Turkish Archives of Pediatrics

LETTER TO THE EDITOR
DOI: 10.5152/TurkArchPediatr.2022.22010

Utility of Neutrophil Gelatinase-Associated Lipocalin and Emerging Lung Injury: Correspondence

Rujittika Mungmunpuntipantip[1], Viroj Wiwanitkit[2]

[1]Private Academic Contulant, Bangkok, Thailand
[2]Department of Community Medicine, Dr DY Patil University, Pune, India

We would like to share ideas on the publication "The Utility of Neutrophil Gelatinase-Associated Lipocalin in the Detection of Emerging Lung Injury due to Mechanical Ventilation in Children: A Preliminary Study."[1] Kocaoğlu[1] concluded that "neutrophil gelatinase-associated lipocalin may be a useful biomarker for emerging lung injuries due to mechanical ventilation in critically ill children and deserves to be investigated." We agree that the neutrophil gelatinase-associated lipocalin might be a useful biomarker. However, as Kocaoğlu already noted, further studies are required. We should be concerned with the possible effect of other conditions that might alter neutrophil gelatinase-associated lipocalin. For example, in an endemic area of hemoglobinopathy, including some areas of Turkey, the neutrophil gelatinase-associated lipocalin is altered in pediatric cases with underlying thalassemia.[2]

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – R.M., V.W.; Design – R.M., V.W.; Supervision – V.W.; Resources – R.M., V.W.; Materials – R.M., V.W.; Data Collection and/or Processing – R.M.; Analysis and/or Interpretation – R.M., V.W.; Literature Search – R.M.; Writing Manuscript – R.M.; Critical Review – R.M., V.W.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

REFERENCES

1. Kocaoğlu Ç. The utility of neutrophil gelatinase-associated lipocalin in the detection of emerging lung injury due to mechanical ventilation in children: A preliminary study. *Turk Arch Pediatr.* 2022;57(1):32-37. [CrossRef]
2. Cetinkaya PU, Azik FM, Karakus V, Huddam B, Yilmaz N. Beta2-microglobulin, neutrophil gelatinase-associated lipocalin, and endocan values in evaluating renal functions in patients with beta-thalassemia major. *Hemoglobin.* 2020;44(3):147-152. [CrossRef]

Corresponding author:
Rujittika Mungmunpuntipantip
✉rujittika@gmail.com
Received: January 12, 2022
Accepted: January 19, 2022

Cite this article as: Mungmunpuntipantip R, Wiwanitkit V. Utility of neutrophil gelatinase-associated lipocalin and emerging lung injury: Correspondence. *Turk Arch Pediatr.* 2022;57(2):249-250.

Response

Çelebi Kocaoğlu

Pediatric Intensive Care Unit, University of Health Sciences, Konya City Hospital, Konya, Turkey

We would like to thank the esteemed authors for their interest and criticism of our article. Our study was not a sensitivity specificity study.[1] However, despite of NGAL is a sensitive biomarker, it can be speculated that its specificity is low due to increasing serum and urine NGAL levels in many cases such as liver insufficiency, severe chronic pulmonary disease, renal disease, cardiac pathologies, methabolic diseases. In the literature, it has been reported that there is an increase in NGAL level in many hemoglobinopathy, especially in thalassemia.[2-5] There was no participian with hemoglobinopathy among our patients. However, we also agree with Çetinkaya et al.[2] Hemoglobinopathies should be considered in the inclusion or exclusion criteria of the study.

REFERENCES

1. Kocaoğlu Ç. The utility of neutrophil gelatinase-associated lipocalin in the detection of emerging lung injury due to mechanical ventilation in children: A preliminary study. *Turk Arch Pediatr*. 2022;57(1):32-37.
2. Cetinkaya PU, Azik FM, Karakus V, Huddam B, Yilmaz N. β2-Microglobulin, Neutrophil Gelatinase-Associated Lipocalin, and Endocan Values in Evaluating Renal Functions in Patients with β-Thalassemia Major. *Hemoglobin*. 2020;44(3):147-152.
3. Karaman K, Şahin S, Geylan H, Yaşar AŞ, Çetin M, Kömüroğlu AU, Öner AF. Evaluation of Renal Function Disorder With Urinary Neutrophil Gelatinase-associated Lipocalin Level in Patients With β-Thalassemia Major. *J Pediatr Hematol Oncol*. 2019;41(7):507-510.
4. Roudkenar MH, Halabian R, Oodi A, Roushandeh AM, Yaghmai P, Najar MR, Amirizadeh N, Shokrgozar MA. Upregulation of neutrophil gelatinase-associated lipocalin, NGAL/Lcn2, in beta-thalassemia patients. *Arch Med Res*. 2008;39(4):402-407.
5. Marouf R, Adekile AD, El-Muzaini H, Abdulla R, Mojiminiyi OA. Neutrophil gelatinase-associated lipocalin as a biomarker of nephropathy in sickle cell disease. *Ann Hematol*. 2021;100(6):1401-1409.