

Peer Review File

Article information: <http://dx.doi.org/10.21037/atm-20-6922>

Reviewer A

Comment 1: Furthermore, the objective of the study is stated (pg 3, line 27-29 according to the checklist) to “describe the functional assessment of the child with clubfoot, from the gait analysis laboratory to more recent assessments of community ambulation and participation” thereby the author should broaden their review outside their own findings.

Reply 1: Thank you. For clarification, the intention of this narrative review was to summarize and highlight key elements learned through our research experience studying the functional outcomes in a large group of children followed longitudinally from early walking (2yrs) through our most recent study at 10 yrs of age. As part of the discussion, we have included and made reference to other published research.

Comment 2: Therefore, I would like to suggest that the authors include findings from other research groups within the field in the review, or at least in the discussion of their own findings to synthesise and add new findings in a greater context. Some examples, except references already mentioned in the manuscript, are Lohle-Akkersdijk et al. 2015, Tuinsma et al. 2018, Aulie et al. 2018, Lööf et al. 2019, Wijnands et al. 2020 to mention some of the more recent reports in the field of motor function and clubfoot.

Reply 2: We would like to thank the reviewer for their comment. Our research has in fact included gross motor function assessments including the Peabody (reported in Karol '09 and Zapata '18) and BOT-2 (Zapata '18). We briefly highlighted the Peabody outcomes at 5 years and the utility of using gross motor assessment in our study. Since the current summary of work was focused on gait analysis, we just chose to highlight this one manuscript for the sake of brevity. I have added a section referencing Loof and Aulie as they relate.

I have added the Meta- analysis by Tuinsma, et al. as a reference.

Comment 3: Second, to give value to both clinicians and researchers it would be interesting if the author could elaborate how their findings might change future treatment and research in clubfoot. For example, do they advocate that all children with clubfoot are assessed regarding gait and/or motor function? Do we need to modify the treatment and/or follow-up of clubfoot?

Reply 3: It is recommended that the results from studies such as these be used to help guide advances in treatment. We do not recommend routine gait analysis for all

children with clubfoot due to cost and lack of availability. In unusual cases with gait disturbances that are refractory to standard treatment, there may be benefit in gait analysis in determining surgical decisions.

Comment 4: Finally, I would suggest that the authors include a paragraph of their thoughts of the quality of the studies and/or study limitations.

Reply 4: I have expanded the description of our prospective study, where our children are enrolled at birth and followed longitudinally at 2, 5, 10 and skeletal maturity. We feel that the quality of this study and the attention to detail at initial inception, speaks strongly for the strength in our results. Although some of our patients required surgical intervention along the way, we do not exclude them from our analysis, hoping to add and expand the knowledge of surgical outcomes following initial nonoperative treatment.

Reviewer B

Comment 1: Abstract - Add some objective data such as outcomes of outcomes, for example the total number of patients, feet, and other relevant information.

Reply 1: We have expanded the abstract to include some of this information within the confines of our word limit. Thank you for this comment.

Comment 2: I believe that it needs to be mentioned whether they have had experience with neglected clubfoot cases or not, that is, who started treatment in children over two years of age.

Reply 2: Our clinicians do have experience with treating neglected clubfeet, however discussion of this topic is outside the scope of the current review of our published work.

Comment 3: On line 121-123, the statement is questionable. Many authors who used Ponseti and found recurrence, most of the time, redid the plaster casts and did not go directly to the transfer of the anterior tibial. Review that sentence.

Reply 3: This sentence has been revised.

Comment 4: The text lacks figures and tables to facilitate reading. I suggest adding.

Reply 4: I have thought on this request, and without going to JBJS and JPO and requesting permission to use our tables/graphs/etc, the only contribution I can think to add would be a table of the manuscripts published from this prospective study. If the reviewer thinks this would satisfy this request, I am happy to put it in a table.

Comment 5: The conclusion is long. I suggest making it more concise and smaller.

Reply 5: We agree with the reviewer and have reorganized this section so the conclusion is brief.

Reviewer C: I want to thank the authors for this interesting narrative review; I believe that we should continue to rely on non-surgical methods for the treatment of clubfoot and on broad and long-term functional evaluations such as those that have been discussed in this manuscript.

Reply: Thank you for reviewing our paper.