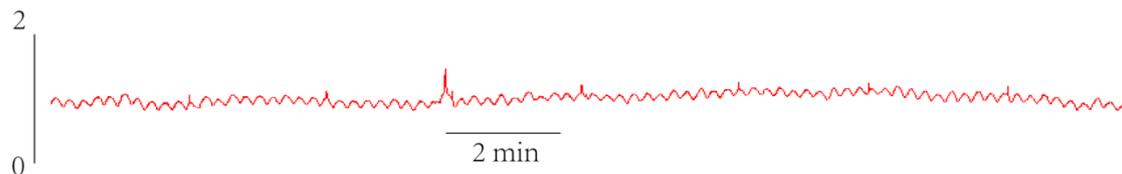


2 19502-Answering reviewers

Major comments:

1: Are type A responses actual responses, or just background noise? Evidence needs to be shown that they are responsive

Response: Though rare reported, type A contractions are actual responses, and another representative trace in the study was showed below:



2: Results. “Characteristics of fasting jejunal motility” section second paragraph first sentence. “In the resting conditions.....frequency of 12-30/min....”. There is no description of whether these responses fit the criteria for type A, B or C motor patterns as outlined for rats, and also there is no figure 8A or 8B.

Response: The description of the motor patterns has been added in the text in the result “The characteristics of the fasting jejunal motility”, paragraph 2, highlight part. There is no figure 8A or 8B, and it has been corrected. I am sorry for the typo mistake.

3: It would be much clearer if Fig 4 shows what is actually being measured on the traces. It could be assumed from the figure that 1mA actually does have an effect on amplitude from the traces provided.

Response: It has been described in the “Experimental procedure” that the jejunal pressure was measured on the traces. The data obtained before and after treatment in the same group was compared statistically by a paired-test and there is no significant with 1 mA ($p=0.058$), but it is so close to have an effect, that is why 1mA seems have an effect on amplitude from the traces

4: The dose response profiles (Fig 4 and 5) could be combined into one graph, which would highlight differences between EA alone and in the presence of beta-adreno drugs.

Response: Thank you for the suggestion. I have combined it.

5: The rationale for using mice and rats in the same study is not explained, and differences between species are not discussed at all. As outlined in comment 2, are the characterisations that were made in rats applied to mouse motility patterns? Why is EA stopped at 4mA in mice but went to 9mA in rats?

Response: Thank you for the advice, the differences and characterisations have been added in the “Discussion” (Paragraph 1).

It has been suggested in the paper that the mean stimulation threshold for induction of firing in mice A δ - and C-fibers are 2 mA and 3 mA, and the knockout mice are too weak to sustain stimuli as strong as 9 mA, so EA stimuli stop at 4 mA in mice.

6: The findings in mice that TRPV1 “may serve as one of the underlying afferent pathways” should be discussed in more detail.

Response: the role of TRPV1 has been discussed in the Discussion (paragraph 4, 5)

7: Why were both TRPV1 and beta-adrenoreceptor pathway investigated as part of 1 study? Do the authors think they are linked, or do these studies constitute 2 quite separate experiments? If the former then more description needs to be provided. If the latter then experiments should be included which investigate whether the pathways are linked (e.g. effects of beta-adrenergic agonists / antagonists in TRPV1 k/o mice).

Response: more description has been discussed in the Discussion (paragraph 5)

8: There is no indication of N for fig. 3,4 5, 6 or 7 either on figure or in figure legend

Response: indication of N has been added.

Minor comments:

1: Page 1, second paragraph last sentence. “The mechanism of such effects has mainly been attributed to modulation of the autonomic nervous system”. This sentence requires a reference.

2: The abdominal region ST25 should be better defined, and more detail should be included regarding the rationale for using this placement.

Response: the references have been added(R16,17)