Reviewer's report

Title: RFE based chondroplasty in wrist arthroscopy indicates high risk for chondrocytes especially for the bipolar application

Version: 2 Date: 3 November 2014

Reviewer: Tamir Pritsch

Reviewer's report:

minor essential revisions

The authors performed a cadaver study in order to assess the risk of performing radiofrequency chondroplasty in the wrist, and determine the difference in heat generation between monopolar and bipolar RFE.

Although the topic is important and the study was nicely designed and performed, the paper needs moderate revisions. In addition, there are multiple grammar and phrasing mistakes that need to be corrected. I outlined only some of the mistakes but the language of this paper needs significant improvement.

Page 2 line 33 – rephrase – instead of " to the estimated sealing effect. But...." Write, "to the estimated sealing effect, however...."

Page 2 line 45 – rephrase "did not exceed 30 deg..." instead of did not reach more than...

Page 2 line 48-50 – please rephrase the sentence – unclear and cumbersome

Page 4 line 83 – please rephrase the sentence/ don’t start the sentence with" but".

In general don’t open your sentences with BUT. Please rephrase.

Page 5 line 96-98 – Please rephrase. Sentence is poorly written.

Page 5 line 106 please add a short explanation of why you hypothesize there is a difference between bipolar and monopolar RFE.

Page 8 – how did you come up with the protocol of applying radiofrequency for a strict 45s? What is it based on and what was the rational? Isn’t applying several increments of 15s clinically more reasonable in terms of avoiding the excessive temperature? This can be addressed in the discussion section as well (page 11 lines 221-227).

Page 9 line 174 how did you measure the distance from the RF-probe to perform the statistical analysis that was done.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

nothing to declare