Author's response to reviews

Title: Anesthesiologists’ practice patterns for treatment of postoperative nausea and vomiting in the ambulatory PACU

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Author’s response to reviews:

Thursday, May 11, 2006

Re: resubmission manuscript
MS: 2045413730934694 - Anesthesiologists’ practice patterns for treatment of postoperative nausea and vomiting in the ambulatory PACU

We are delighted to re-submit the manuscript, MS: 2045413730934694 - Anesthesiologists’ practice patterns for treatment of postoperative nausea and vomiting in the ambulatory PACU.

Thank you for considering our article.

Below we address each of the reviewers’ concerns point-by-point. We believe the paper is improved after incorporating the suggestions.

Thank you.

Sincerely,

Alex Macario

Point by Point Comments by Reviewers

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Major Compulsory Revisions

Comment: Page 6, physician sample: Why was the 2002 ASA directory used instead of the most current one since the study was done in 2004? Since this was a simple random sample, the most active list should have been used.
Response: To our knowledge, the ASA directory is no longer (after 2003) available in printed form. At the time we designed the study (2003) the 2003 directory was not published. That is why we used the 2002 directory, which did allow us to identify practitioners in active clinical practice in 2004. We understand that if a random sample is from a membership list, efforts should be made to ensure the list is current. If not, former members on the list and new subjects not included may be different in characteristics and opinions from those included in the population of interest.

Comment: Also how was the goal of 100 returned surveys calculated?
Response: Since our goal was a descriptive analysis of practice, we enrolled a convenience sample of 100 subjects. No formal power statistics were computed to obtain this number. We are planning a future study...
with more subjects that is powered to answer questions raised by the current paper, such as identifying predictors (e.g., academic vs. community practice) of drug choice.

Comment: Was a stamped self addressed envelope included or other strategies used to try to enhance the response rate?
Response: Yes, a stamped self-addressed envelope was included. We forgot to mention this, but now it is in the text on page 6. Thank you!

Comment: Page 8, first line: It is preferable to attach the whole survey instrument as an appendix, rather than simply stating that it is available from the authors.
Response: Done. We have added the survey as an Appendix. Thank you.

Comment: Page 9, Third paragraph: How was the information about the use of non-pharmacologic techniques elicited? Did the authors ask specifically about the use of non-pharmacologic techniques? Again making the whole survey instrument available helps to address those issues.
Response: Yes. We specifically asked about that and mention that in the Discussion (paragraph 3). We have added the survey as an Appendix. Thank you.

Comment: Page 14, limitations: discuss the relatively small sample size. Also the authors should discuss non-response bias. While not significantly different from other national surveys of professional organizations, the response rate of 38% is low, and the impact of this on the results should be discussed. Any attempt to improve the non-response rate should be discussed here (Todd M. Principles of successful sample surveys. Anesthesiology 2003; 99: 1251-2)
Response: Done. This is a good point. Thank you. The text now reads: The limitations of this method include that the subject sample depended on anesthesiologists' willingness to participate. While not significantly different from other national surveys of professional organizations, the response rate of 38% is low and non-response bias may exist. This bias reflects proportion of nonresponse multiplied by the difference in the answers of the responders and nonresponders. Since it is unknown whether the physicians answering the survey were systematically different from non-responders, there is no absolutely acceptable level of response. The study had relatively small sample size. Determination of adequate sample size may be difficult and depends on the desired precision of the results. A larger number of respondents is always possible (to enable subgroup analyses about differences among practice types, academic vs. private practice, for example) but we obtained a reasonable sampling of current practice patterns to help design larger studies of PONV treatment.

Minor Essential Revisions

Comment: Line 3, reference 2: this refers to the anesthesiologists' perspective rather than the patient perspective.
Response: This reference has been moved to support the notion that anesthesiologists also perceive PONV as an important issue to outpatients. (paragraph 1 of Introduction)

Comment: Page 12, third line from the end of the page: the reference should be number 26 and not number 24.
Response: Yes sorry for the error. We have changed it to 26. Thank you.

Comment: Page 13, first paragraph: IV fluid therapy was not studied for the treatment Of PONV, reference 30 is a prophylaxis study. Also reference 34 refers to a prophylaxis meta-analysis and not treatment.
Response: Yes thank you. The sentence was changed to: Other non-pharmacologic treatments suggested by our respondents such as IV fluid therapy, isopropyl alcohol inhalation, and acupuncture/acustimulation, have been studied, sometimes for prophylaxis not treatment, while others such as forced air warming have not.

Discretionary Revisions (which the author can choose to ignore)

Comment: Results and conclusions: "Whereas few anesthesiologists would repeat......" : Indicating a percentage range would be preferable to "few"
Response: Done. Thank you : Whereas 3%-7% of anesthesiologists would repeat dose metoclopramide, dexamethasone, or droperidol, 26% of practitioners would re-dose the 5-HT3-antagonist for PONV
Comment: Conclusions, line 2, "and also regardless of the number of prophylactic antiemetics given": the whole point is that the prophylactic regimens, whether monotherapy or combination therapies, include a 5HT3 receptor antagonist. Therefore, this should be better stated as "and also following prophylactic regimens including a 5 HT3 antagonist, regardless of the number of prophylactic antiemetics given" or something along those lines.
Response: Done. This is a good point. Thank you. We state: 5-HT3-antagonists are the most common choice for treatment of established PONV for outpatients when no prophylaxis is used, and also following prophylactic regimens that include a 5HT3 antagonist, regardless of the number of prophylactic antiemetics given.

Comment: Page 7, second paragraph, line 3: "the four antiemetics chosen........... were intended to represent major receptor systems involved in the etiology of PONV". I am not sure why the authors chose the combination of metoclopramide and droperidol, since both agents work on the dopaminergic receptors. Is it to give the responders the opportunity to choose an agent working on the cholinergic muscarinic receptor, or the histamine H1 receptor for treatment? This whole second paragraph should be better moved to the discussion section.
Response: Done. This material is in paragraph 3 of Discussion.

Comment: Page 9, first paragraph: did the authors attempt to resend the survey to non-responders in an attempt to increase the response rate? Did they include a prepaid self addressed envelope?
Response: Yes, a stamped self addressed envelope was included. We forgot to mention this, but now it is in the text in Methods last sentence of second paragraph. Thank you! We did not resend the survey to non-responders.

Comment: Page 9, last paragraph: was the 24 % the percentage of anesthesiologists who responded to the question about second choice if treatment fails? It will be interesting to report how many chose to give several doses of a 5-HT3 antagonist in PACU if the initial rescue failed.
Response: the response rate was close to 100%, rather if no prophylaxis was administered and initial therapy (regardless of what it was)for PONV failed, then the most common (reported by 24% of anesthesiologists) next choice for treatment was still a 5-HT3 antagonist, followed by promethazine.

Comment: Page 11, line 3, it would be clearer if the authors add: "This pattern holds true following PONV prophylaxis with a regimen including a 5HT3 antagonist regardless of the number of prophylactic antiemetics received by the patient".
Response: done thank you.

Comment: Page 11, second paragraph: as the authors highlight, a wide variety of treatments are used reflecting lack of information and/or knowledge. It would be interesting to compare the response of physicians in private practice versus those in academic institutions, since the sample of responders is almost evenly spread.
Response: This is a good issue to raise. Since our goal was a descriptive analysis of practice, we only enrolled 100 subjects. We are planning a future study with more subjects that is powered to answer this question.

Comment: Page 11, Initial treatment: how was it elicited that 96 % preferred pharmacologic interventions? Was it because this was stated as their first line therapy or did the authors ask specifically about this?
Response: We specifically asked about that. We have added the survey as an Appendix. Thank you.

Comment: Page 12, line 1: I am assuming that the authors mean that the redosing with a 5HT3 antagonist is following initial prophylaxis failure. I suggest changing "therapy" to "prophylaxis" for clarification if this is the case.
Response: done thank you

Comment: Page 14, conclusion: see my comments about the similar conclusion section in the abstract.
Response: we have changed as previously noted thank you.