Reviewer’s report

Title: Incidence and risk factors of spinal epidural hemorrhage after spine surgery: A crosssectional retrospective analysis of a national database

Version: 0 Date: 24 Dec 2019

Reviewer: Julie Agel

Reviewer's report:

This is an interesting article but I have a few points that require clarification.

I would suggest that there are other countries besides Korea where little is known about SEH (line 38) - Myanmar, Nepal, Haiti etc. Please consider rewording this.

Please write out TE (TE) the first time you use the abbreviation.

Please clarify that all of these cases of SEH were within the initial hospitalization -

Please clearly define the pertinent cases - and who did this and how - was this all done by computer query?

When you state that all selected cases were individually investigated do you mean that someone looked at hospital records by hand?

I am not certain that the literature review section belongs in the middle of the text - if you are using this to create your list of risk factors which is what I am hypothesizing please be clearer about this

In your results please be clear if when you discuss surgery time that this is from their initial surgical procedure - this is also true for most other variables such as cost etc.

When you discuss procedures done at various size hospitals please provide rates rather than the frequency count

Your length of stay seems very long (on average) can you provide more information about the types of cases done that are included in your sample.

Please define use of NSAIDS - does this mean pre-surgery, at any time during the hospitalization, discharged on NSAIDS

I remain confused about your sampling weight - throughout your work please identify what is a sampling estimate number versus what is true incidence

Please consider turning Figure 1 into a formal consort diagram
Lastly do you know which of these patients were put on prophylaxis as routine surgical care

I think you have an opportunity to provide useful information here but you need to streamline your points and provide a little more detail - there is a huge difference between a 21 year old with a traumatic event and a 70 year with a longstanding degenerative condition - I might consider looking at your data once without the trauma cases or without the cases that were less than 2 hours to see if your results hold firm

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

No

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

Yes

**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:

Needs some language corrections before being published

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