Reviewer's report

Title: Biomechanical Comparison of Lumbar Spine Instability between Laminectomy and Bilateral Laminotomy for Spinal Stenosis Syndrome- An Experimental Study in Porcine Model

Version: 1 Date: 6 November 2007

Reviewer: william hutton

Reviewer's report:

General
This experiment on pigs has been done quite well. The methodology is good and the written language is clear. However, the hypothesis that they are testing seems less than worthwhile; in other words it seems obvious that the less damage done to the spine, the less instability created. Further, the fact that the experiment has been carried out on pigs makes the results less than useful to the human situation.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
The experiment should be continued using a few human spines to back up what they have found in the pig spine. It may be that the authors do not have access to human cadaveric material. If that is the case then I would urge them not to carry out experiments, using only a pig model, that have direct clinical relevance.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Page 7 needs better explanation. It says "Six tests were performed for each.... " Please list the six out as 1) the intervertebral displacements of intact.....; 2) bilateral laminotomy......; 3)......;4)......;5)......;6) It has hard to follow as it is written at present.
The Discussion is too long and reads like more Introduction.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest
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'