Reviewer’s report

Title: The effects on calcaneofibular ligament function of differences in the angle of the calcaneofibular ligament with respect to the long axis of the fibula: A simulation study

Version: 0 Date: 24 Oct 2017

Reviewer: Matt Carroll

Reviewer's report:

Thank you for the opportunity to review this work:

Abstract:

I would question the main conclusion that ankle function may change in relation to various CFL angles. The study demonstrated that CFL strain varies according to sagittal and frontal plane positioning of the ankle not vice versa.

Background: Page 1

There are typographical errors through the background section and numerous sentences that do not read well.

Line 16: Sentence begins with "Since", please consider an alternative start for the sentence

Lines 26-32: This sentence is confusing

Line 47: Sentence starts with "on the other hand", please consider an alternative start for the sentence

The word running angle was initially confusing and not a term I was familiar with. The running angle either needs to be defined earlier in the background or an alternative term used, e.g. anatomical orientation.

Background: Page 2

Line 6: Reference needs correction "Grond JT"

Lines 21-27: The aim does not align with the study conclusions.

Methods: Page 1

Please add what institution granted ethical approval
Methods: page 2

Lines 48-51: A previous study on what indicated reproducibility and reliability?

Statistical analysis:

Was any adjustment considered for pooling the left and right feet?

Results:

Please report P values

Table 1: The title needs to be more descriptive. What are the differences in the table?

The in text description of the results section does not really match what Table 1 presents

Table 2: There is some confusion between the in text description in the results section and table 2. The in text description is titled "changes in strain" but table 2 is titled "changes in degree of stretching"

Table 3: Same problem as Table 2 with regard to variation between in text and title.

The in text description of table 2 also needs some statistics presented in the results

Discussion:

The authors need to acknowledge they only examined two planar motion (sagittal and frontal) components of ankle function. Incorporating varus and valgus motions at the hind foot also examined triplanar motion of the subtalar joint.

Conclusion:

As mentioned in the abstract I feel the conclusion is not correct based on the results.

**Level of interest**

Please indicate how interesting you found the manuscript:

An article of limited interest
**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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