Reviewer's report

**Title:** Morphometry of the suprascapular notch: correlation with scapular dimensions and clinical relevance.

**Version:** 3  **Date:** 31 January 2013

**Reviewer:** KONSTANTINOS NATSIS

**Reviewer's report:**

Dear Editor,

The authors measured the dimensions of the suprascapular notch as well as some other dimensions of the scapula in large sample (500 bones). Also, they classified visually the suprascapular notch shape into six types, according to the Rengachary classification. They examined possible correlations between dimensions of the notch and dimensions of the scapula and they presented the dimensions of the notch in each morphologic type per Rengachary. Finally, they compared their results to those reported in previous studies and made some comments about clinical implications of the results for the suprascapular nerve entrapment syndrome. It is a well structured study, the sample is great and some of the results and correlations are interesting. However, there is enough to do before it can be accepted for publication:

1. In the Introduction section, authors should describe the six types of the notch exactly as they were originally described by Rengachary (in a schematic illustration and in the text).
2. In the Introduction section, authors should make clear which the safe zone is and in which surgical procedures is it useful.
3. Delete the word “huge” from the last paragraph of the Introduction.
4. How did they estimate the ICC? The article needs a review by a biostatistician or at least some further explanations.
5. The most important mistake in the methodology of the study (Major Compulsory Revision): it seems that the authors made a wrong interpretation of the Rengachary types. First, according to the description of Rengachary, in type I it is impossible to make any measurements in the notch since there are no discrete margins of the notch. What exactly did they measure? According to the original description of Rengachary the Type IV notch is “very small and ‘V’ shaped”. Also, in the figures of Rengachary the Type III notch is larger than type IV notch. Even in the results of the present study the Type III notch has both diameters greater than Type IV notch. Nevertheless, authors comment that suprascapular nerve entrapment is more likely to occur in Type III notch because of its small width and great depth! I believe that there is a misunderstood regarding the morphology of type III and IV and that’s why authors reported that type IV is by far the most common type, while in previous studies type III is the
most common study and type IV is by far the less common type.

6. The English language needs some improvement.

In conclusion, authors have done an extensive work on the quantitative morphology of the suprascapular notch and correlation to scapular dimensions which is very interesting. The study has a major problem with the qualitative classification of the notch and whatever is related to that. I propose to remove any data about the qualitative classification of the notch, apply the above mentioned modifications and resubmit the article, focused on the quantitative data and then I believe that there will be enough chances to be accepted for publication.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests