September 25, 2016

Dear Editor,

Please find enclosed the edited manuscript in Word format.

Title: Extrinsic Visual Feedback and Additional Cognitive/Physical Demands Affect Single-limb Balance Control in Individuals with Ankle Instability

Author: You-jou Hung, Jacob Miller

Name of Journal: World Journal of Orthopedics

ESPS Manuscript NO: 28863

The manuscript has been improved according to the suggestions of reviewers:
1 Format has been updated.

2 Revision has been made according to the suggestions of the reviewer

(1) The case series is not large enough, but the result of this study is helpful for choosing rehabilitation method for patients with ankle instability.

Respond: A larger sample size will be beneficial for future studies. A paragraph discussing the limitation of the study was added at the end of the "conclusion" section.

(2) Authors aimed to investigate the impact of extrinsic visual feedback and additional cognitive/physical demands on single-limb balance in individuals with ankle instability. Sixteen subjects with ankle instability participated in the study. It is not clear why no healthy controls were included in this study. If the aim is just for individual with ankle instability, it should be reflected in the title. Maintaining balance depends on information received by the brain from three peripheral sources: eyes, muscles and joints, and vestibular organs. If the study was to establish a new BBS quantitative measure to assess severity of ankle instability, authors should focus on eliminating effects from other factors. It was not clear the range of ankle instability of the participating population with ankle instability (CAIT scores, BBS scores). BBS scores are based on visual feedback. Is the BBS score valid without visual feedback? If not, the measurement without visual feedback will be invalid. No valid conclusion can be reached. What are the means and standard deviations for BBS scores from healthy controls without visual feedback? If the BBS scores have a large variance and low repeatability for healthy controls without visual feedback, there is a flaw in the study design.

Respond: The title of the manuscript was changed to "Extrinsic Visual Feedback and Additional Cognitive/Physical Demands Affect Single-limb Balance Control in Individuals with Ankle Instability" to better specify the subjects of the project. Agreed with the reviewer, having a separate group with individuals with no ankle instability will enhance this manuscript. This limitation is added to the "conclusion" section.

Because the Biodex Balance System (BBS) is commonly used in a clinical setting, this study can remind reviewers that the default setting (with extrinsic visual feedback) of the Athletic Single-limb Testing protocol is not functional, and it can also over-estimate an individual's single-limb balance capacity. To gain more functional significance, 3 modified protocols were examined in the present study. However, additional investigations are needed to examine the validity and reliability of those modified protocols.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the World Journal of Orthopedics.

Sincerely yours,

You-jou Hung