

# Accepted Manuscript

Title: Investigation of the passive mechanical properties of spine muscles following disruption of the thoracolumbar fascia and erector spinae aponeurosis, as well as facet injury in a rat

Author: Derek P. Zwambag, Mark B. Hurtig, Howard Vernon, Stephen H.M. Brown

PII: S1529-9430(17)31215-9  
DOI: <https://doi.org/10.1016/j.spinee.2017.12.007>  
Reference: SPINEE 57559

To appear in: *The Spine Journal*

Received date: 21-7-2017  
Revised date: 13-11-2017  
Accepted date: 11-12-2017

Please cite this article as: Derek P. Zwambag, Mark B. Hurtig, Howard Vernon, Stephen H.M. Brown, Investigation of the passive mechanical properties of spine muscles following disruption of the thoracolumbar fascia and erector spinae aponeurosis, as well as facet injury in a rat, *The Spine Journal* (2017), <https://doi.org/10.1016/j.spinee.2017.12.007>.

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 proof before it is published in its final 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.



1 July 20, 2017

2 **Investigation of the passive mechanical properties of spine muscles following**  
3 **disruption of the thoracolumbar fascia and erector spinae aponeurosis, as well as**  
4 **facet injury in a rat**

5 Derek P. Zwambag<sup>1</sup>, Mark B. Hurtig<sup>2</sup>, Howard Vernon<sup>3</sup>, Stephen H.M. Brown<sup>1</sup>

6 <sup>1</sup>Human Health and Nutritional Sciences, University of Guelph, Guelph ON, Canada

7 <sup>2</sup>Ontario Veterinary College, University of Guelph, Guelph ON, Canada

8 <sup>3</sup>Canadian Memorial Chiropractic College, Toronto ON, Canada

9

10 **Address Correspondence To:**

11 Stephen H. M. Brown, PhD

12 Department of Human Health and Nutritional Sciences

13 University of Guelph

14 Guelph, ON, Canada, N1G 2W1

15 Email: shmbrown@uoguelph.ca

16 Phone: 519-824-4120 ext. 53651

17 Fax: 519-763-5902

18

19

20 **Acknowledgements:** This work was funded by grants from the National Chiropractic  
21 Mutual Insurance Company and Natural Sciences and Engineering Research Council  
22 (NSERC) of Canada. The authors would like to thank Drs Jim Henry, Kiran Yashpal, and  
23 Brian Budgell for their help in developing the facet injury model.

Download English Version:

<https://daneshyari.com/en/article/8804492>

Download Persian Version:

<https://daneshyari.com/article/8804492>

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