Reviewer's report

Title: New parameters describing morphological variations in the suprascapular notch region as potential predictors of suprascapular nerve entrapment

Version: 2 Date: 7 August 2014

Reviewer: Diana Toneva

Reviewer's report:

Reviewer's report: This is an interesting and well structured study, which investigates the possibility of predicting suprascapular neuropathy by means of mathematical assessment of the complex morphology of the suprascapular region. This study would be of great interest to the specialists dealing with this topic.

Major Compulsory Revisions: None

Discretionary Revisions

Key words

“Anatomical variation” is a very general notion, which does not need to be included in Key words. “Suprascapular opening” is more appropriate, although I think “suprascapular foramen” is more common term.

The Background is concise, but gives the key background information.

The Methods are detailed described. However, it would be better also to define “SN passage area” and to clarify the difference with “aSSO”.

The Results are informative and relevant.

The Discussion is logical and consecutive. It is taken into account not only the advantages of both new parameters, but also their limitations.

Minor issues not for publication

Abstract

Results -> replace with “Results”

Background First paragraph

“…was firstly described by 1936 by André Thomas [3].” -> replace with “…was firstly described in 1936 by André Thomas [3].”

Background Third paragraph

60% [9] -> replace with 60% [8] I suppose the cited article is this of Avery et al. (2002).

Methods First paragraph
“All donor gave informed connect” – replace with “All donors gave informed consent”

Methods Second paragraph
“Usefulness and correctness of this method was confirmed to used the Bland-Altman plot and R2 value in previously study [6].” -> The sentence should be rewritten: “Usefulness and correctness of this method were confirmed by the Bland-Altman plot and R2 value used in a previous study [6].” OR “Usefulness and correctness of this method were confirmed with the Bland-Altman plot and R2 value in a previous study [6].” OR anyhow to sound meaningfully.

Methods
x 100% -> x 100 (there is no need of “%” in the formulas)

Table titles
“according to STSL and SSN type.” -> I think the plural form of “type” is more correct to be used. -> “according to STSL and SSN types.”

Table 1 and Table 2
* When ACSL present -> it is marked in the footnote of the tables, but there is no “*” anywhere in both Tables.

Results Second paragraph
R-0.3155 – add “=” -> R=-0.3155

Discussion Third paragraph
“It has been reported in 5.5% - 12.5% of cases [5,20].” -> “It has been reported in 3.7% - 12.5% of cases [5,20].” Is it not 3.7% instead of 5.5%? Check it.

Discussion Last paragraph
“This is rate is higher than” – remove the first “is” (“This rate is higher than”) or rewrite the sentence.

References

It may be noticed that both cited articles of Moriggl are Part 1 and Part 2.

Figures legend
Figure. 1. -> Figure 1. /Remove the dots between “Figure” and “Digit”./

Fig. 4
The second correlation plot in Fig. 4 is not clear enough (the legend does not correspond to the lines in the plot).

ACKNOWLEDGMENTS
The sentence should be rewritten /the singular forms of the nouns do not sound good/.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.