

3<sup>rd</sup> March 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format with all the changes suggested by the reviewers (file name: Pinto et al\_reviewed.doc).

**Title:** Ileal Intussusception Due to a Parasit Egg: a case report

**Author:** José Pedro Pinto, Agostinho Cordeiro, Ana Margarida Ferreira, Conceição Antunes, Patrícia Botelho, Ana João Rodrigues, Pedro Leão

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

**ESPS Manuscript NO:** 9551

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

1. [Format has been updated.](#)

2. [Response to reviewers comments](#)

Reviewer: The present manuscript is a short case report about a patient suffering from ileal intussusception. The patient was successfully treated by means of surgery. The analysis of the patient by ultrasonography and computer tomography as well as the surgery are evidently very good but nevertheless traditional. The only novel finding was that pathological anatomy revealed granulomatous inflammation “due to the presence of an egg parasite suggestive of *Schistosoma* species”.

The following points need to be addressed:

Major point: Although the finding that an egg parasite with features suggestive of *Schistosoma* may be novel and interesting more precise information is needed about this observation.

-How do we know that it is an egg parasite and how do we know that it belongs to *Schistosoma* species?

[Answer: The reviewer has certainly a point in asking this question. Indeed, not enough information was provided in the previous manuscript, therefore we have included extra information in this present version.](#)

Parasite eggs are oval or round reproductive bodies that can be seen on the bowel wall with granuloma formation. They usually have a shell with variable thickness and can be seen on HE preparations. There are three main Schistosomal species causing intestinal infection: *S. mansoni*, *S. japonicum* and *S. haematobium*. Their eggs have the following features:

- *S. mansoni*: 114-175 x 45-70 µm wide with a lateral spine.
- *S. japonicum*: 70-100 x 55-65 µm wide, a thin shell with a lateral and small spine.
- *S. haematobium*: 112-170 x 40-70 µm wide with a terminal and prominent spine.

However, there are no special stains or techniques to identify eggs so the diagnosis rests on morphological grounds. We found a 75 µm wide ovoid structure with a thin and basophilic shell with some distortion so we couldn't assert the species. "

Detailed information about egg morphology was provided in the manuscript- page 4.

-Moreover the authors should possibly discuss mechanisms whereby the parasite may induce ileal intussusception.

Answer: The reviewer has a point, thus we have address this in the presente manuscript:

Page 4-5: "We believe that there may be two mechanisms that can potentially explain the observed invagination. First, it may occur due to an inflammatory reaction to a foreign body, with the growth of granuloma, eventually leading to fibrosis, and to a process of retraction of the ileal wall and consequent invagination. On the other hand, this may be a simple physical process, i.e., the size of the granuloma may itself cause the invagination."

Minor points:

-Do the authors know if the patient has been visiting tropical countries?

No, the patient did not visit any tropical countries. A sentence referring this was inserted in the manuscript – page 4.

Introduction:

-Line 4: obstructing should read obstruction

It has been corrected to: "Even when an obstruction is diagnosed..."

-Line 5: "adults, unlike the pediatric age": adults are not an age!

It has been corrected to: "adults, unlike children..."

-Line 6: "begin" – what does it mean? Benign?

It has been corrected to: "There are several benign..."

Case report:

-Line 5: which biochemical parameters were measured?

Answer: This has been included: "Analytical parameters (WBC, HGB, PCR, metabolic panel and liver function), showed no significant alterations"

-Line 10: "with about 5 cm", "with" should be deleted.

It has been corrected to: "This allowed to identify an ileo-ileal intussusception, located approximately 30 cm from the ileocecal valve"

-Line 16. "a fibrile" -what is that?

It has been corrected to: "... hospitalization, apyretic, presenting...."

-Discussion:

The sentence starting with "The causes of intussusception are the most commonly reported..." should be rewritten

It has been corrected to: "The most common causes of intussusception are the diverticulum or tumors (benign or malignant)."

3. References and typesetting were corrected

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

Sincerely yours,

Pedro Leão MD, PhD

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