Reviewer’s report

Title: A comparison of zero-profile anchored spacer (ROI-C) and plate fixation in 2-level noncontiguous anterior cervical discectomy and fusion- a retrospective study

Version: 2 Date: 22 Dec 2017

Reviewer: Julian Scherer

Reviewer's report:

General comments

I would like to congratulate the authors on this study that addresses a very interesting issue.

The study design is well-chosen although the study design is not consistent described through the manuscript. (Please see specific comments).

The execution of the analysis of the data seems satisfying to me, but the presentation of the results is a bit disappointing.

Please show the specific p-values at any given time in table 3 (p-values for the comparison at one time). Also, please show how the Cobb-angles were measured. I also missed a graph for the illustration of the main results.

I also do have the impression that the manuscript needs some slight language polishing.

Summarizing, I think that the present study can be published after revision of the mentioned aspects listed in the comments below.

Specific comments

1.Title

I would suggest following title: „A comparison of zero-profile anchored spacer (ROI-C) and plate fixation in 2-level noncontiguous anterior cervical discectomy and fusion- a retrospective study "
2. Abstract

Line 43 p1: On page 4 you claim that patients were observed at least 12 months. This statement differs clearly from the one you made here.

Line 48 p1: please insert "the" two groups

Line 50 p1: please change "were" into "was"

In my opinion, the results section in the abstract is too detailed. Please reduce to the main findings of your study and please show %-values more than X out of X to make the abstract clearer to the reader.

3. Introduction

Line 23 p2: Please insert "a" debate (…) and change "over" into "about". Also change "is" into "would be". Please delete "for use".

Line 24 p2: please describe "levels" of what?

Line 34 p2: please change "studied" into "investigated" (if)

Line 39 p2: in my opinion, the ROI-C Cage is not inserted "into" the vertebral body, I guess you meant between two vertebrae as it is commonly used as a spinal disc substitution. Please rewrite.

4. Material and methods

Line 50 p2: I would suggest erasing "This is a retrospective study" and insert this aspect into the title.

Line 51 ff p2: In my opinion, the mean age (including SD) would fit better into the "results" section.

Line 9 ff p3: Please explain why developmental stenosis is an exclusion criteria. Also, you claimed that 44 patients received surgery during the specific time range. Therefore, in my understanding every single patient met inclusion criteria. If so, please mention this explicitly and explain that no participant met exclusion criteria.

Line 25 p3: please rewrite: "There was no significant difference".

Line 40 p3: I think "plates were applied" would fit better.
Line 47 p3: I think you should put the "collected data and outcome assessment" after "surgical technique". This would fit better into the patient’s context.

Line 52 p3: surgery instead of surgeries.

Line 7 p4: "when was the clinical and radiological evaluation taken preoperatively?"

Line 11 p4: In my opinion, it is good to use scores, but I think you should also score the patient’s subjective life quality after surgery and not only use objective scoring systems. Please describe the JOA scoring system and the NDI more precisely. Also, please describe the measured outcome or meaning of the JOA-RR.

Line 20 p4: Please change "satisfied" into "given".

Line 28 p4: New osteophyte formation in what time period?

Line 32 p4: "were observed for at least 12 months (...)": Did every patient receive follow-up at the same time after surgery?

5. Discussion

Line 10 p6. I guess you meant that the ROI-C itself was simple to insert. Please rewrite this section.

Line 32. P 6: Please write "may occur" instead of "maybe".

Line 39 p6: I would prefer an extra section for the "conclusion" to emphasize it within the manuscript.

Line 40 p6: You claim that there was no significant difference in clinical outcomes although you defined "dysphagia" as a clinical outcome and you stated that "dysphagia" had a significant difference between the compared group at any time. Please rewri
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

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:

Needs some language corrections before being published

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