# ANSWERING REVIEWERS

May 23, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 10650-review.doc).

**Title:** Stratification of characteristic CT findings improves diagnostic accuracy in patients with equivocal appendicitis

**Author:** Geon Park, Sang Chul Lee, Byung-Jo Choi, Say-June Kim

**Name of Journal:** *World Journal of Gastroenterology*

**ESPS Manuscript NO:** 10650

The manuscript has been improved according to the suggestions of reviewers:
1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

The original article is well presented with few flaws as follows-

One of the major premises of your research article is "appendiceal diameter of 7mm" as a cut off to support the diagnosis of appendicitis. You have now calculated the significance of a cutoff of 6mm in your article. However, most recent articles already use a criterion of 6 mm. To site a few references- 1. New CT Criterion for Acute Appendicitis: Maximum Depth of Intraluminal Appendiceal Fluid.May 2007, Volume 188, Number 5 http://www.ajronline.org/doi/full/10.2214/AJR.06.1180 2. CT in appendicitis. Diagnostic and interventional radiology. http://www.dirjournal.org/text.php3?id=154 3. The equivocal appendix at CT: prevalence in a control population. Emerg Radiol. Jan 2010; 17(1): 57–61. Please clarify.

**RESPONSE: Thank you for your good comment. As you mentioned, there have been many articles which included a criterion of 6 mm or of 7 mm in the definition of appendicitis. Of these, we used the criterion of 7mm mainly based on the trends in recent textbooks.**

**"In general, CT findings of appendicitis increase with the severity of the disease. Classic findings include a distended appendix more than 7 mm in diameter and circumferential wall thickening and enhancement, which may give the appearance of a halo or target."**

**Courtney M, Townsend J, Beauchamp BD, Mark Evers M, Mattox KL. Sabiston Textbook of surgery. The molecular basis of modern surgical practice. In: Maa J, Kirkwood KS. The appendix. 19th ed. (publication in 2012 – the most recent version) Philadelphia, Elsevier, 2012:1281.**

**"Sonographic findings consistent with acute appendicitis include an appendix of 7 mm or more in anteroposterior diameter, a thick-walled, noncompressible luminal structure seen in cross section, referred to as a target lesion, or the presence of an appendicolith."**

**Courtney M, Townsend J, Beauchamp BD, Mark Evers M, Mattox KL. Sabiston Textbook of surgery. The molecular basis of modern surgical practice. In: Maa J, Kirkwood KS. The appendix. 19th ed.**

**Philadelphia, Elsevier, 2012:1282.**

**"Dilated appendix ≥ 7 mm, abnormal enhancement of appendiceal wall, appendicolith, and focal bowel wall thickening of cecal tip may be present in patients with appendicitis. … When there is dilated appendix ≥ 7 mm, it shows 95% sensitivity and 95% specificity"**

**Federle M, Jeffrey B, Woodward P, Borhani A. Diagnostic Imaging abdomen. In: Appendicitis. 2nd ed. Canada, Amirsys, 2010; II-6:26-28**

**The diameter of the normal appendix ranges from 6 - 11 mm depending on intraluminal contents. Therefore, use of appendiceal diameter without secondary signs is unreliable. The criterion of 6 mm which we have found in this study is somewhat different from the criterion of 6 mm which used as a component of defining appendicitis in certain papers. The definition of appendicitis is a larger concept than our definition which favors appendicitis in equivocal CT features, for our concept is more specific. Therefore, we think that our criterion of 6mm is meaningful, though the criterion of 6mm is already familiar in the definition of appendicitis. Considering your opinion, we revised the sentence in the introduction which states the definition of appendicitis: from 7mm to "6 or 7 mm" for the correct information. Thank you.**

? Introduction ..1st para last 6th and 7th sentences - may be rewritten as - Though CT scan improves diagnostic accuracy, there still remain instances when CT has equivocal findings. Over time, several CT features have been described as pointers to the diagnosis of acute appendicitis. 2nd para – 1st line -therefore , we intend to …..

**RESPONSE: We made the change as suggested. Thank you.**

? Discussion – last page – please state- absence of intraluminal air rather than presence as an indicator for appendicitis

**RESPONSE: We made the change as suggested. Thank you.**

? Images- include an image showing increased wall to wall appendiceal diameter as well

**RESPONSE: We added a new figure (figure 2) showing increased wall to wall appendiceal diameter as well as you suggested. Thank you. (Figure numbers were adjusted)**

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

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