Reviewer's report

Title: Attenuating effect of Acorus calamus in chronic constriction injury induced neuropathic pain in rats: an evidence of anti-oxidative, anti-inflammatory, neuroprotective and calcium inhibitory effects

Version: 1 Date: 24 November 2010

Reviewer: Stanislava Jergova

Reviewer’s report:

The submitted manuscript reports on the effect of Acorus calamus extract treatment in the model of peripheral neuropathic pain. Authors conducted a battery of standard behavioral tests to evaluate changes in mechanical and thermal sensitivity in the injured paw as well as biochemical and histological analysis of the injured nerve. The results show that the treatment with AC extract significantly improve behavioral outcome after peripheral nerve injury, reduce a level of biochemical markers and histopathological alteration of injured nerve. The experiment is designed clearly and the methods are sufficient to study proposed hypothesis. Discussion is well written with many relevant references showing authors’ excellent orientation in the field.

Minor Essential Revisions:

1. The main comment is about insufficient figure legends. It is necessary to add more details so then figures will be more comprehensible.
2. The title of the manuscript could be stated more clearly by using term “Acorus calamus extract”
3. There are several grammatical errors and typos, therefore I suggest the manuscript to be carefully reviewed and these errors fixed (for example behavioural).
4. I highly suggest not to use symbol “&” instead of “and”.
5. Correct the names of “Randall Selitto test” and “GraphPad Prism”.
6. Abbreviation: Following terms are used only once in the text, therefore there is no need to use their abbreviated forms:
   - non-steroidal anti-inflammatory drugs (NSAID)
   - amyotrophic lateral sclerosis (ALS)
   - Alzheimer’s disease (AD)
   - Parkinson’s disease (PD)
   - superoxide dismutase (SOD)
   - reduced glutathione (GSH)
   - glutathione peroxidase (GPx)
gammaaminobutyric acid (GABA)

7. Abbreviations for MPO and CCI are used in Methods section, no need to explain them later in the text.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests