

**Title: Improvement of Distension and Mural Visualization of  
Bowel Loops Using Neutral Oral Contrasts in Abdominal CT**

**Author:** Jahanbakhsh Hashemi, Mina Taghavi, Yasmin Davoud, Masoud Pezeshkirad, Amien Mahajeri Moghadam

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

**ESPS Manuscript NO:** 14762

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

Reviewer number1:

1) Poor English is the eminent feature of this manuscript

**Response:** We thank the respected referee for this comment. In compliance with the respected reviewer the manuscript was revised grammatically by two native English speakers and we revised completely.

2) The introduction is too lengthy for a scientific paper:

**Response:** We have trimmed the introduction.

3) Aim of work listed in the abstract is largely non-coherent with that of the manuscript:

**Response:** It has been revised and highlighted in the article.

4) It is not clear the number of your patient's population, their sex stratification ?

**Response:** The demographic data was added to the material and method section.

5) What do you mean by 1% DI solution ?

**Response:** 2% DI solution stands for 2% diluted iodine solution. It was added to the text as well.

6) In results section ? What do you mean by image quality satisfaction? Which parameters were used to judge?

**Response:** By image satisfaction we meant the scaling method we used to grade the image quality.

The grading system we used was as follows:

"A five-point scale (0=worst, 4=best) was used to determine the quality of images as well as the intestinal wall delineation. The latter was classified from indistinguishable (0) to completely visible (4). Overall image quality was varied from unspecified (0) to perfect (4) according to Likert Scale(14)."

This has been mentioned in the Data analysis section.

7) Where are the summary results of your statistical works (I mean the appropriate statistical values in right place, not just in tables?

**Response:** We are really grateful for this brilliant comment. In compliance with the respected reviewer we added the following statement to the result section:

"The mean diameter after neutral contrast material was significantly higher than that of positive contrast agent for duodenum (first radiologist: 9.1 vs. 13.3; second radiologist 9.08 vs. 12.88) and ileum (first radiologist: 15.6 vs. 18.1; second radiologist 15.4 vs. 18.1). However, the difference was not statistically significant for jejunum (first radiologist: 15.3 vs. 14.7; second radiologist 15.3 vs. 14.6."

Reviewer number 2:

1) Abstract: Well written. It gives a full description of the study design and the results.

2) Introduction: The introduction is informative and very well written.

3) Patient selection process" should be used before the first paragraph:

Response: We added the Patient selection process and it had been highlighted

4) The first paragraph in material and method should be re-written to describe in orderly fashion:

Response: In compliance with the respected referee we totally revised and rewrote the first paragraph

5) Revising "they were observed closely by a trained nurse for the occurring":

Response: It was revised accordingly.

6) " ... which was prepared using 60 gr sorbitol sugar mixed in 1500 ml of water. For sorbitol sugar, we used 12 sachet of sorbitol, each containing 6 gr of sorbitol". I do not understand it ;  $12 \times 6 \text{ gr} = 72 \text{ gr}$  not 60

Response: For sorbitol sugar, we used 12 sachet of sorbitol, each containing 6 gr of sorbitol:

The sentence has been revised.

7) Revising sentence" A 16-detector row CT scanner was used for all scans and modifications in the general abdominal scan protocol were minimal:

Response: We are really grateful for this comment and in compliance with it we revised the first few sentences in the imaging protocol completely in to the following statement:

"All MDCT examinations were conducted on the same equipment, a 16-detector unit (Neusoft Inc., China). The procedure lasted 30-35 minutes and was conducted using the same technique for all patients. Patients lay in the supine position on the CT table and modifications in the general abdominal scan protocol were minimal"

8) "After obtaining coronal images". Do you mean scan projection radiographs (scanograms or topograms

Response: By the statement: "After obtaining coronal images: we meant topograms. It was added to the text.

9) Is this the protocol for positive contrast agent only?

Response: In compliance with the respected referee, the protocol for each contrast agent group was explained in the text

10)"once all 200 scans" It is not 200 scans, it is 200 examinations

Response: We totally agree with the reviewer's comment. Our English reviewer decided that our statement is not necessary at the beginning of the sentence and it was deleted. We revised the sentence accordingly:

"Two radiologists interpreted and re-reviewed the data independently."

11) Visible [4] and perfect [4]. The [4] should be written as (4).

Response: Visible [4] and perfect [4] has been written to visible (4) and perfect (4)

12) Delete "in the patients":

Response: It has been deleted

13) Break the single paragraph in 2 smaller:

Response: It has been broken.

14) In table 1 the quantitative score is given not the "diameter"

Response: In table 1 the quantitative diameter was changed to quantitative score

15) Table 1; since the first group is the neutral is better to report results first of the neutral or switch the groups' numbering

Response: In table 1: the results for neutral agent mentioned first

16) In table 2:" values in % are redundant ":

Response: The table was revised accordingly

17) Our study demonstrated that small bowel wall visualization is significantly improved by the usage of neutral contrast agent (sorbitol solution) especially for jejunum and ileum". Except if I have missed something here, Table 1 p values are statistically significant for Duodenum ( $p < 0.1$  for radiologist 1 only), not statistical significant for ileum (however, they suggest that neutral may work better but the null hypothesis -both contrast agents are equivalent- is not rejected) and certainly for Jejunum both contrast agents seem equivalent

Response: We totally agree with the respected reviewer. This was mistakenly typed. Interpretation of statistics given in Table 1 was corrected in the text

18) References and typesetting were corrected

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

Sincerely yours,

Yasmin Davoudi, MD, Assistant Professor,  
Radiology Department, School of Medicine,  
Mashhad University of medical sciences, 91788,  
Mashhad, Khorasane Razavi, Iran.  
E-mail: davoudiy@mums.ac.ir  
Telephone: +98-91-53145523  
Fax: +98-51-38525004