



Commentary

Comment to: “Inflammatory parameters as predictive factors for complicated appendicitis: A retrospective cohort study”

Dear Editor,

We have read the valuable article titled “Inflammatory parameters as predictive factors for complicated appendicitis: A retrospective cohort study” by Ribeiro et al. [1] with a great interest. In this article, the authors explained the situation of predicting the complexity of the appendix by looking at analytical predictive factors. These easily accessible basic parameters are very important, especially for physicians in rural areas or those who have difficulty in accessing advanced imaging methods. In this regard, this study will make a significant contribution to the literature. However, some issues should be raised our point of view.

Firstly, Ribeiro et al. [1] emphasized the importance of basic laboratory parameters such as complete blood count parameters (CBC) parameters and C-reactive protein (CRP). This basic laboratory parameters are affected by various factors, like chronic diseases, haematological diseases, allergic diseases, various drugs, malignant or inflammatory diseases [2,3]. Therefore, patients with diseases that may affect basic laboratory parameters should be excluded from this study. Failure to exclude these patients from the study will lead to misleading assessments.

Secondly, the patients were divided into two groups, but the negative appendectomy group was not mentioned. Especially in pregnant patients, this rate (17.27–36%) may be higher and this is a serious rate [4, 5]. In this regard, negative appendectomy rate should be given in this study, and the diagnostic value of analytical predictive factors should be used to determine the negative appendectomy group. Again, as far as we understand, gangrenous appendicitis was evaluated in the uncomplicated patient group. However, this patient group was evaluated in the complicated appendicitis group in other studies [3,6]. This situation should be re-evaluated.

Thirdly, to better understand the clinical characteristics of the patient groups, table 2 should include important parameters such as comorbid diseases, postoperative complications according to the Clavien-Dindo classification [7], and cut-off values of laboratory parameters.

Finally, basic biochemical laboratory parameters, like CBC parameters, have high diagnostic value in determining complicated or uncomplicated appendicitis. We found that white blood cell, neutrophil, neutrophil to lymphocyte ratio, platelet, platelet to lymphocyte ratio, lactate dehydrogenase, indirect, direct and total bilirubin can be utilized to diagnose complicated appendicitis [5]. Therefore, using the basic biochemical parameters as well as CBC and CRP will make the study more valuable.

Provenance and peer review

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Ethical Approval

Ethical approval isn't required for this study.

Consent

Patients data were not used. Therefore consent approval is not required for this study.

Author contribution

Rıfat PEKSÖZ: Study concept or design, data analysis or interpretation, writing the paper. Yavuz Albayrak: Reviewed the literature and revised the manuscript. Sabri Selçuk Atamanalp: Supervised the writing process and revised the manuscript.

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Rıfat peksöz.

Declaration of competing interest

The authors declare no conflict of interest.

References

- [1] Ana Matos Ribeiro, et al., Inflammatory parameters as predictive factors for complicated appendicitis: a retrospective cohort study, *Ann. Med. Surg.* 74 (2022) 103266, <https://doi.org/10.1016/j.amsu.2022.103266>.
- [2] C. Bedel, Diagnostic value of basic laboratory parameters for simple and perforated acute appendicitis, *Turk. J. Clin. Lab.* 9 (2018) 266–271.
- [3] Peksöz R, Bayar B. The role of complete blood count parameters in diagnosing acute appendicitis and measuring the severity of inflammation. *Ulus Travma Acil Cerrahi Derg* 27(2021):654–661. doi:10.14744/tjtes.2020.69195.
- [4] K. Ito, H. Ito, E.E. Whang, A. Tavakkolizadeh, Appendectomy in pregnancy: evaluation of the risks of a negative appendectomy, *Am. J. Surg.* 203 (2012) 145–150, <https://doi.org/10.1016/j.amjsurg.2011.02.010>.

- [5] R. Peksöz, E. Dişçi, A. Kaya, E. Ağırman, E. Korkut, N. Aksungur, et al., Significance of laboratory parameters in diagnosing acute appendicitis during pregnancy, *ANZ J. Surg.* 92 (1–2) (2022) 121–127, <https://doi.org/10.1111/ans.17443>.
- [6] H.M. Moon, B.S. Park, D.J. Moon, Diagnostic value of C-reactive protein in complicated appendicitis, *J. Korean Soc. Coloproctol.* 27 (3) (2011) 122–126, <https://doi.org/10.3393/jksc.2011.27.3.122>.
- [7] D. Dindo, N. Demartines, P.-A. Clavien, Classification of surgical complications. A new proposal with evaluation in a cohort of 6336 patients and results of a survey, *Ann. Surg.* 240 (2004) 205–213, <https://doi.org/10.1097/01.sla.0000133083.54934.ae>.

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