**Rebuttal Comments** - Development of an algorithm to perform a comprehensive study of autonomic dysreflexia in animals with high spinal cord injury using a telemetry device.

**Changes made by the Science Editor:**  
  
1. There have been edits made to the manuscript.   
  
Changes to be made by the Author(s):  
  
1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues. The JoVE editor will not copy-edit your manuscript and any errors in the submitted revision may be present in the published version.  
  
2. 1.1.1 - How is the drug administered?

The enrofloxacin drug is administered subcutaneously (i.e. s.c).  
  
3. 1.1.4 - Is there anything that must be moved or dissected to expose the descending aorta?

W hen making the abdominal incision, cut through the peritoneum to expose the intestines. Hydrate the gut tissue with 2-3mL ringers and retract the intestines. The descending aorta will be exposed at the posterior abdominal wall. Blunt dissect around the aorta and separate the aorta form the inferior vena cava using a blunt instrument.

4. Please describe software usage in section 3 in more step-wise detail.

We would like to thank reviewer for their comments. We have rephrased section 3 as to enhance reader's understanding of the different panels within the BP analysis software and the recommended settings that we had used for our algorithm. As a results of the science editor's previous comments, we have previously added Figure 4 to illustrate the user interface of the software and the output (Figure 4C and 4D)

**Reviewers' comments:**  
  
**Reviewer #1:**   
*Manuscript Summary:*   
This manuscript describes a novel algorithm to assess spontaneously occurring episodes of autonomic dysreflexia after a spinal cord injury. This will significantly impact the field.

*Major Concerns:*  
None  
  
*Minor Concerns:*  
None  
  
*Additional Comments to Authors:*  
N/A

We would like to thank reviewer for their comments.  
  
  
**Reviewer #2:**   
*Manuscript Summary:*   
This protocol presents a novel pattern recognition algorithm developed for a JAVA platform software to study the fluctuations of cardiovascular parameters as well as the number, severity and duration of spontaneously occurring autonomic dysreflexia events. The software is able to apply a pattern recognition algorithm on hemodynamic data such as systolic blood pressure and heart rate extracted from telemetry recordings of conscious and unrestrained animals before and after thoracic (T3) complete transection.  
  
*Major Concerns:*  
None  
  
*Minor Concerns:*  
None  
  
*Additional Comments to Authors:*  
None

We would like to thank reviewer for their comments.

**Reviewer #3:**   
*Manuscript Summary:*   
This is a very interesting study and also very useful if can be translated into human being. The experimental design is reasonable. The description of technique is very details. It can be accepted in current format. It may be better and more understandable if the author can provide a diagram to illustrate how the device is set in the animal.   
  
*Major Concerns:*  
N/A  
  
*Minor Concerns:*  
It may be better and more understandable if the author can provide a diagram to illustrate how the device is set in the animal.

We would like to thank the reviewer for their comments. We have added a simplified diagram (derived from Mayorov et al. 2001) outlining the anatomical landmarks associated with the telemetry device implantation (Figure 1A), with respect to the T3 SCI surgery.

*Additional Comments to Authors:*  
N/A