Reviewer's report

Title: A Comparison of Lumbar Transverse Pedicle Angles between Ethnic Groups: A Retrospective Review

Version: 0 Date: 11 Dec 2018

Reviewer: Gagandeep Choudhary

Reviewer's report:

General comments:

1. Well written manuscript.

2. Major revision is required in the "results" subsection (please see below). Minor revisions required in other subsections.

3. Please use the abbreviation for Transverse Pedicle Angles (TPA) consistently throughout the manuscript.

4. Use the word 'gender' instead of 'sex'.

5. Same figures are listed multiple time in the manuscript. List each figure only once in the manuscript.

Subsections:

Title: Appropriate

Abstract: Worth mentioning individual vertebral levels (i.e. L2 and L3) in the abstract which showed statistical significance, instead of "multiple individual levels".

Background:

Please use the abbreviation for Transverse Pedicle Angles (TPA) consistently throughout the manuscript.
Page 4, 2nd paragraph: Multiple studies are listed here: Citation 7 and 8: Please mention whether these studies were on cadavers or on imaging modality.

Methods:

Page 6, 2nd paragraph: Do you mean 'figure' instead of 'image'? If so use word "figure" instead of "Image".

Use: 'Parentheses' for figures and tables.

Also: Figure and table should be listed properly, Example: see Page 6, 2nd paragraph: "mid-axis of the pedicle bilaterally as seen in Image 1", instead use "mid-axis of the pedicle bilaterally (Figure 1)".

Results:

Use: 'Parentheses' for figures and tables.

Page 7, 1st paragraph 2nd line: Description of Figure 1 in this paragraph doesn't match the provided Figure.

Page 7, 2nd paragraph: "However, when stratified at the L2 and L3 levels": These two line need to be rephrases (combine these two line into one line to avoid repetition).

Page 7, 3rd paragraph and page 8: Use symbol º instead of 'Degree'.

It is worth mentioning the other statistics related to gender, age, height and weight. At-least as a supplementary Data file.

Important to mention that "No statistical differences were seen in TPA at L1, L4 and L5 vertebral levels".

Discussion:

Page 8, last line: "These results can be visualized in Figures 1 and 2". Again the figure 1 description does not match the provided figure.

Consistently use "(p<0.05)" instead of "(p=.05)". See last paragraph on page 8.

Need rephrasing: Page 9 first paragraph, line 4th: "When planning on instrumenting patient to undue radiation."
Conclusion: Appropriate

Tables:

It is worth mentioning the other statistics related to gender, age, height and weight. At-least as a supplementary Data file.

Abbreviations of "SD" and "SEM" should be described/listed in the figure legend.

If possible the significant P-value data should be listed in the table form.

Figures:

Figure and table should be listed properly, Example: see Page 6, 2nd paragraph: "mid-axis of the pedicle bilaterally as seen in Image 1", instead use "mid-axis of the pedicle bilaterally (Figure 1)".

Additional CT image showing the significant difference in the TPA angle at L2 or L3 level in different ethnic groups will be more appealing o the audience.

Figure 1: Please describe/correct 'Fist' in the figure legend. (Also make sure figure is correctly described in the manuscript. Please see comments on methods and results).

References: Appropriate

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.

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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