

## Format for ANSWERING REVIEWERS

March, 2014

Dear Editor,



Please find enclosed the edited manuscript in Word format (file name: 7671-review.doc).

**Title:** Imaging of small bowel Crohn's disease in paediatric patients

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**Name of Journal:** *World Journal of Radiology*

**ESPS Manuscript NO:** 7671

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

Reviewer 1

**1. Abstract:** We changed CT-PET to PET-CT

**2. Key words;** we included PET-CT instead of Crohn's disease

**3. Introduction page 3:**

Line 1; we defined childhood as below the age of 20

Line 12; we explained the shortening MRI and we corrected it on page 4, line 3 as well

Line 13; previous.

**4. Introduction page 5:** Page 6, lines 7-10: We added the following sentence "Infact, it can directly examine the mucosa demonstrating early active mucosal disease such as aphthous and linear ulcers, but it does not allow to evaluate the small bowel wall and the mesentery, except with indirect signs. Moreover, superimposed bowel loops or non palpable bowel loops deep in the pelvis can hide active disease or its complications <sup>[21]</sup>."

**5. Introduction page 6:** Line 14; <sup>[24]</sup> [Krille L](#), [Zeeb H](#), [Jahnen A](#), [Mildenberger P](#), [Seidenbusch M](#), [Schneider K](#), [Weisser G](#), [Hammer G](#), [Scholz P](#), [Blettner M](#). Computed tomographies and cancer risk in children: a literature overview of CT practices, risk estimations and an epidemiologic cohort study proposal. *Radiat Environ Biophys* 2012; 51(2):103-11. [PMID: 22310909 DOI: 10.1007/s00411-012-0405-1]

**6. Introduction page 8:** Page 9, line 7: We added the reference <sup>[34]</sup>.

**7. Introduction page 9:** Please give a reference for the first sentence regarding conditions that can cause false negative results. Page 9, line 9: We added the references <sup>[38,42]</sup>.

## 8. Introduction page 20:

Line 9; Please give some examples of advantages and disadvantages, respectively. We added examples

Line 13; Please define which patients, suspected CD/known CD. We defined the group.

9. Introduction page 21: The layout of the last paragraph has been changed. We changed the layout in accordance with the rest of the text.

Reviewer 2

1. PET-CT has no actual role in pediatric CD. We agree that there is not enough evidence to support the use of PET/CT in clinical practice. However, we thought correct to evaluate PET/CT among the imaging methods in pediatric patients for completeness. Infact there are preliminary literature data that suggest a clinical value of PET/CT with FDG not only in adults but also in pediatric patients especially for the early-therapy-follow up in non-complicated CD. [Shyn PB, Morteale KJ, Britz-Cunningham SH, Friedman S, Odze RD, Burakoff R, Goldberg JE, Erturk M, Silverman SG. Low-Dose 18F-FDG PET-CT Enterography: improving on CT Enterography assessment of patients with Crohn Disease. *J Nucl Med* 2010;51(12): 1841-1848 [PMID: 21078803 DOI: 10.2967/jnumed.110.080796]; Groshar D, Bernstine H, Stern D, Sosna J, Eligalashvili M, Gurbuz EG, Niv Y, Fraser G. PET/CT Enterography in Crohn Disease: Correlation of Disease Activity on CT Enterography with 18F-FDG Uptake. *J Nucl Med* 2010;51(7):1009-14 [PMID: 20554741 DOI: 10.2967/jnumed.109.073130]; Spier B, Perlman S, Jaskowiak C, Reichelderfer M. PET-CT in the evaluation of inflammatory bowel disease: studies in patients before and after treatment. *Mol Imaging Biol* 2010;12(1): 85-88 [PMID: 19430844 DOI: 10.1007/s11307-009-0232-1]; Lemberg DA, Issenman RM, Cawdron R, Green T, Mernagh J, Skehan SJ, Nahmias C, Jacobson K. Positron emission tomography in the investigation of pediatric inflammatory bowel disease. *Inflamm Bowel Dis* 2005;11(8):733–738 [PMID: 16043988]. Many others are cited in the ECCO-ESGAR guidelines 2013.

2. The role of enteroclysis in patients affected by CD is nowadays still accepted in adult patients only, whilst there is no clinical or scientific evidence about the diagnostic efficacy of these techniques in pediatric patients. Our assertion is supported by <sup>[18]</sup> Kurugoglu S, Korman U, Adaletli I, Selcuk D Enteroclysis in older children and teenagers. *Pediatr Radiol* 2007; 37: 457–466 [PMID: 17377787]

3. The analysis of diagnostic issues related to MRI seems rather related to adults than pediatric patients. Our experience is based on children, the most of the articles we used to support our findings are related to pediatric patients.

4. Pictures are too many. We felt it was important to show many and clear images to support the text.

5. Abstract: The paragraph on MR imaging is mostly focused to describe findings of adult rather than pediatric CD of the small bowel. Our experience is based on children, the most of the articles we used to support our findings are related to pediatric patients.
6. Supply a reference for the statement at the 3rd page: "Moreover, the involvement of the jejunum alone is uncommon and it is more difficult to investigate because of its tendency to stay non distended" (ref). Page 4, line 1-2: We added the reference as <sup>[3]</sup> [Torkzad MR, Ullberg U, Nyström N, Blomqvist L, Hellström P, Fagerberg UL](#). Manifestations of small bowel disease in pediatric Crohn's disease on magnetic resonance enterography. *Inflamm Bowel Dis* 2012; 18(3):520-8 [PMID: 21538711 DOI: 10.1002/ibd.2172]
7. References for the statement on the 3rd page: "The clinical importance of the SB CD phenotype is the impact that a diffuse SB disease is expected to have on a child's growth and development. Moreover, patients with SB CD are more likely to experience complications, including intestinal obstruction and less commonly fistulization". Page 4, lines 3-6: The references were already recent, we added another one anyway.
8. More recent references for the statement regarding to radiation exposure in pediatric at page 4th "...concerns about the proven increased risk of high radiation exposure in pediatric patients mandates the use of alternative techniques when possible". Page 4, lines 18-19: We added another reference
9. The authors did not cite the newest ECCO-ESGAR guidelines on diagnostic management of CD published on J Crohn's and Colitis 2013. Page 4: We corrected the oversight.
10. Provide references for the statement : "SBFT can detect the earliest mucosal changes such as aphthous ulceration and allows real-time assessment of bowel motility, helping to distinguish between strictures and mural thickening and transit time, allowing a functional evaluation of the pathological segment" Page 5, lines 17-19: We added the references.
11. References 20- 25 years ago are outdated. Page 5, line 11: We canceled the two given references and provided a more recent one : <sup>[19]</sup> [Panes J, Bouhnik Y, Reinisch W, Stoker J, Taylor SA, Baumgart DC](#), et al. Imaging techniques for assessment of inflammatory bowel disease: joint ECCO and ESGAR evidence-based consensus guidelines. *J Crohns Colitis* 2013;7(7):556-85 [PMID: 23583097 DOI: 10.1016]

3 References and typesetting were corrected

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

Sincerely yours,

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