



Correspondence

Comment on “Association between early life laxative exposure and risk of allergic diseases”



We read with great interest, the article by Lin et al¹ showing association between early life laxative exposure and risk of allergic diseases, which gives clinicians an opportunity to evaluate the benefits and harm of laxative exposure in the early life. We appreciate the authors who analyzed data from Taiwan's National Health Insurance Research Database and conducted a great cohort study. Nevertheless, we highlight some key points.

First, recent research presents that gut dysbiosis may lead to dysregulation of inflammation and defects in the intestinal epithelial barriers, resulting in increased intestinal permeability, which is called as leaky gut, permitting the penetration of toxins and allergen into the systemic circulation, eventually contributing to allergic diseases.² We found that allergic diseases^{3,4} might be connected to constipation. Moreover, the severity of constipation is associated with an increased risk of asthma.⁵ Laxatives have been considered the effective treatment for moderate-to-severe constipation. Hence, when it came to the influence of laxatives on the risk of developing allergic diseases, it might be confounded by the severity of constipation. Therefore, we suggest that the authors should match or adjust the severity of constipation in the propensity score and consider sensitivity tests to reduce these confounding biases in the study.

Second, although the authors analyzed the influences of medications, such as laxatives and antibiotics, there is only dichotomy as yes or no (at least 7 days during the 9 months before childbirth). We suggest the authors to estimate the treatment duration by cumulative defined daily dose to analyze different durations and different influences, to investigate whether there is sort of dose-dependent effect in this observational study to reveal their robust findings.

On the basis of the abovementioned reasons, we recommend that database validation and residual confounders should be considered in this research to improve validity.

Yen-Chu Huang, MD^{*,†}
Meng-Che Wu, MD, PhD^{*,†,‡}
James Cheng-Chung Wei, MD, PhD^{§,||,¶,1}

^{*} Division of Pediatric Gastroenterology
Children's Medical Center
Taichung Veterans General Hospital
Taichung, Taiwan

[†] College of Medicine
National Chung Hsing University
Taichung, Taiwan

[‡] School of Medicine
Chung Shan Medical University
Taichung, Taiwan

[§] Division of Allergy, Immunology and Rheumatology
Chung Shan Medical University Hospital
Taichung, Taiwan

^{||} Institute of Medicine
College of Medicine
Chung Shan Medical University
Taichung, Taiwan

[¶] Graduate Institute of Integrated Medicine
China Medical University
Taichung, Taiwan
jccwei@gmail.com

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