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LETTER

Addressing Limitations and Enhancing Understanding: Feedback on 'Major Infections of Newly Diagnosed Childhood-Onset Systemic Lupus Erythematosus' [Letter]

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Dear editor

I thoroughly reviewed Bao et al's article[1] on "Major Infections of Childhood-Onset Systemic Lupus Erythematosus" in the Journal of Multidisciplinary Healthcare. This retrospective study analyzed 98 cSLE patients to identify risk factors and develop a prediction model for major infections within 6 months of diagnosis. High disease activity, lupus nephritis, serositis, and lymphopenia increased the infection risk. The CALL score (Children with high disease activity, lymphopenia, and LN) effectively identifies high-risk patients. Early identification using the CALL score aids in managing major infections in cSLE patients.[1]

The authors acknowledge the retrospective nature of the study, the small number of participants, incomplete or delayed vaccination status, and identifying infections using diagnosis codes as limitations. However, there are additional limitations that should be addressed.[1]

The study primarily focused on specific risk factors for major infections in children with systemic lupus erythematosus (cSLE). However, it did not thoroughly examine the impact of underlying comorbidities on the likelihood of contracting an infection. For instance, Bao et al identified pneumonia as the most common major infection in cSLE patients but did not investigate whether the presence of comorbidities contributed to its development. Various conditions, such as stroke, head injury, dementia, lung diseases (eg, asthma, bronchiectasis, cystic fibrosis, or COPD), and living in crowded places, are known to increase the risk of pneumonia.[2] Additionally, certain Salmonella infections (groups B, C, or D) were identified as risk factors for bacteremia, the second most reported major infection.[3] By not accounting for comorbidities, Bao et al missed an opportunity to assess their impact on these major infections alongside cSLE.To determine whether these infections were solely caused by cSLE itself, it is crucial to include patients without any comorbidities at the start of the study.

Another limitation of the study is the absence of a control group without major infection events. Without a control group, it becomes more challenging to attribute the observed major infections solely to cSLE or to identify potential confounding factors.[4] Including a control group would have provided a basis for comparison and allowed for a better understanding of the specific risk factors associated with major infections in children with SLE.

Furthermore, it is important to note that this research was conducted at a single center, which introduces biases and limits the diversity of the patient population. Therefore, the findings may not be directly applicable to different populations or healthcare settings. To ensure broader applicability and generalizability of the predictors of major infections in individuals with cSLE, it is crucial to validate the results in diverse populations, particularly as more cases of childhood-onset lupus are reported in different racial and ethnic backgrounds.[5]

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Multi-center studies involving larger and more diverse cohorts of patients would provide stronger evidence and enhance the external validity of the results, enabling healthcare professionals to make more informed decisions regarding the prevention and management of major infections in children with cSLE.

Disclosure

The author reports no conflicts of interest in this communication.

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