Predicting acute biliary pancreatitis severity

Sema Ayten

Department of Emergency Medicine, İstanbul Göztepe Prof. Dr. Süleyman Yalçın City Hospital, İstanbul-*Türkiye*

Dear Editor,

I read with interest the study by Tolan et al.,[1] published in a previous issue of the Turkish Journal of Trauma and Emergency Surgery (TJTES), which investigated the role of NLR and PLR in predicting the severity of acute biliary pancreatitis (ABP). The use of these simple, inexpensive, and rapid biomarkers for early severity prediction is of great importance, especially in resource-limited settings. However, there are several methodological and clinical interpretation points that warrant consideration.

1. Case Selection and Limited Generalizability: The study's limitation to only 161 cases over a 10-year period (2015-2024) is noteworthy. Furthermore, the exclusive inclusion of biliary etiology pancreatitis restricts the generalizability of the findings to other etiologies such as alcoholic, hypertriglyceridemic, or idiopathic pancreatitis. This narrow selection weakens the applicability of the results to the broader pancreatitis population.

2. Clinical Severity vs. Radiological Severity (Revised Atlanta Criteria): The authors utilized only the Balthazar scoring system (radiological severity) as a severity indicator. However, according to the current Revised Atlanta Classification, the severity of pancreatitis is primarily determined by the presence and duration of organ failure, not solely by radiology.[2,3] Focusing only on radiological severity may not fully reflect the patient's true clinical status (mortality, need for intensive care).

3. Lack of ROC Analysis and Clinical Applicability: While the study reports statistical significance (p-values) for NLR and PLR, it fails to provide the most critical data for clinical decision-making: "cut-off points" and their corresponding sensitivity/specificity (AUC) values. For a physician to practically use these biomarkers in the emergency department (e.g., "NLR above X predicts severe pancreatitis"), ROC analysis results are essential. This omission severely limits the clinical applicability of the study.[4,5]

In conclusion, while the study by Tolan et al. highlights the potential of NLR and PLR in predicting ABP severity, the limitations in case selection, the disregard for the Revised Atlanta Criteria in severity assessment, and the absence of clinical cut-off values restrict the study's scientific contribution and practical utility.

Sincerely

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Cite this article as: Ayten S. Predicting acute biliary pancreatitis severity. Ulus Travma Acil Cerrahi Derg 2026;32:1322.
Address for correspondence: Sema Ayten
Department of Emergency Medicine, İstanbul Göztepe Prof. Dr. Süleyman Yalçın City Hospital, İstanbul, Türkiye
E-mail: semayten@hotmail.com
Ulus Travma Acil Cerrahi Derg 2026;32(10):1322 DOI: 10.14744/tjtes.2026.74687
Submitted: 19.01.2026 Revised: 04.04.2026 Accepted: 04.05.2026 Published: 06.10.2026
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