Centre intégré
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de l'Estrie – Centre
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de Sherbrooke
Québec

Research Centre on Aging

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Dr Damian Gardia-Olmo;
Dr Stephen C Strom;
Dr Andrzej Tarnawski
Editors-in-Chief
World Journal of Gastroenterology

Manuscript NO. 31463: "Non-invasive stimulation techniques to relieve abdominal/pelvic pain: is more always better?"

Dear Drs. Garcia-Olmo, Strom and Tarnawski,

Thank you for considering our letter to the editor for publication in the World Journal of Gastroenterology. We are grateful to you and the reviewers for the thoughtful comments and constructive suggestions, which have helped to improve the quality of this manuscript.

Please find enclosed the revised manuscript, as well as our response to the reviewers.

We hope that the result is to your satisfaction, and would be happy to make any further changes that should be required.

Cordially yours,

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REVIEWER #03475779

"The papaer should be a short communication more than a Letter to the Editor. There are many aspect to clarify to publish as an original Article but as preliminary communication it is good for publication"

We agree with the reviewer that a short communication would have been appropriate. However, from our understanding, short communications are not accepted for publication in the *World Journal of Gastroenterology*. We hence chose to publish our results as a letter to the editor, as we believed that this format was the one which most suited our manuscript.

REVIWER #03262657

1. **"In what way the authors have chosen which groups of patients will treat with combining TENS + tDCS?"**

   Patients were allocated randomly to TENS or TENS + tDCS using a random numbers table with a ratio of 1:1, based on their order of entry in the trial. This information was added on page 4. We thank the reviewer for prompting us on this issue.

2. **"Have any differences between groups regarding the age, sex or medical history?"**

   The comparability of treatment groups is indeed an important issue. As it can be seen in the table below, the two treatment groups were relatively similar, although the proportion of women tended to be higher in the TENS-only group. Information regarding group similarities and differences is now briefly presented on page 4 of the manuscript. We thank the reviewer for highlighting this important point.

	Group	Data	*P* value
Age	TENS	Mean = 42	0.56
	TENS + tDCS	Mean = 45	
Sex	TENS	4 women; 1 men	0.79
	TENS + tDCS	2 women; 2 men	
Pain	TENS	2 pelvic; 1 abdominal; 2 pelvic and abdominal	0.73
	TENS + tDCS	1 pelvic; 1 abdominal; 2 pelvic and abdominal	

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3. **"Why the combining TENS with tDCS decrease the pain sensitivity better in patients with chronic low back pain than in patients with chronic abdominal/pelvic pain?"**

   This is an interesting question. As mentioned in our manuscript, the discrepancies observed between our results and those of Schabrun and colleagues could be explained by the different populations that were studied. Apart from the variations in the physiopathology of chronic low back pain and chronic abdominal/pelvic pain, other factors could also be involved. For instance, it should be noted that the cortical somatosensory area devoted to the pelvic organs/genitals lies much deeper within interhemispheric fissure compared to that of the lumbar spine. It should also be noted that the positive effect of tDCS + TENS mentioned by Schabrun and colleagues was reported on a subsample of patients only (i.e., individuals with more pronounced pain sensitization). Perhaps comparing TENS and tDCS + TENS in chronic abdominal/pelvic pain patients with increased pain sensitization would have produced different results. These issues are now discussed in the manuscript on pages 5-6.

REVIEWER #03473712

"Is there a p value to show if the difference between both groups is statistically significant or not?"

Because the sample of patients was small, we deliberately chose not to report the p-values. Indeed, running statistical tests with small sample reduces statistical power and increases the chances of committing a type-II error. Hence, descriptive analysis and figures were preferred to inferential statistics. Nevertheless, it is interesting to note that non-parametric tests all confirmed that there was no difference between the two treatment groups, both before and after treatment (all p-values > 0.05). Because of the power issue discussed above, we believe that p-values should not be presented. We however remain open to add this information, should the editor think that this is necessary.

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