

To the Editor World Journal of Orthopedics:

April 5 2016

Dear Editor

We are happy to have complied and responded to all the requests by each individual reviewer.

The changes are made as required: the citations, the referencing, the comments, the affiliations and provision of the COI, Copyright and the permission / consent form.

We note that the response to the comments by reviewer # 2 have been provided as follows:

Authors Reply

We thank the reviewer for this input.

- ***How did the opportunity to 'slackline' (assuming that is the correct verb) come about to the patient?***
 - o The patient was being treated with recognised stroke rehabilitation methods and the presence of research on slacklining for balance and Quads became available. With the knowledge from this available research which we had completed the year before (Gabel, Osborne et al. 2015) the methodology was simply implemented for this specific patient. The effects were immediate in terms of functionally measureable and patient reported improvements. Consequently, as a rehabilitation intervention, the slacklining was retained and continued. Furthermore, removal of this from the rehab program showed a corresponding reduction in both measurable and reported function which prompted its re-introduction.
 - o A previous study we had completed the year before had given us the ideas of a progressive set of protocols – how to initiate and then progress the slacklining as a separate intervention (Gabel and Mendoza 2013).
 - o This was supported by the existing other research available from other studies and publications – much of this is summarized in the additional paper prepared concurrently with this study (Gabel 2014).

- ***Whilst there are no indications of foul-play, a skeptic might consider the possibility that the author has recognised the opportunity to test the feasibility of a relatively rare activity in various healthcare scenarios where a range of physical activities may indeed provide benefit.***
 - o Agreed. However, this was introduced as a sole change in the program and the functionally measureable and patient reported improvements changed accordingly. It was also felt to be worthwhile to retain this intervention for this patient and after the period of ongoing sustained and variable change with and without the protocol, the method was felt to be worthwhile reporting as a case study.

- ***If slacklining was not available, what would the attending physician's (and the physical therapists) approach have been for this patient?***
 - o The alternative approaches were those previously documented in the case study
 - general balance work in standing,
 - use of balance mats,
 - strength and steps and
 - hydrotherapy.
 - o All these methods had already been introduced and used in both an inpatient and outpatient setting with positive but not sustained gains and the level of functional status was felt to be able to be further improved - also the patient felt this as well. The slacklining provided this additional patient and rehabilitation input challenge

- ***Are there examples of other such patients?***
 - o Yes. This method has been used in other stroke patients by the same clinic with similar results – currently in stages of continuing progression.
 - o Two additional papers are currently under submission on the role of slacklining in Parkinson's – a controlled study – where the results show an improvement in the overall function and a reduction in falls risk for these patients.
 - o A case study paper on slacklining as a supplementary rehab protocol for traumatic brain injury is in progress and has shown a positive effect so far – this case study is 5 months into the longitudinal nature of the 18 months follow up with an improvement in the overall function from an initial 22% level to 60% in this period.

- ***There is some minor repetition in methods and results (e.g. supports / stick etc.) sections that could be amended.***
 - o This has now been addressed.

Kind regards

Dr CP Gabel, Dr N Rando, Dr M Melloh

References

- Gabel, C. P. (2014). "Slacklining: A Novel Exercise to Enhance Quadriceps Recruitment, Core Strength and Balance Control." *J Nov Physiother* **4**(229).
- Gabel, C. P. and S. Mendoza (2013). "'Slacklining' - a self-generated, graded training program for lower limb rehabilitation." *IJATT* **18**(4): 14-19.
- Gabel, C. P., J. Osborne and B. Burkett (2015). "The influence of 'Slacklining' on quadriceps rehabilitation, activation and intensity." *Int J Sc Med Sport* **18**(1): 62-66.