Author’s response to reviews

Title: Lateral wedges with and without custom arch support for people with medial knee osteoarthritis and pronated feet: An exploratory randomized crossover study

Authors:

Michael Hunt (michael.hunt@ubc.ca)

Judit Takacs (jud.takacs@gmail.com)

Natasha Krowchuk (natasha.krowchuk@ubc.ca)

Gillian Hatfield (gillian.hatfield@ufv.ca)

Rana Hinman (ranash@unimelb.edu.au)

Ryan Chang (ryan.chang.umass@gmail.com)

Version: 2 Date: 19 Apr 2017

Author’s response to reviews:

Reviewer reports:

Editor comments

Thank you for adequately addressing the Reviewers' comments. Some outstanding comments to address:

1. Please provide a statement in the methods outlining the differences between the original study protocol (Clinicaltrials.gov identifier: NCT02234895) and the final study protocol described in this manuscript.

Response: This information has now been provided in the first paragraph of the Methods.

2. Please clarify in the interventions section of the methods if participants wore their allocated insoles in their own shoes or in study shoes provided.

Response: This has been added on Page 8 as requested.

3. Please discuss or add as a limitation the implications of the very low adherence as a percentage of shoe wear time (~19-24%). Perhaps this relates to comment #2?
Response: Wear times were 72.5% and 75.8% for the lateral wedges and lateral wedges with arch support, respectively. The 19.2 and 24.4 were the standard deviation values across all participants. We feel that wear times in excess of 70% are acceptable and are consistent with previous research (for example, Bennell et al (BMJ 2011) reported average wear times of 69% for lateral wedges in their study).

4. Based on this statement in the Results “There were no differences (p=0.55) in self reported comfort between the two conditions (lateral wedges = 6.4 (2.6) out of 10; lateral wedges plus arch support = 6.9 (2.5) out of 10)” please remove this misleading statement from the beginning of the discussion “the lateral wedges with arch support were deemed slightly more comfortable”. You have appropriately expanded on this later in the discussion.

Response: This has been removed as requested.