

Comment on “Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratios of overweight children and adolescents”

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Dear Editor,

We read an article entitled “Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratios of overweight children and adolescents” by Yazaki et al.¹ In this cross-sectional study, the authors compared the differences in neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) between groups of obesity, overweight, and eutrophic children and adolescents and further verified whether these parameters were related to age, ultrasensitive C-reactive protein (us-CRP), body mass index, and waist-to-height ratio. The results of the study showed that there was no significant statistical difference between the three groups in NLR ($p=0.30$) and PLR ($p=0.68$) and that PLR, rather than NLR, was independently associated with overweight. After carefully reading this study, we think that there are some issues that need clarification.

First, as described in Table 2, the purpose of this study¹ was to compare the differences in laboratory variables (e.g., leukocytes, neutrophils, NLR, and PLR) among three groups (i.e., obesity, overweight, and eutrophic groups). However, it is unknown whether there are differences in age and sex among the three groups. It is insufficient to provide the age and gender of the total study population because it cannot reflect the differences in age and gender among the three groups. A possible hypothesis is that there are statistically significant differences in age and gender among the three groups, leading to incomparability between

groups. Therefore, it is highly recommended to provide differences in age and gender among the three groups.

Second, the statistical method of this study¹ is not entirely inappropriate. Statistically, the Kruskal-Wallis test² should be used to compare variables that are not normally distributed among the three groups. As described in this study¹, the purpose of Table 2 was to compare the differences in laboratory variables among the three groups. Therefore, the Kruskal-Wallis test, rather than the Mann-Whitney test, should be used to analyze the differences in laboratory variables among the three groups.

Third, as described in this study, “Regarding nutritional status, 106 (62.4%) were eutrophic and 64 (37.6%) were overweight (overweight, obesity, and severe obesity),” it is known that overweight involves three different groups (i.e., overweight, obesity, and severe obesity). It is well known that severe obesity is a special and vulnerable population^{3,4}. From our perspective, it may be more interesting to compare the differences in laboratory variables between this group (severe obesity) and the other three groups (obesity, overweight, and eutrophic groups) in Table 2.

AUTHORS' CONTRIBUTIONS

HH: Conceptualization, Investigation, Project administration, Writing – original draft. **YZ:** Conceptualization, Supervision, Validation, Writing – review & editing.

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