Reviewer's report

Title: Fast track hip fracture care and mortality – an observational study of 2230 patients.

Version: 0 Date: 17 Dec 2018

Reviewer: A Garland

Reviewer's report:

Thank you for giving me the opportunity to review this interesting paper.

Scientific methodology: This is a classical retrospective observational study aiming to assess whether the introduction of a fast track hip fracture care reduced the 30-day mortality in Akershus University Hospital. Exposed fast track management (n=1140) and controls - conventionally treated (n=1090) were collected from 1 Jan 2012 to 31 Dec 2015 through the Norwegian Hip Fracture Register and reviewing hospital records. Fishers exact test was used and logistic regression models included factors judged to be relevant. Level of significance was set at p=0.05/95% CI. No power calculations were presented.

Suggestions:

- I humbly suggest a shortening of the manuscript. It is a fairly simple research question that ought to be possible to answer in fewer words.

- Is the year of surgery included in the analyses? Probably not of relevance with such a short observational period, but otherwise better results of any kind could potentially be explained by the general improvement in care during the same time period with all the unexposed collected in the beginning of the study period if I understand you correctly. You are reasoning some about it in the discussion section, the fact that you already before the introduction of the fast track had seen an improvement. This could be elaborated.

- I miss a presentation of your power calculations. How many patients would be needed to be included in the study in order to capture the differences in mortality you are aiming to capture? You are correctly questioning the results by Pedersen et al. on the same grounds without presenting the numbers needed to defend the results of your own study.

- What is the most interesting result of your study- the clinical implication? That the introduction of fast track didn't improve mortality or the fact that, if you do the fast track correctly the patients who receive the intended interventions to the greatest extent had an improved composite 30-day outcome? And is that reflected in title and abstract in the way you want it to be? When I read your study I tend to draw the clinical conclusion that if you are gonna
fast track hip fracture patients do it properly or you'll loose the effect. But you don't? Or do you? Please elaborate on clinical implications.

Kind regards/ AG

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Do you want to get recognition for reviewing this manuscript? Add a record of this review to Publons to track and showcase your reviewing expertise across the world's journals. Signing up is quick, easy and free!

Yes