

## **Response to Reviewer 1**

**Reviewer #1:** The submission needs to be edited for correction of grammatical errors.

**Answer:** Thank you for your suggestions. Regarding the English polishing process, we have sent our edited manuscript to English editing service,

Research Affairs, Faculty of Medicine, Chulalongkorn University, before submitting this final manuscript to the editor and reviewers already.

## **Response to Reviewer 2**

**Reviewer #2:** 1. How did mixing of cases take place, when it was decided to retrospectively review case records? 2. Was history / presentation examined to look for inconsolable cry / drawing up legs ? 3. What signs on the abdominal xray were there to differentiate the Intussusception group? 4. Time of onset / presentation, shock / apathy are additional features not listed 5. What do the authors conclude? Conclusion is not available in the main manuscript, although the abstract includes a short conclusion.

6. Abd radiography, in addition to increasing the risk of radiation exposure, is well known to be a poor diagnostic tool.

**Comment:** 1. How did mixing of cases take place, when it was decided to retrospectively review case records?

**Answer:** Thank you for your comments. Our study is a retrospective and prospective cohort study that selected participants from January 2006 to June 2018 who suspected intussusception and underwent AR and USG abdomen as a part of working up. However, 51 of 151 participants was finally diagnosed other diseases or conditions instead of intussusception and that was the reason why we had mixing of cases in this study (page 5, study population).

**Comment:** 2. Was history / presentation examined to look for inconsolable cry / drawing up legs?

**Answer:** Thank you very much for your comment. This study is mainly the retrospective data from our pediatric resident recording. If the doctors recorded just crying, we did not count it as inconsolable cry. However, if the doctors specifically mentioned

crying that had not happened before by guardians' report or history of inconsolable crying by guardians, we would record this symptom as inconsolable crying in our case record form. In older children who could point the finger to tummy or could tell that they had abdominal pain, we would record this symptom as abdominal pain in our case record form.

**Comment:** 3. What signs on the abdominal x-ray were there to differentiate the Intussusception group?

**Answer:** Thank you very much indeed for this very good suggestion. The positive finding for intussusception that our radiologist looked for composed 1) an abnormal soft tissue mass at right sided abdomen (figure 1A), or 2) small amount of stool or air in the transverse colon (figure 1B), or 3) intestinal obstruction; a localized bowel dilatation with paucity/absent distal bowel gas (figure 1C) or multiple air-fluid levels in the same bowel loop on additional upright position. We also added more picture of these findings in our manuscript for the readers as well. (figure 1)

**Comment:** 4. Time of onset / presentation, shock / apathy are additional features not listed

**Answer:** Thank you very much for your helpful suggestion. Because of the retrospective study design, we could not record the exact time of the symptoms of our participants in this study. We mentioned this limitation in the discussion part already (page 10, 11).

**Comment:** 5. What do the authors conclude? Conclusion is not available in the main manuscript, although the abstract includes a short conclusion.

**Answer:** Thank you very much indeed for your very good suggestion. We added the conclusion part in this manuscript already (page 12).

**Comment:** 6. Abd radiography, in addition to increasing the risk of radiation exposure, is well known to be a poor diagnostic tool.

**Answer:** Thank you very much for your comment. Abdominal radiography is considered a poor diagnostic tool to diagnose intussusception. However, it is operator independent, general doctor in rural area can use this tool in suspected cases of

intussusception. Positive abdominal radiography could help the doctor to decide referring case to secondary or tertiary hospitals for the specific management in time, making the more favorable outcome. Moreover, we also depict the symptoms that the doctor should be aware of intussusception into the PIS. We hope that only dedicate history, physical examination and eagle eye on AR, will help our young doctors to have confidence to initial diagnose intussusception and proper management.