Prophylaxis of postoperative nausea and vomiting: Gabapentin a new anti-emetic approach?

Every third patient undergoing general anaesthesia suffers from postoperative nausea and vomiting (PONV). Therefore, in patients with a high risk profile of PONV, including the above mentioned factors attributing to a higher incidence of PONV (e.g. non-smoking females of child-bearing age with a previous episode of nausea or/and vomiting or kinetosis in the patient’s history), combinations of antiemetic interventions have been recommended. In a large study, Christian Apfel and colleagues showed that various antiemetic strategies are associated with a very similar and constant relative reduction rate of about 25-30%. All evaluated anti-emetic approaches (dexamethasone,
droperidol, total intravenous anaesthesia and ondansetron) work independently, so consequently their combined benefit can be derived directly from the single effects.\(^1\)

The present issue of the Journal contains an article\(^6\) reporting the results of a trial evaluating the efficacy of the antiepileptic drug gabapentin for prevention of PONV. The authors were able to demonstrate, that gabapentin has antiemetic properties of clinical relevance. However, more clinical trials are needed to evaluate dose-finding and safety-studies, as well as comparisons to established antiemetic strategies and a potential combined benefit of gabapentin and other established anti-emetic interventions. The present study raises hope that gabapentin might be an effective and safe new approach in the clinical antiemetic portfolio that may be used as a component of a multimode solution using various antiemetic interventions for high-risk patients. However, avoiding PONV while minimizing the chances of producing unwanted side-effects still remains a challenge.

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**References**