

Comment on “Nutritional aspects and cardiovascular risk in systemic lupus erythematosus”

Roujun Pan¹ , Zhipeng Li¹ , Lianping He^{1*} 

Dear Editor,

We were very happy to read the valuable article written by Calza et al.¹ This article discovered the relationship between systemic lupus erythematosus (SLE), cardiovascular disease (CVD), and metabolic syndrome (MS). Patients suffering from SLE have a significantly increased risk of CVD and MS. Although the author's findings have been proven by good practice and supported by data, we believe that there are still some problems that can be further explored.

First of all, in the method part of the summary, we suggest supplementing the statistical methods used in this article, such as the use of Pearson's chi-square test to perform probability analysis on the categorical data of unpaired samples.

In addition, it is well known that the prevalence of SLE is significantly higher in women than in men. The primary factor for this is suspected to be the difference in sex hormone levels. SLE patients are usually accompanied by fluctuations in sex hormone levels, and sex hormone levels also have a greater impact on body weight². For example, Leeners et al.³ pointed out that estrogen plays a leading role in the causes and consequences of female obesity. At the same time, estrogen also has a myocardial protective effect, which can reduce the risk of CVD to a certain extent. The sample of women in this study has a large age span, including both 25–49-year-old women of normal childbearing age and menopausal women more than

50 years old. The levels of female sex hormones are not the same in different periods, especially after menopause, estrogen levels will be significantly reduced. We propose to stratify the samples by age to investigate the risk of SLE with MS and CVD at different ages.

Finally, we believe that the representativeness of the samples in this study is relatively weak. The reason is that the Systemic Lupus International Collaborating Clinics Damage Index (SLICC) and Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) scores are low, and it is suggested that SLE has a relatively mild disease course and relatively weak influence on the host function and metabolism. Therefore, we recommend increasing the SLICC and SLEDAI scores as much as possible. In addition, the sample content in this experiment is not well-balanced, and the proportion of women is as high as 90%. This is unfavorable for the gender-controlled analysis of the experimental results. We suggest expanding the sample content as much as possible to provide a more reliable reference for the experiment.

AUTHORS' CONTRIBUTIONS

RP: Formal Analysis, Writing – original draft. **ZL:** Writing – review & editing. **LH:** Conceptualization, Writing – review & editing.

REFERENCES

1. Calza JI, Muza LS, Gasparin AA, Xavier RM, Monticielo OA. Nutritional aspects and cardiovascular risk in systemic lupus erythematosus. *Rev Assoc Med Bras* (1992). 2021;67(5):656-60. <https://doi.org/10.1590/1806-9282.20200817>
2. Shi H, Clegg DJ. Sex differences in the regulation of body weight. *Physiol Behav*. 2009;97(2):199-204. <https://doi.org/10.1016/j.physbeh.2009.02.017>
3. Leeners B, Geary N, Tobler PN, Asarian L. Ovarian hormones and obesity. *Hum Reprod Update*. 2017;23(3):300-21. <https://doi.org/10.1093/humupd/dmw045>

¹Taizhou University, School of Medicine – Jiaojiang, China.

*Corresponding author: lianpinghe@tzc.edu.cn

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none.

Received on October 13, 2021. Accepted on October 29, 2021.

