

Emerging Perspectives in Perioperative Use of Gabapentinoids

To the Editor:

We congratulate Schmidt *et al.*¹ for choosing a very appropriate topic at the forum of clinical concepts and commentary in *ANESTHESIOLOGY*. The use of gabapentinoids as a component of multimodal approach toward postoperative pain management has recently been emerging as an area of interest for anesthesiologists. Published literature supports the authors' statement that perioperative use of gabapentinoids reduces pain after surgery and has opioid-sparing effects.

However, because of paucity of evidence, the authors were unable to clarify the role of gabapentinoids in chronic postsurgical pain. They concluded that the limited data that are available indicate some role of gabapentinoids in prevention of chronic postsurgical pain at the cost of increased sedation in the immediate postoperative period. We agree with the authors' view that there is a need of further studies to justify the effect of gabapentinoids on chronic postsurgical pain. At this juncture, it is pertinent to note that there is a significant abuse potential for these drugs, and a recent survey carried out in substance misuse clinics threw up a high proportion of respondents admitting to abusing gabapentinoids.² Therefore, while embarking on studies on long-term postoperative therapy to prevent chronic postsurgical pain, it is imperative to recognize this abuse potential be vigilant in identifying drug-seeking behavior and eventually formulate guidelines to prevent and treat such cases as and when they arise.

We agree with the authors' statement that the gabapentinoids are generally well tolerated. Even in cases of overdose or intoxication of gabapentinoids, only supportive care is usually sufficient and this is what makes them attractive to the clinician, but here we would like to emphasize that careful selection of patients is of utmost importance while using these drugs perioperatively as many patient factors such as age, renal dysfunction, type of surgery, and concomitant sedative use may predispose the patient to serious side effects. Indeed, even respiratory depression has been reported in the early postoperative period. The Ottawa Hospital Acute Pain Service has developed an algorithm to screen patients for risk factors (sleep deprivation, neuraxial opioid, renal dysfunction, neuraxial opioid use, obstructive sleep apnea, and elderly) before using pregabalin. Pregabalin is avoided in any patient found to have more than two risk factors, and in patients with one risk factor, it is recommended to prescribe pregabalin with caution.³

The authors have not discussed the role of gabapentinoids in regional anesthesia which has been highlighted in the recent literature. Recent studies have concluded that oral pregabalin in doses ranging from 75 to 150 mg is an effective adjuvant to spinal anesthesia⁴ and patient-controlled epidural analgesia for total knee arthroplasty.⁵ On the basis of

published literature, it is evident that apart from pain relief and opioid-sparing action, gabapentinoids have other useful actions in the perioperative period which are recently being explored. Preoperative oral pregabalin reduces the incidence and severity of postdural puncture headache⁶ and has also been shown to mitigate anxiety without increasing postanesthesia care unit stay in day-care procedures.⁷

The use of gabapentinoids is likely to witness an increase in the coming years. Therefore, the extensive review of the subject was interesting and well timed. We would once again like to congratulate the authors for their work.

Competing Interests

The authors declare no competing interests.

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References

- Schmidt PC, Ruchelli G, Mackey SC, Carroll IR: Perioperative gabapentinoids: Choice of agent, dose, timing, and effects on chronic postsurgical pain. *ANESTHESIOLOGY* 2013; 119:1215–21
- Baird CR, Fox P, Colvin LA: Gabapentinoid abuse in order to potentiate the effect of methadone: A survey among substance misusers. *Eur Addict Res* 2014; 20:115–8
- Eipe N, Penning J: Postoperative respiratory depression with pregabalin: A case series and a preoperative decision algorithm. *Pain Res Manag* 2011; 16:353–6
- Kohli M, Murali T, Gupta R, Khan P, Bogra J: Optimization of subarachnoid block by oral pregabalin for hysterectomy. *J Anaesthesiol Clin Pharmacol* 2011; 27:101–5
- Jain P, Jolly A, Bholla V, Adatia S, Sood J: Evaluation of efficacy of oral pregabalin in reducing postoperative pain in patients undergoing total knee arthroplasty. *Indian J Orthop* 2012; 46:646–52
- Rahmawaty GEI, Rashwan D, Mohamed NN: The efficacy of preoperative pregabalin on reduction of the incidence and severity of postdural puncture headache after spinal anesthesia. *Egypt J Anesth* 2013; 29:357–61
- Gonano C, Latzke D, Sabeti-Aschraf M, Kettner SC, Chiari A, Gustorff B: The anxiolytic effect of pregabalin in outpatients undergoing minor orthopaedic surgery. *J Psychopharmacol* 2011; 25:249–53

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In Reply:

We would like to thank Drs. van Schalkwyk and Kachhwah *et al.* for their comments concerning our article.¹ Dr. van Schalkwyk reports that our statement “gabapentinoids are very well tolerated” is “an assertion contradicted by even the most enthusiastic of the three old meta-analyses [we] cite.” Our article cites five, not three, meta-analyses.^{2–6} These were not old, but were the most recent meta-analyses on perioperative gabapentinoids available at the time of our writing the review, with two having been published in 2006 and the