

October 8th, 2014

Dear Dr. Braiman,

Herewith we submit the article entitled "Development of an algorithm to perform a comprehensive study of autonomic dysreflexia in animals with high spinal cord injury using a telemetry device." by David Popok, Christopher West, Bárbara Frias and Andrei Krassioukov to be considered for publication in the Journal of Visualized Experiments, JoVE. Dr. Andrei Krassioukov is the corresponding author. All the correspondence should be sent to the International Collaboration on Repair Discoveries, ICORD-BSCC, UBC, 818 West 10<sup>th</sup> Avenue, Vancouver, V5Z 1M9 British Columbia, Canada. Email: krassioukov@icord.org Tel: 604 675 8819; Fax: 604 675 8820.

This original article outlines the importance of a unique algorithm developed for a detailed analysis of diurnal fluctuations of cardiovascular parameters collected by telemetry. This innovative technology allows for continuous 24 hours monitoring of hemodynamic values, such as blood pressure and heart rate, in order to identify the occurrence of a clinically relevant and life-threatening condition known as autonomic dysreflexia (AD). Hopefully, this method could be adapted in the future for use in human ambulatory bedside detection of AD events.

David Popok is a Masters student and he is the primary author of this paper. He was responsible for the development of the novel algorithm for hemodynamic parameters analysis. Dr. Christopher West was responsible for study conception, surgical procedures, animal care, interpretation and drafting of the manuscript. Dr. Barbara Frias was responsible for interpretation and drafting of the manuscript. Dr. Andrei Krassioukov is the senior author and was responsible for study conception, data interpretation, drafting of the manuscript, and final approval of the manuscript.

All work followed the adequate guidelines for animal use. This work was partially supported by the Canadian Institute of Health Research and the Heart and Stroke Foundation of BC and Yukon. We also state that this is an original paper, which has not been submitted or published in another journal or book. All authors have read and approved the final manuscript.

We would like to invite the following esteemed reviewers: Keith Tansey (Emory University), David S.K. Magnuson (University of Louisville), Veronica Tom (Drexler University), Lawrence Schramm (John Hopkins University), Jill Wecht (Mount Sinai Hospital) and Stephen E. Dicarlo (Wayne State University).

Yours sincerely,

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