Reviewer’s report

Title: i-Scan detection of minimal change esophagitis in dyspeptic patients with or without Gastroesophageal Reflux disease.

Version: 0 Date: 13 Sep 2015

Reviewer: Johannes Rey

Reviewer’s report:

To the authors

This is a single center cohort study at a tertiary center in Thailand. 144 patients were enrolled to defined the efficacy of iScan endoscopy (SE) in minimal change esophagitis (MCE). 144 patients were included. All patients had done a 24 hour ph monitoring and were divided into two groups (A, B) and in forty normal volunteers as control group. The positive predictive value of SE was reported to be 36.54%. The authors concluded that SE detected more MCE in GERD than in non-GERD patients, and in controls. However, for its publication, there are some important points to be clarified as indicated below:

Major Points

1. In the study protocol the authors reported that the distal esophagus was inspected by HD and followed by SE. How many MCL did the authors find during the inspection by HD? Could this have influence on the results?

2. Were the two endoscopists blinded for later inspection of the images to each other? Why did the authors not take the decision during the endoscopy?

3. The positive predictive value (ppv) for SE was reported to be 36.54%. This is in contrast to other reports how find a ppv of 100% for iScan (Rey JW et al., 2014), please discuss.

4. What is the accuracy of histology compared against virtual chromoendoscopy? Which should be used as the gold standard? Why did the authors did not prove their endoscopic finding by biopsy?

5. After many studies using different advanced endoscopic techniques to identify minimal changes in the GE junction, at this point I would like to see evidence that there is any clinical correlation between minimal changes and disease behavior or response to anti-reflux treatment. What is the cost versus benefit here?

6. It was concluded that SE detected more MCE in GERD than in non-GERD patients, and in controls. However, do the authors have any data to show from this study that identifying minimal changes altered patients' management?

Minor Points
1. Material and Methods: Exclusion criteria should be displayed in a table. Did the authors exclude patients with an axial hernia?

2. Female patients were included twice more. The authors should discuss this circumstance.

3. The first author of Reference 23. should be revised.

**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.

No

**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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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