

September 24, 2014

Dear Editor,

Please find enclosed the edited manuscript Word format (file name: ESPS Manuscript 13306-review.docx).

Title: Effect of longer battery life on small bowel capsule endoscopy

Authors: George Ou, Neal Shahidi, Cherry Galorport, Oliver Takach, Terry Lee, Robert Enns

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO.: 13306

The manuscript has been improved according to the suggestions of the reviewers/editors:

- 1) Running title has been clarified and separated from the Title.
 - a. Title: Effect of longer battery life on small bowel capsule endoscopy
 - b. Running title: Capsule endoscopy battery life.
- 2) Completion rates (88.2% vs 93.2%) have been added in the abstract/results as per reviewer's suggestion.
- 3) Abstract conclusion has been revised to include "although it does not affect the rate of positive findings" as per reviewer's suggestion.
- 4) Core tip section has been added to manuscript.
 - a. This is the first study, to our knowledge, to specifically examine the effect of battery life on capsule endoscopy completion rate (i.e. complete visualization of the entire small bowel). Capsule endoscopies performed using SB2U had longer recording time and a corresponding trend toward higher completion rate than the older-generation SB2. As the two systems are identical in dimensions, there was no difference in the transit times. There was no difference in the rates of positive findings. A randomized controlled trial would be necessary to confirm the diagnostic advantage of longer battery life in capsule endoscopy.
- 5) Abbreviated names and manuscript title were added to page 4 of manuscript as per suggestion.
 - a. Effect of longer battery life on small bowel capsule endoscopy
G. Ou, N. Shahidi, C. Galorport, O. Takach, T. Lee, R. Enns
- 6) Reasons for disconnecting capsule endoscopy between 8h and 9h in 6 of 15 SB2U patients have been clarified in the discussion section.
 - a. 6 were disconnected between 8 h and 9 h either per patient preference or based on real-time identification of features suggestive of colonic mucosa by the research assistant/gastrointestinal therapeutics fellow; the remaining 9 were disconnected by the patients at home late at night after at least 10 hours of recording, usually before bed time or after the recorder has powered down due to loss of signal (i.e. battery outage).
- 7) Clarified whether completion rate may have been higher if the 6 patient's capsule endoscopies were not disconnected prematurely in the discussion section as per suggestion.
 - a. It is possible that a statistically significant difference in the completion rates between SB2U and SB2 may have been detected had the CEs not been disconnected prematurely. Assuming the 6 CEs would have been complete with extended recording times, the completion rate of SB2U could have been as high as 95.9% ($p=0.004$).

- 8) Addressed the point on optimal duration of capsule endoscopy in the discussion section as suggested.
 - a. The optimal recording duration remains to be determined, as premature disconnections confound this study's ability to draw such conclusion.

Thank you for reviewers' feedback and suggestions. We appreciate the opportunity to publish our manuscript in the *World Journal of Gastroenterology*.

Sincerely,

A handwritten signature in black ink, appearing to read 'G Ou', written in a cursive style.

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