

## ANSWERING REVIEWERS



May 27, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 10679-edited.doc).

**Title:** Intestinal ascariasis at pediatric emergency room in a developed country

**Author:** Shuichiro Umetsu, Tsuyoshi Sogo, Kentaro Iwasawa, Takeo Kondo, Tomoyuki Tsunoda, Manari Oikawa-Kawamoto, Haruki Komatsu, Ayano Inui, Tomoo Fujisawa

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

**ESPS Manuscript NO:** 10679

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

(1) Reviewer #00071779

(Comments of Reviewer #00071779)

I think this needs to be re written without saying the patient had 'ileus'. How do you conclude that the symptoms were due to this single worm, which are often asymptomatic? if it is a because there was no other identifiable cause, and relief with treatment, say so.

(Answers to Reviewer #00071779)

We are grateful to the Reviewer #00071779 for the encouraging comments and recommendation of our manuscript, and also for useful comments that have helped us to improve our paper. As the Reviewer points out, the patient actually had no findings of ileus, except for bilious vomiting and abdominal pain. However, bilious vomiting at any age is an ominous sign that mandates immediate evaluation, and a sign of intestinal obstruction until proven otherwise (Parashette KR, et al. *Pediatr Rev* 2013;34:307-19; DOI: 10.1542/pir.34-7-307). We added this point in the discussion (page 9, lines 4 to 6). According to the Reviewer's comments, we rewrote "symptoms of ileus" to "symptoms suggesting ileus" or "bilious vomiting".

As the Reviewer points out, a single worm of *Ascaris* infection is usually asymptomatic unless a worm enter ampulla of Vater, biliary duct, or pancreatic duct. *Ascaris* infection might be detected by chance in our case, but any other cause of bilious vomiting and abdominal pain was not identified. Moreover, an ultrasound examination showed no space between the worm and intestinal wall at the emergency room, but a space between the worm and intestinal wall appeared after clinical symptoms disappeared. So we speculated that *Ascaris* might excrete neurotoxins which make the small bowel contract (spasticity) and cause bilious vomiting and abdominal pain, as we addressed in the text. After eradication with pyrantel pamoate, he has not presented any abdominal symptoms.

(2) Reviewer #00225277

(Comments of Reviewer #00225277)

This Case Report presents a patient with symptomatic ascariasis diagnosed in an area in which this infection is infrequent. The images and comments may be interesting for the readers because the paper includes some characteristic ultrasonographic images facilitating easy diagnosis. Although the paper is well built, the case report is long and needs some modifications, including shortening for consideration for publication. Specific comments The diagnosis of ileus seems to be, at least, doubtful in a patient admitted with some bilious vomits, without associated bowel dilation and which was solved spontaneously in less than 24 hours. Furthermore, a large number of worms has been associated with ileus in ascariasis and in the patient presented only one specimen was found in his bowel. Typical transabdominal ultrasonography images, such as those included in this case report, are considered highly suspicious for the diagnosis of this parasite (Ultrasound Q 2009;25:207-9). The statement related to the origin of the family should be omitted. Traveling to tropical areas is adequate, but the time elapsed between the onset of symptoms and the journey should be specified. Technical aspects on CE use should be omitted and the need for CT-scan and CE assessment should also be discussed, because they are not always necessary for diagnosis and treatment. Figures 2 and 3 are not necessary. In fact, only one CE image is adequate for demonstrating the worm in the small intestine. Figure 5 is inverted. Some Photoshop associated work would be convenient to solve this inconvenience.

(Answers to Reviewer #00225277)

We are grateful to the Reviewer #00225277 for the encouraging comments and recommendation of our manuscript, and also for useful comments that have helped us to improve our paper. As the Reviewer points out, the patient actually had no findings of ileus, except for bilious vomiting and abdominal pain. However, bilious vomiting at any age is an ominous sign that mandates immediate evaluation, and a sign of intestinal obstruction until proven otherwise (Parashette KR, et al. *Pediatr Rev* 2013;34:307-19; DOI: 10.1542/pir.34-7-307). We added this point in the discussion (page 9, lines 4 to 6). According to the Reviewer's comments, we rewrote "symtoms of ileus" to "symptoms suggesting ileus" or "bilious vomiting".

As the Reviewer points out, a single worm of *Ascaris* infection is usually asymptomatic unless a worm enter ampulla of Vater, biliary duct, or pancreatic duct. *Ascaris* infection might be detected by chance in our case, but any other cause of bilious vomiting and abdominal pain was not identified as long as we examined. Moreover, an ultrasound examination showed no space between the worm and intestinal wall at the emergency room, but a space between the worm and intestinal wall appeared after clinical symptoms disappeared. So we speculated that *Ascaris* might excrete neurotoxins which make the small bowel contract (spasticity) and cause bilious vomiting and abdominal pain, as we addressed in the text.

According to the Reviewer's comment, the statement related to the origin of the family was omitted, and the time elapsed between the onset of symptoms and the journey was added (page 5, lines 24 to 25).

According to the Reviewer's comment, technical aspects on CE use were omitted.

As the Reviewer points out, CE and CT scan are not always necessary for diagnosis and treatment of intestinal ascariasis. As we stated in the discussion, we believe that CE is useful in cases where a small number of worms or a single worm causes symptoms, and that CE can clarify the type and be used to estimate the number of infected parasites. We added the discussion on the necessity for CT scan and CE (page 8, lines 8 to 10).

According to the Reviewer's comment, Fig 2 was omitted. However, we think Figure 3, which showed a space between the intestinal wall and the tubular structure, and fluid could pass through this space, was necessary. As previously explained, Figure 3 may indicate the association between symptoms and a single worm infection of *Ascaris*.

As the Reviewer point out, only one CE image is adequate for demonstrating the worm in the

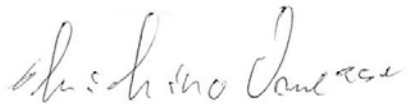
small intestine. Figure 4 changed to one image of CE.

As the Reviewer point out, we placed a inverted scale. We edited the image of Figure 5 to correct the direction of a scale.

3 References and typesetting were corrected

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

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Shuichiro Umetsu'.

Shuichiro UMETSU, MD

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