# **LETTERS TO THE EDITOR**

**Open Access** 

# Re: Profile and outcome of pediatric intussusception: a 5-year experience in a tertiary care center

Ewelina Wojciechowska<sup>\*</sup> and Hanna Garnier

To the Editor,

We read with great interest the article: "Profile and outcome of pediatric intussusception: a 5-year experience in a tertiary care center" published in one of the last issues of the *Annals of Pediatric Surgery* [1]. It is noteworthy that Madan et al. concentrate on the most common cause of bowel obstruction in infants and toddlers, thereby constituting after appendicitis, one of the top common causes of an acute abdomen in children [2]. Authors rightly highlighted that intussusception has considerable medical importance particularly for recognizing idiopathic cases which concern mainly patients under the age of 3 (to 90% of cases).

Researchers noted that this disease is more frequently seen in well-nourished patients, whereas some papers suggest that there is no correlation between BMI and intussusception [3]. We congratulate the high efficiency in the pneumatic reduction under fluoroscopy (FGAR) which was reported to be 91%. However, it should be underlined that the ultrasound-guided hydrostatic reduction (UGHR) has been proven to be superior to FGAR. Liu et. al. [4] in his multicenter and prospective study concludes that compared with FGAR, UGHR has more advantages (ex. completely free of ionizing radiation) and that its success rate is significantly higher. Moreover, Xie et al. [5] found that hydrostatic reduction should be treatment of choice in appropriate patients with intussusception, due to its higher efficiency (96.77% vs. 83.87%).

The graphic representation used in respect of results is very understandable for the reader; however, we have some comments. Individual elements of the graph should closely match the data. Figure 1 represents the number of patients sorted by age, although patients that are 3 and 6 years old are included in two age groups simultaneously—3-year-old patients in groups 0–3 and 3–6, as well as 6-year-old patients in groups 3–6 and 6–12. We would like to suggest dividing the above patients for accuracy reasons. Furthermore, we noticed incompatibility in Figure 4. According to quantitative analysis, 9% of patients had unsuccessful pneumatic reduction which corresponds to 8% in the graph (value 0).

In conclusion, we strongly believe that this report is placed among the important articles on this topic. We also hope that these observations will be beneficial and can be helpful for the equally valuable future articles.

#### Abbreviations

FGAR: Pneumatic reduction under fluoroscopy; UGHR: Ultrasound-guided hydrostatic reduction.

#### Acknowledgements

Not applicable

# Authors' contributions

EW, HG - Concept, design, resource, materials, literature search, writing. HG - critical reviews. The authors read and approved the final manuscript.

# Funding

Not applicable.

Department of Surgery and Urology for Children and Adolescents, Medical University of Gdansk, Gdansk, Poland



© The Author(s) 2022. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

<sup>\*</sup>Correspondence: ewojciechowska@gumed.edu.pl

#### Availability of data and materials

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

### Declarations

**Ethics approval and consent to participate** Not applicable.

#### **Consent for publication**

Not applicable.

# Competing interests

The authors declare that they have no competing interests.

Received: 13 October 2021 Accepted: 11 February 2022 Published online: 12 July 2022

#### References

- Madan AJ, Haider F, Alhindi S. Profile and outcome of pediatric intussusception: a 5-year experience in a tertiary care center. Ann Pediatr Surg. 2021;17:31. https://doi.org/10.1186/s43159-021-00097-5.
- Charles T, Penninga L, Reurings JC, Berry MC. Intussusception in children: a clinical review. Acta Chir Belg. 2015;115(5):327–33. https://doi.org/10. 1080/00015458.2015.11681124 PMID: 26559998.
- Karabulut B, Erdoğan D, Bostancı I, Onde U, Karakoç AE. Are interleukin-6, body mass index and atopy crucial in infantile intussusception? Indian J Pediatr. 2010;77(11):1257–60. https://doi.org/10.1007/s12098-010-0218-7 Epub 2010 Sep 30. PMID: 20882433.
- Liu ST, Tang XB, Li H, Chen D, Lei J, Bai YZ. Ultrasound-guided hydrostatic reduction versus fluoroscopy-guided air reduction for pediatric intussusception: a multi-center, prospective, cohort study. World J Emerg Surg. 2021;16(1):3. https://doi.org/10.1186/s13017-020-00346-9 PMID: 33436001; PMCID: PMC7805056.
- Xie X, Wu Y, Wang Q, Zhao Y, Chen G, Xiang B. A randomized trial of pneumatic reduction versus hydrostatic reduction for intussusception in pediatric patients. J Pediatr Surg. 2018;53(8):1464–8. https://doi.org/10. 1016/j.jpedsurg.2017.08.005 Epub 2017 Aug 8. PMID: 28827051.

# **Publisher's Note**

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

# Submit your manuscript to a SpringerOpen<sup>®</sup> journal and benefit from:

- Convenient online submission
- ► Rigorous peer review
- Open access: articles freely available online
- ► High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at > springeropen.com