LETTER TO THE EDITOR

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Letter to Editor for the Assessment of Bronchiolitis Severity Using Modified Tal and BROSJOD Scores

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Dear Editor,

I have thoroughly reviewed the article titled "Assessment of Bronchiolitis Severity Using Modified Tal and BROSJOD Scores" by Leyla Alibayli and colleagues, published in European Archives of Medical Research (2025;41(1):24–31). This study evaluates the prognostic value of Modified Tal (M-Tal) and Bronchiolitis Score Sant Joan de Deu (BROSJOD) scores in infants with acute bronchiolitis. Below, I present the strengths, limitations, and recommendations for the manuscript.

STRENGTHS OF THE ARTICLE

Clinical Applicability

The study clearly demonstrates the association of M-Tal and BROSJOD scores with high-flow nasal cannula (HFNC) requirement and hospital stay duration in a prospective cohort. Notably, the significantly higher HFNC need in patients with M-Tal >7.5 and BROSJOD >10 (p=0.001) highlights their potential utility in clinical decision-making.[1]

Methodological Rigor

Exclusion of confounders such as age, comorbidities, and prematurity strengthens internal validity. Inclusion of COVID-19-positive patients also adds pandemic-specific data diversity.[1]

POTENTIAL LIMITATIONS AND RECOMMENDATIONS

Sample Size

The single-center design with 111 patients limits statistical power, particularly in the subgroup requiring HFNC (n=22). Multicenter studies with larger cohorts would improve generalizability. Similar limitations were noted in a study differentiating testicular torsion from epididymo-orchitis using inflammatory markers.[2]

Lack of Blood Gas Parameters

Blood gas analyses were only performed at admission, with no follow-up data. McCallum et al.[3] emphasized that late-term blood gas changes could correlate with dynamic score values. This gap was also observed in a Stanford Type B aortic dissection study.[4]

Comparison with Other Scores

The absence of comparisons with tools such as the Modified Wood's Clinical Asthma Score (M-WCAS) is notable. Golan-Tripto et al.[5] demonstrated concordance between M-Tal and M-WCAS.

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RECOMMENDATIONS FOR FUTURE STUDIES

Randomized Controlled Trials

Investigate the impact of initiating HFNC based on these scores. Innovative indices, such as the pan-immune inflammation value used to predict strangulation in incarcerated hernias, could be tested in similar contexts.[2,6]

Biomarker Integration

Combining scores with biomarkers such as procalcitonin may enhance prognostic accuracy. The success of NLR and SII in predicting mortality in acute cholecystitis supports this approach.[7]

CONCLUSION

This study supports the clinical utility of M-Tal and BROSJOD scores in assessing bronchiolitis severity. However, limitations such as sample size and longitudinal data gaps warrant future research. As seen in studies on complicated appendicitis,[8] multidisciplinary integration of inflammatory indices could enrich the body of knowledge in this field.

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