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: Helen Branthwaite

Reviewer's report:

An interesting article that builds on the understanding of ankle ligament structure and possible changes in function. Not only does this type of work challenge historical belief it also introduces and reaffirms the notion that as humans we are all different.

The title needs clarification, as well as the abstract and throughout the text, on what "running angles" means. To the audience interested in this journal it would be fair to say that the initial thought is that this term is related to running gait. I think the term should clarify that this is fibre orientation, if I am understanding this correctly?

Check throughout the manuscript on the journal referencing style and rectify accordingly. Similarly review the language format of tense and reduce 1st person.

Introduction

ATFL is introduced first and then quickly moved on to CFL - it may be worth revisiting how this is written as it distracts from the main topic.

Grond JT ? I assume this is an author - ref correctly

Methods

Expand the ethical judgement of this paper and acknowledge that ethical protocols were adhered to. Who consented to this work being completed? Expand the statement about ethical approval to assure the readers that this project was suitably approved.

Why did the specimens have to be dissected above the knee for CFL assessment ?

Who dissected the CFL ligament and how were the angles determined ?

Diagrams of the methodology would enhance the understating of this work as the audience reading it would not necessarily have knowledge of the descriptive techniques used.
Expand what was examined statistically.

Results

This section is clear and well presented.

Discussion

Do not repeat the results in the opening paragraph.

The acknowledgment of their being variations between ethnicities in the second paragraph is a relevant discussion point, however I feel that it should be at the end of the discussion as it is a limitation of the study really and distracts from the main message at the beginning of this work.

This section needs complete revision as it is an extension of all literature review with your results popped in. There is no discussion about why you got the results you did or what significance this has. Build on what you have written in a way that delves into the work and discusses why there is such variation in a population and why the ligament behaves differently.

Level of interest

Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English

Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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