# End to end response

Dear reviewers,

Thanks, for your time and effort during for reviewing process of manuscript titled "A comparative study between bowel ultrasound and magnetic resonance enterography among Egyptian inflammatory bowel disease patients".

Revision with all corrections are mentioned below as point-to-point response to the issues raised in the peer review report:

| Required revision | Response |
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| **Reviewer #1** | |
| 1. The total number of cases is small, including ulcerative colitis and Crohn's disease, and the number of cases of a single disease is less. Therefore, the conclusion is not necessarily reliable, because the number of cases is too small. It is suggested to increase the number of cases. | In agreement with this comment, in discussion section, it was mentioned that this study its limitation is relatively small number of the included patients. This can be explained that inflammatory bowel disease is uncommon disease in African countries, but with the current civilization and developing imaging devices and rising skillfulness of their examiners in our country, more cases are diagnosed. Bowel ultrasonography is new technique and more evolving studies will be held in our future work with larger sample size. |
| 2. It is suggested to increase the analysis of correlation between clinical and imaging indexes. There are some superficial conclusions at present. | Table 5 was created, results were added and discussed |
| **Reviewer #2** | |
| 1. Can the authors show the AUC and likelihood ratios for disease activity | Figure 3 was created, and results were discussed. |

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| index evaluated by ultrasonography in 26 patients with Crohn's disease compared to those by MRE and colonoscopy? | |
| 2. Please mention the healthcare cost saved by ultrasound imaging used in place of MRE or colonoscopy and the availability of MRE and endoscope among African countries in the Discussion section. | **Added in Discussion:** In Egypt, both MRE and colonoscopy are available tools with estimated total cost of $93 US dollars and $125 US dollars respectively. Bowel ultrasound costs only 18$ US dollars which is considered as a low-cost alternative and has prospects for widespread clinical use. |
| 3. Were the timing and the order of imaging studies of ultrasonography, MRE, and colonoscopy same in each patient? | Yes, the timing and the order of imaging studies of ultrasonography, MRE, and colonoscopy same in each patient |
| 4. The authors should add the description about the usefulness of ultrasonography for screening examination before performing MRE and colonoscopy as a follow-up imaging study in the conclusion. | **Added in Conclusion:** In comparison to MRE and colonoscopy, bowel ultrasound is a useful non-invasive and feasible bedside imaging tool for the detection of inflammation, complications, as screening tool and follow-up of IBD patients when performed by the attending physician. |
| **Reviewer #3** | |
| 1. Imaging diagnosis needs to mention whether the diagnosing doctor knows the diagnosis of the patient, otherwise there will be deviations | **Added in Patient and methods:** **Bowel Ultrasound** Bowel ultrasound assessment was reviewed blindly compared to MRE and colonoscopy. |
| 2. The sample size of this study is only 40, I think the sample size is relatively small, insufficient In order to explain all the problems, it is conditionally | In agreement with this comment, in discussion section, it was mentioned that this study its limitation is relatively small number of the included patients. |

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| recommended to increase the sample size, which also leads to whether the conclusions drawn by the author are reliable | This can be explained that inflammatory bowel disease is uncommon disease in African countries, but with the current civilization and developing imaging devices and rising skillfulness of their examiners in our country, more cases are diagnosed. Bowel ultrasonography is new technique and more evolving studies will be held in our future work with larger sample size. |
| 3. The discussion in the paper is simply to list the data of the results. I think more theory is needed to support it, otherwise It seems that the content of the article is very thin; | **Added to Discussion:**<br>MRE is a cross-sectional non-ionizing imaging technique that can be used for IBD diagnosis and extrainstestinal assessment of disease activity and followup of patients. But MRE is available at certain centers only and it takes long time during scanning with sedation in some cases such as children to avoid motion artefacts besides non-compliance to contrast intake and breath-hold technique [13].<br>Assessment of gastrointestinal tract in IBD patients by intestinal ultrasound was evolved nowadays due to development of ultrasound devices and rising skillfullness of their examiners as radiologists and gastroenterologists. Major parts of the small and large intestine can be easily examined by bowel ultrasound while proximal part of jejunum and the rectum may be difficult in their assessment due to overlying structures. Inspite of different |

| | advantages of bowel ultrasound as a rapid bedside, inexpensive and non-radiating tolerable test but its results are subjective to the examiner's expertise [14]. |
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| **Reviewer #4** | |
| 1. References 30,31,32 in the manuscript were not listed as WJG required. | The References are adjusted according to WJG requirements. |
| 2. It is better to show the picture of colonoscopy, since it was done. | Picture of colonoscopy was added to figure 1. |
| 3. For the picture of intestinal ultrasound, I suggested that the arrowed should be added to show the lesion regions | Arrows were added to show the lesion regions |
| 4. For bowel ultrasound and MRE, I think not abscess and fistula were observed. Please also display other type of lesions, such as Cobble stone, stenosis. | Other types of lesions were added to figure 1 |
| **Editorial Office's comments** | |
| 1. A total of 33 references are cited, without references published in the last 3 years. The authors need to update the references. | New total 36 references are cited including 4 new references were published in the last 3 years (References 1, 13, 14, 18) |
| 2. Language evaluation: language classification was grade C, all language issues in the manuscript to be resolved | Revised and resolved |
| 3. The authors need to fill out the STROBE checklist with page numbers. | STROBE checklist was filled out with page numbers. |
| 4. I found the authors did not provide the original figures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; | Original figures are provided and prepared to be editable by PowerPoint. |

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| 5. I found the authors did not write the "article highlight" section. Please write the "article highlights" section at the end of the main text. | "Article highlight" section was added at the end of the main text before the references section. |