Reviewer's report

**Title:** Decreased risk of postoperative nausea and vomiting (PONV) following emergency versus elective open cholecystectomy has implications for PONV prophylaxis: a retrospective cohort study

**Version:** 1  **Date:** 13 July 2009

**Reviewer:** Daniela Ionescu

**Reviewer's report:**

The research is approaching an interesting idea and is well conducted.

1. Is the question posed by the authors well defined?
   Acceptable. This is a retrospective study. No real question

2. Are the methods appropriate and well described?
   Needs major compulsory revisions. Needs more details more data and more logical presentation:
   - study groups should be comparable in size. Comparing 175 elective cases vs. 91 emergency cases may mislead to some conclusions and sample size is 54.
   - BMI should be comparable in study groups.
   - emergency criteria should be better defined: i.e. acute cholecystitis with fever, increased leukocytes count, suggestive ultrasound examination and others.
   - preoperative medication and procedures especially for emergency cases should be detailed: i.e. metoclopramide, naso-gastric tube, opioids
   - Table 1 should be redone and should include only emergency vs. elective cases and not the participating hospitals assuming that the protocols were similar. Table 1 should include anesthetic risk (evaluated as ASA risk), also.
   - authors must detail what were the opioids administered, dosages, postoperative analgesic protocol
   - postoperative management of the patients must be detailed: NG tube (when necessary, routine), antiemetics, time to oral feeding and time to patient’s ambulation.
   - anesthetic protocol should be detailed and comparable in study groups: i.e. the same percentage of using muscle relaxants (in authors Table 1 there are differences in % of patients where relaxants were administered), opioids dose should be comparable and detailed.
   - PONV "on operating table" (page 5) must be defined: after recovery (extubation), before intubation?
   - I suggest considering PONV in the first 24 h or separately in the first 24 h and the next 48 h. I consider the first 72 h after operation for assessing PONV is a too long time interval and the patient should drink and eat at 72 h.
3. Are the data sound?
   Not enough details.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Must be detailed on some aspects and more concise on others.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   Not entirely. Discussions should be more focused on study findings and potential explications. Incidence of findings should be reported to the literature findings. History of motion sickness must be excluded from the analysis. Comments as "unlikely to be differentially distributed between two groups" (page 10) must be withdrawn once this factor is excluded.

6. Are limitations of the work clearly stated?
   The limitation of the studies is missing from Discussion section.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   Not very clear. There are acknowledgements on conflict of interest and involvement in the study but not on similar publications.

8. Do the title and abstract accurately convey what has been found?
   No. Both the title and the abstract must be focused on the findings of the study and not on prophylaxis (title) or discussions (abstract).

9. Is the writing acceptable?
   The writing should be more lapidary and precise.
   Finally English language should be checked and improved: i.e. narcotic (should be replaced with opioids), acuity of operation, perusing, serendipitous.

   **Level of interest:** An article whose findings are important to those with closely related research interests

   **Quality of written English:** Needs some language corrections before being published

   **Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

   **Declaration of competing interests:**

   I declare that I have no competing interests.