Reviewer’s report

Title: Mortality after Primary Shoulder Arthroplasty: An analysis of 4,019 patients from 1976-2008

Version: 1 Date: 27 June 2011

Reviewer: Ashley Blom

Reviewer’s report:

Major Compulsory revisions.
This is an interesting body of work and is well presented and clear. The methodology is sound. Mortality after relatively less common surgical procedures such as shoulder replacements is difficult to accurately quantify and the author’s large prospective database allows this to be done. However, I feel the authors can greatly add to their manuscript by providing a little more detail.
Firstly, the diagnoses would be very helpful. Particularly an analysis of trauma versus elective indications, as one would expect mortality to be higher after fracture as has been shown in hip arthroplasty.
Secondly, a day by day analysis of risk of death as done in Blom et al Acta Orthopaedica 2006; 77(3): 347-350 would better present the relative risk as it is unlikely to be linear over the 90 days.
Thirdly, the cause of death would be very valuable to know as this would enable clinicians to address the problem of mortality after shoulder replacement.
If the authors could provide this data, I would recommend publication.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests