versus the control group. Additionally, there was no significant difference between gabapentinoids and control groups for adverse effect during 24 hours postoperatively. In the subgroup analyses (gabapentin and pregabalin) regarding pain-related measurements, two subgroups showed the similar effect on reducing the postoperative pain severity.

CONCLUSION: Preoperative administration of gabapentinoids could provide pain relief without side effects in patients undergoing tonsillectomy. However, considering the insufficient evaluation of efficacy of gabapentinoids according to the high heterogeneity in some parameters, further clinical trials with robust research methodology should be conducted in order to confirm the results of this study.

LEVEL OF EVIDENCE: NA.

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