

### References

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### *PONV in Outpatients: when should it be assessed?*

To the Editor:

Despite major advances in anesthesia, postoperative nausea and vomiting (PONV) still remains a common distressing problem facing patients. In ambulatory care setting, it may lead to delayed discharge and unanticipated overnight admission, both with financial implications to both the patient and the health provider. Referring to the recent article by Dr Chung in the April edition of this journal, I would like to comment on the low incidence of PONV (2.18%) reported in patients undergoing ambulatory surgery in this centre.

In a recent study of 140 patients undergoing dental extractions under general anesthesia (propofol/N<sub>2</sub>O/sevoflurane) in our ambulatory care unit, we noted a similarly low incidence of PONV (2.9%) in the post anesthesia room (PAR). However, the incidence at 48 hr post-op was 28%. Could the author provide further details on the incidence of PONV at 48 hr at the Toronto hospital to allow inter institutional comparison?

Documentation of other adverse events (e.g. respiratory, CNS, cardiovascular, excessive pain and bleeding) in the PAR can be accurate assessors of surgical day care associated morbidity. However, in the case of PONV, perhaps follow-up by telephone may provide us with more realistic information?

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### REPLY:

We thank Dr. Collins for her interest in our article.<sup>1</sup> Overall, 4.6% of the patients developed PONV before dis-

charge. We interviewed 30% of the patients 24 hr postoperatively and found that 9.1% of the interviewed patients suffered from PONV in the first 24 hr. We do not have data on the incidence of PONV 48 hr postoperatively. Detailed information on PONV in the same patient population were presented elsewhere.<sup>2</sup>

Determining the PONV incidence 24 or 48 hr postoperatively may provide more realistic information on total PONV than recording in-hospital PONV occurrences. Most outpatients tend to assume normal activities in the first 24 hr after surgery, which may contribute to PONV following discharge. Total PONV incidence, including the occurrence of post-discharge PONV, more appropriately reflects the long-term impact of ambulatory surgery on patients, while in-hospital PONV incidence may be more important in determining PACU cost or PACU nursing workload. In our study, we decided to follow up after the first 24 hr. We expect the highest PONV incidence to occur during the first 24 hr postoperatively as residual anesthetic effect subsides with time. With a 9.1% PONV incidence at 24 hr, it is unlikely that the 48-hr PONV incidence in our institute would be close to the 28% PONV incidence in Dr. Collins' institution. The case-mix of ambulatory population in our institution, 36% underwent relatively low-risk eye surgery, may explain the difference. Undoubtedly, characteristics of the patient populations play a key role in any interinstitutional comparison.

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Doris Tong FRCPC  
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### *Continuous interscalene block*

To the Editor:

We read the article "A new technique of continuous interscalene nerve block"<sup>1</sup> and the accompanying editorial<sup>2</sup> published in the Canadian Journal of Anesthesia. We approve of the suggestions made by Coleman and Chan<sup>2</sup> to prevent damage to the catheter by the sharp end of the Tuohy needle and the recommendations not to perform interscalene block

under general anesthesia. We have one concern dealing with the size of the needle. The authors used a 17 G Tuohy needle which is much larger than the usual 20 or 21 G needle used in this setting. This practice not only increases the level of pain, but also the risks of bleeding during the placement of the catheter and the secure fixation procedure. Moreover, this procedure could be time consuming and cause delay in a busy orthopedic department.

The reduced incidence of hemidiaphragmatic paralysis observed when interscalene block is performed through the catheter is interesting. We made a similar observation by measuring the hemidiaphragmatic excursion (HE) by means of ultrasonography in patients receiving 30 ml ropivacaine 0.5%, either through an interscalene catheter or as a single shot injection according to Winnie's technique using a nerve stimulator. We found a 60% decrease in HE in the interscalene group vs 80% in the single shot group. We believe the main factor explaining the better preservation of HE is the placement of the catheter which permits preferential distal distribution of local anesthetic. This practice may well become the interscalene block technique of choice for patients with severe pulmonary disease.

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- 2 Coleman MM, Chan VWS. Continuous interscalene brachial plexus block. *Can J Anesth* 1999; 46: 209-14.

#### REPLY:

*Thank you for the opportunity to respond to the letter of Drs. Borgeat and Nadig.*

1. *In our experience of 2,125 catheter placements, we have not encountered a single instance where the Tuohy needle damaged the catheter.*
2. *The evidence for recommending that nerve blocks should be done on awake patients only, is unconvincing and largely subjective. The work of Auroy et al.<sup>1</sup> quoted by Coleman and Chan in their editorial<sup>2</sup> yielded an incidence of nerve damage of four of 21,278 nerve blocks. This incidence is simply too small to come to any meaningful conclusion. Fanelli et al.,<sup>3</sup> in a well conducted study, concluded that sedation/analgesia should be advocated during block place-*

*ment to improve patient acceptance. We support their views. Furthermore, the Tuohy needle has, to our knowledge, never been implicated in peripheral nerve damage.*

3. *We place blocks under general anesthesia, conscious sedation with propofol or in awake patients following proper skin and subcutaneous infiltration with lidocaine. The choice is dictated by the clinical situation. Pain is therefore not an issue and we have not yet encountered an episode of bleeding that would have been prevented by using a thinner needle. Epidurals are regularly done with 17 G Tuohy needles on awake patients without any of the problems mentioned.*
4. *In experienced hands, the procedure does not lengthen the anesthetic time by more than ten minutes.*
5. *We share the opinion of Drs. Borgeat and Nadig on hemidiaphragmatic paralysis and indwelling interscalene catheters.*

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#### Intrathecal meperidine

To the Editor:

Murto *et al.*<sup>1</sup> investigated the effect of 0.15 and 0.30 mg·kg<sup>-1</sup> of intrathecal meperidine on spinal anesthesia produced by lidocaine. They found that 0.30 mg·kg<sup>-1</sup> of meperidine intrathecally prolonged postoperative analgesia and reduced the requirements for parenteral analgesics. They also reported the regression of the sensory block.

However, five patients in all groups needed supplementary *iv* anesthesia, which consisted of propofol