Reviewer's report

Title: Single and double pain responses to individually titrated ultra-short laser stimulation in humans

Version: 0 Date: 24 Dec 2018

Reviewer: Philip Hess

Reviewer's report:

This is an interesting study which uses laser energy at individually-defined levels to induce pain. The authors were able to induce delayed pain at low thresholds, presumably via activation of c-fiber transmitted pain. The manuscript is mostly well written. The findings are interesting in that they may provide a novel method of studying c-fiber mediated pain.

Methods

The use of single and double pain take a moment for the naïve reader to understand. This would be assisted by an explanation in the methods. For example, 'single pain' was defined as feeling pain of mild intensity with laser stimulation, whether early or delayed, and 'double pain' was defined as the subject reporting both early and delayed pains.

Minor issues

Page 3
Line 23: Ultra-short laser stimulation with a carbon dioxide (CO2) laser meets these criteria…

Page 4
Line 49: A series was comprised of three stimuli, at least one minute apart, located at slightly different skin areas of the plantar arc.

Page 6
Lines 27 - 32: this should be placed at the end of the results.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:
Acceptable
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