

Peer Review

Review of: "Effectiveness of the PAS for Diagnosing the Severity of Acute Appendicitis in Children: A Cohort Study"

Anas Shikha¹

1. Paediatric Surgery, Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, Bandar Seri Begawan, Brunei Darussalam

Dear Authors,

Thank you for your hard work on this study. It's encouraging to see research focusing on the severity of appendicitis, as this is a critical area that could ultimately improve patient care. Your effort to explore this topic and develop a scoring system is commendable and provides a basis for further discussion and refinement in the field.

That said, I have some concerns that I hope you will consider addressing in future revisions:

Practical Benefits of Knowing Severity:

- It is not clear how knowing the severity of appendicitis will change patient care. Will the management be different based on severity, or is the score mainly for prognosis? Clarifying this point could greatly improve the impact of your research.
- Additionally, the study does not include data about the post-operative course or complications. Without this information, readers cannot fully understand the practical implications of the severity scoring.

Fundamental Issues in the Study Design Leading to Cloudy Ground Truth and Biased Data:

- The ground truth criteria in the study rely on the visual assessment of the appendix, which is very subjective and can lead to bias. Using a more objective standard, such as histopathology results, as the gold standard could help reduce this bias and strengthen the validity of your findings.

- Excluding patients with an appendicular mass may have left out cases with likely severe appendicitis, making the study group less representative of all patients with the condition.
- The exclusion of about 23% of the cohort due to “losses during the follow-up” raises concerns about biased data. Moreover, the term “losses during the follow-up” is confusing; using a clearer term could help readers better understand the issue.

These issues are major because they affect the overall validity of the data and may lead to misleading outcomes upon analysis. I hope these points will be useful as you continue to refine your work. Your study has the potential to contribute significantly to the field, and addressing these concerns could strengthen your conclusions and the practical applications of your research.

Sincerely,

Anas

Declarations

Potential competing interests: No potential competing interests to declare.