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: 16 Jan 2020

Reviewer: Siddharth Aiyer

Reviewer's report:

General comments

The authors present a cross-sectional analysis of retrospective data on post-operative spinal epidural haemorrhage (SEH) following spine surgery. They attempt to assess the incidence and risk factors for SEH from the national data base.

Major comments:

Level of evidence 4.

The authors present large data set analysis for incidence of SEH in spine surgery. Although there is limitation in the methods where the national dataset does not have a diagnosis of SEH for identification. The alternative appears acceptable in the methods.

The conclusions derived however are not representative of results. The conclusion on the thromboprophylaxis in the setting a level 4 evidence where the anticoagulation use was not significant in the univariate analysis and marginal significance in the multivariate analysis cant be extrapolated to conclude "we recommend more active thromboprophylaxis after spine surgery."

The conclusions can include the incidence rates and the findings of the risk factors based on the univariate and multivariate analysis. However, drawing conclusions on thromboprophylaxis based on marginal statistical significance cannot be justified.

I recommend the paper for major revisions.

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.
No

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

No

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:

Not suitable for publication unless extensively edited

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