Reviewer's report

**Title:** Cholecystectomy in Sweden 2000 - 2003: a nationwide study on procedures, patient characteristics, and mortality

**Version:** 3  **Date:** 3 May 2007

**Reviewer:** Alexandros Polychronidis

**Reviewer's report:**

General

In this retrospective, nationwide study, the authors compared the characteristics and postoperative long-term mortality of patients undergoing either laparoscopic or open cholecystectomy. Patients undergoing open cholecystectomy were older, more likely to have acute disease presentation or cholelithiasis-associated complications, accompanying comorbidity, and repeated hospital admissions before surgery. It was also more likely to have concomitant interventions along with cholecystectomy. After surgery, patients undergoing open cholecystectomy had longer hospital stay and a higher probability of repeat admissions because of either biliary disease or cardiac and pulmonary comorbidity. Interestingly these patients had a higher mortality than the corresponding general population not only in the early postoperative period but also during the 9-month follow-up period for ages younger than 69 years. It is likely that the complications of cholelithiasis, the advanced age and the concomitant comorbid conditions have dictated the choice of open cholecystectomy instead of the laparoscopic procedure and these factors probably explain the findings of this study.

Overall, the aim of this study is well defined, the methods are sufficient, the results are adequately presented and the discussion is in concordance with the major findings of the study. Although several of the findings in this study have been previously reported by other studies comparing laparoscopic cholecystectomy with the open procedure, the large scale and the multi-institutional nature of this study provide it with sufficient strength to be published in BMC medicine.

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**Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)**

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**Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)**

A minor revision refers to the expression “…patients selected for these procedures.” (Introduction section, last paragraph, lines 1-2) which is misleading since there were no selection criteria set and should be replaced (for example: …patients undergoing either laparoscopic or open cholecystectomy)

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**Discretionary Revisions (which the author can choose to ignore)**

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

What next?: Accept for publication in BMC Medicine after minor essential revisions

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests