Reviewer's report

Title: Importance and challenges of measuring intrinsic foot muscle strength: Review of the literature

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Reviewer: Michael J Mueller

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Overall, I think the authors have done a good job addressing the concerns raised in the first review. The review contains important information on the intrinsic muscles of the foot that is highly relevant to this journal.

Major Compulsory Revisions: none noted.

Minor Essential Revisions: Although the authors have tried to clarify the use of "direct" and "indirect" methods of assessing intrinsic/extrinsic muscle strength in the text, I still think the terms are misused for the reasons explained in the first review. (The “direct” methods are indirect estimates of intrinsic muscle strength as they rely on many factors (i.e., joint torque through the MTPJ, placement and length of resistance arm, type of force measuring device, joint position, and involvement of the extrinsic muscles) many of which are discussed by the authors. The “indirect” measures are not measures of strength at all but estimates of muscle structure (volume or area), activity, or histochemical properties.)

While some of these issues have been clarified in the text, the abstract still uses the terms “direct” and “indirect” with no operational definition. Since the abstract often will stand alone, I think the use of “direct” could easily be eliminated in the abstract. Specifically, the sentence “Published methods of measuring…direct and indirect methods” should be deleted. The next sentence could read, “Methods to estimate toe flexor muscle strength include the paper…and the intrinsic positive test.” “Direct” should also be eliminated 2 sentences later, “…unclear whether any direct method…” The next sentence could read something like, “Indirect methods to investigate intrinsic muscle structure and performance include CT, ultrasonography, MRI,…”.

Level of interest: An article of importance in its field

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

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.