

## Author's Accepted Manuscript

Musculo-articular stiffness is affected by the magnitude of the impulse applied when assessed with the free-oscillation technique

Aurélio Faria, Ronaldo Gabriel, Massimiliano Ditroilo, Helena Moreira, Rui Brás



PII: S0021-9290(15)00652-1  
DOI: <http://dx.doi.org/10.1016/j.jbiomech.2015.11.020>  
Reference: BM7428

To appear in: *Journal of Biomechanics*

Received date: 5 November 2014  
Revised date: 13 November 2015  
Accepted date: 17 November 2015

Cite this article as: Aurélio Faria, Ronaldo Gabriel, Massimiliano Ditroilo, Helena Moreira and Rui Brás, Musculo-articular stiffness is affected by the magnitude of the impulse applied when assessed with the free-oscillation technique, *Journal of Biomechanics*, <http://dx.doi.org/10.1016/j.jbiomech.2015.11.020>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## TITLE

Musculo-articular stiffness is affected by the magnitude of the impulse applied when assessed with the free-oscillation technique

## AUTHORS

Aurélio Faria<sup>1,\*</sup>, Ronaldo Gabriel<sup>2</sup>, Massimiliano Ditroilo<sup>3</sup>, Helena Moreira<sup>4</sup>, Rui Brás<sup>1</sup>,

<sup>1</sup> Department of Sport Science - CIDESD, University of Beira Interior, Covilhã, Portugal.

<sup>2</sup> Department of Sport Sciences, Exercise and Health - CITAB, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal.

<sup>3</sup> Department of Sport, Health and Exercise Science, Faculty of Science & Engineering, University of Hull, Hull, United Kingdom

<sup>4</sup> Department of Sport Sciences, Exercise and Health - CIDESD, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal.

WORD COUNT – 3906 + 1029 (Appendix)

## CORRESPONDING AUTHOR

\*Aurélio Faria, PhD, Sports Science Department, University of Beira Interior, Rua Marquês D'Ávila e Bolama, 6201-001 Covilhã, Portugal, Email: afaia@ubi.pt, Tel. +351275329153/Fax. +351275329153

## Abstract

Musculo-articular stiffness (MAS) of the triceps surae can be assessed using the free-oscillation technique whereby an impulse is applied and the ensuing damped oscillations are recorded. The purpose of this study was to investigate if impulses of different magnitudes can affect the measurement of MAS. Twenty seven males ( $20.7 \pm 1.3$  years)

Download English Version:

<https://daneshyari.com/en/article/10431161>

Download Persian Version:

<https://daneshyari.com/article/10431161>

[Daneshyari.com](https://daneshyari.com)