

## Gabapentin for postoperative nausea and vomiting prophylaxis

Sir,

I read with interest the recent article by Pandey *et al*<sup>[1]</sup> regarding preoperative gabapentin in reducing postoperative nausea and vomiting (PONV) after laparoscopic cholecystectomy. The authors concluded that a prophylactic dose of 600 mg gabapentin given 2 hours before surgery effectively reduced the incidence of PONV and postoperative analgesic requirement for 24 hours.

Gabapentin has an established role in chronic neuropathic pain. Numerous clinical trials have also demonstrated the analgesic property of gabapentin in the perioperative setting. This was supported by a recent meta-analysis by Seib and Paul.<sup>[2]</sup> However, the role of gabapentin in preventing nausea and vomiting is less clear. A small open-label study of only 9 patients suggested the gabapentin was effective in reducing chemotherapy-induced nausea.<sup>[3]</sup> Mitigation of tachykinin neurotransmitter activity by gabapentin has been postulated to play a role.

I am more inclined to think that the lower incidence of PONV in the gabapentin group was due to a decrease in opioid-related side effect. Fentanyl requirement was shown to be lower in the gabapentin group ( $P=0.01$ ) and it was statistically significant. It will be interesting to see if gabapentin reduces the incidence of PONV when compared with placebo in patients undergoing non-painful procedures under general anesthesia.

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### References

1. Pandey CK, Priye S, Ambesh SP, Singh S, Singh U, Singh PK. Prophylactic gabapentin for prevention of postoperative nausea and vomiting in patients undergoing laparoscopic cholecystectomy: A randomized, double-blind, placebo-controlled study. *J Postgrad Med* 2006;52:97-100.
2. Seib RK, Paul JE. Preoperative gabapentin for postoperative analgesia: a meta-analysis. *Can J Anesth* 2006;53:461-9.
3. Guttuso T Jr, Roscoe J, Griggs J. Effect of gabapentin on nausea induced by chemotherapy in patients with breast cancer. *Lancet* 2003;361:1703-5.