



LETTER TO THE EDITOR

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Letter to the editor regarding “Preoperative predictor laboratory markers for complicated appendicitis: A retrospective analysis of single-center experience”

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Dear Editor,

We read with great interest the valuable article by Barut Bora and Ceylan Cengiz, titled “Preoperative predictor laboratory markers for complicated appendicitis: A retrospective analysis of single-center experience” [1]. In this article, the authors elucidate the significance of basic laboratory parameters in distinguishing between uncomplicated and complicated appendicitis. These easily accessible, cost-effective, and straightforward laboratory parameters hold particular importance for physicians in rural areas or those encountering challenges accessing advanced imaging methods, which are often time-consuming and expensive. In this regard, this study is poised to make a significant contribution to the existing literature. However, we wish to highlight a few aspects from our perspective, with the hope that our comments will enrich the authors' future research endeavors.

Firstly, the study's inclusion and exclusion criteria should be clearly articulated. While the authors appropriately excluded patients under 18 years of age and those who had undergone other surgical procedures, it's worth noting that several factors can influence blood values. These may include pregnancy, advanced age, chronic illnesses, allergic conditions, the use of various medications, hematological disorders, and the presence of malignant or inflammatory diseases [2]. For the sake of minimizing bias, it is advisable to exclude patients with such conditions from the study. Additionally, the study examines

the duration between the onset of patients' complaints and their admission to the emergency department (referred to as "Timing of Emergency Department arrival to admission (day)"). In the case of elderly individuals, several factors, such as reduced abdominal muscle strength, heightened pain thresholds, alterations in the nervous system, and a tendency to delay seeking medical attention, can lead to delayed presentation at the emergency department. Such delays may contribute to a higher rate of complications [3]. Hence, it is crucial to consider elderly patients as a distinct subgroup in the study.

Secondly, the patients were categorized into complicated and uncomplicated groups. To enhance clarity, it is advisable to explicitly outline in the methods section the criteria used to classify patients into these groups. The 2020 guidelines from the World Society of Emergency Surgery define complicated appendicitis as encompassing conditions such as gangrene, perforation, and abscess formation [4]. Incorporating these specific criteria into the study will provide a more precise understanding of patient classification.

Thirdly, the authors emphasize the importance of white blood cell (WBC) count, platelet count, C-reactive protein (CRP) levels, total and direct bilirubin levels, amylase, lipase, and sodium values in determining the condition of complicated appendicitis. WBC count and CRP levels are widely used laboratory parameters for diagnosing acute appendicitis and

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abdominal infections [5]. However, recent studies have identified hemogram sub-parameters, such as neutrophil count, neutrophil-to-lymphocyte ratio, and platelet-to-lymphocyte ratio, as having a higher diagnostic value than other parameters in assessing appendix complications [2,6,7]. Evaluating these parameters may yield more substantial results.

Lastly, categorizing postoperative complications according to the Clavien-Dindo classification will enhance our understanding of the complication status within the groups [8]. We extend our congratulations to the authors for their informative article and eagerly anticipate their response to our comments.

Conflict of Interests

The authors declare that there is no conflict of interest in the study.

Financial Disclosure

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Authors' reply

We would like to express our gratitude to the author who provided thoughtful contributions and critiques to our

article titled "Preoperative Predictor Laboratory Markers for Complicated Appendicitis: A Retrospective Analysis of Single-Center Experience," as well as to the editor who granted us the opportunity to respond.

In response to the initial critique, it is evident that the criteria for patient inclusion and exclusion in our manuscript are clearly defined. It is well-established that the clinical manifestation of acute appendicitis remains consistent, regardless of its etiology. Underlying causes may, of course, include secondary malignancies, as appendiceal malignancies present with symptoms consistent with appendicitis (supported by laboratory, radiological, and physical examination findings) [1]. Additionally, upon scrutinizing the source cited by the author regarding factors affecting White Blood Cell count, it is noted that in the discussion section, evidence is directly cited from entirely different sources. This discrepancy is highly unfortunate. The contribution made by the author, stating that "factors such as muscular atrophy, high pain threshold, changes in the nervous system, and a tendency to delay seeking medical attention may lead to delayed presentation in the emergency department for elderly patients [2]," is unfortunate as it directly cites another paper without original attribution.

In the author's critique (However, recent studies have identified hemogram sub-parameters, such as neutrophil count, neutrophil-to-lymphocyte ratio, and platelet-to-lymphocyte ratio, as having a higher diagnostic value than other parameters in assessing appendix complications.), upon reviewing the study by Hajibandeh S et al. [3] in the literature, it is evident that it is a meta-analysis conducted solely on the NLR value, and there is no comparison with other inflammatory parameters. In conclusion, while the criticisms and contributions to our article may contribute to future studies, it is unfortunate that there were incorrect references, and in some instances, sentences from other sources were directly copied into the discussion sections of the cited articles.

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