Reviewer’s report

Title: Lead Fixation in Deep Brain Stimulation: Comparison of Three Lead Anchoring Devices in China

Version: 0 Date: 19 Feb 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

Statistics - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable
OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Yes - current version is technically sound

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: the study is interesting and well written. It provides useful information about the most used lead anchoring devices for DBS

REQUESTED REVISIONS:

My major concern is that authors put together the lead fixation from Medtronic and PINS as "traditional". Are they exactly the same? - in the discussion authors discussed this but I think this should be emphasized in the Introduction. maybe if they separate the six traditional (medtronic) and the 20 traditional from PINS would be interesting, once they are comparing the different designs. If they were really put together, authors should say that the new lead fixation devices are potentially better than the "traditional" and that these latest are similar regarding their manufacturer.

ADDITIONAL REQUESTS/SUGGESTIONS:

considering a better description and picture of each lead anchoring device (improve figure 1 quality with real pictures and a better description). I also believe that they need to clarify who measured the shift between the two positions. If it were the treating surgeon, this may be considered as a bias and should be added to the study limitation. add p values in the Results presented in the abstract. I also believe that authors should be clear to say that the new design lead anchoring devices requires less adjustment than the first generation. Figure 4 is also in the discussion. figures are generally added in Methods or Results

Note: This reviewer report can be downloaded - see attached pdf file.

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.

No

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

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