KASTAMONU MEDICAL JOURNAL

Letter to the Editor

DOI: 10.51271/KMJ-0199

Kastamonu Med J. 2025;5(2):143-144

Comments on "Relationship of Atherogenic Index of Plasma with exercise, obesity and biochemical parameters"

Mustafa Can Şenoymak

Department of Endocrinology and Metabolism, University of Health Sciences, Sultan 2. Abdulhamid Han Training and Research Hospital, İstanbul, Turkiye

Cite this article as: Şenoymak MC. Comments on "Relationship of Atherogenic Index of Plasma with exercise, obesity and biochemical parameters". *Kastamonu Med J.* 2025;5(2):143-144.

Received: 13.08.2024 ◆ **Accepted**: 16.12.2024 ◆ **Published**: 20.06.2025

Keywords: Hyperlipidemia, obesity, Atherogenic Index of Plasma

Dear Editor,

I was deeply interested in the article by Olgun et al.,[1] titled "Relationship of Atherogenic Index of Plasma with exercise, obesity and biochemical parameters" published in volume 4, Issue 2 of the "Kastamonu Medical Journal" in 2024. I want to express my appreciation to the authors and the editorial team for their insightful and significant contribution. In this letter, I would like to address certain aspects that might further enrich the discussion presented in the article.

Cardiovascular diseases remain one of the foremost causes of morbidity and mortality globally, underscoring the critical importance of accurate and reliable parameters for predicting cardiovascular risk.[2] Among these parameters, the Atherogenic Index of Plasma (AIP) stands out as a valuable marker, providing significant insights into an individual's risk profile.[3] The study's simultaneous examination of physical activity, anthropometric characteristics, and the AIP is particularly noteworthy, as it offers a comprehensive approach to understanding the multifaceted nature of cardiovascular risk. This integrative analysis is commendable for its potential to advance our knowledge in this vital area of public health.

However, I would like to raise a concern regarding the study's methodology. One of the main points of the study is the AIP, which is calculated using a mathematical formula that involves the ratio of triglycerides to HDL cholesterol. Medical conditions that can alter this ratio include hyperlipidemia and the use of lipid-altering medications such as statins or fenofibrates.[4] Upon reviewing the study's methodology, it is noted that hyperlipidemia was not stated as an exclusion criterion, and the use of medications that affect lipid parameters was not excluded. If patients with hyperlipidemia or those using lipid-altering medications were included in the study, it could have significantly influenced the results and, in turn, affected the generalizability and reliability of the study's conclusions.

In conclusion, while acknowledging the strengths of this study in investigating the relationship between AIP, physical activity, and anthropometric parameters, addressing the previously mentioned methodological concerns could further enhance the accuracy and reliability of the findings wish to extend my sincere appreciation to the authors for their substantial contribution to this area of research and look forward to their future scholarly work.

ETHICAL DECLARATIONS

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

The authors declared that this study has received no financial support.

Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

1. Olgun E, Topçu E, Çetin Ş. Relationship of Atherogenic Index of plasma with exercise, obesity and biochemical parameters. *Kastamonu Med J.* 2024;4(2):33-38. doi:10.51271/KMJ-0139
2. Goldsborough E 3rd, Osuji N, Blaha MJ. Assessment of cardiovascular disease risk: a 2022 update. *Endocrinol Metab Clin North Am.* 2022;51(3): 483-509. doi:10.1016/j.ecl.2022.02.005
3. Lioy B, Webb RJ, Amirabdollahian F. The association between the Atherogenic Index of plasma and cardiometabolic risk factors: a review. *Healthcare (Basel).* 2023;11(7):966. doi:10.3390/healthcare11070966
4. Karr S. Epidemiology and management of hyperlipidemia. *Am J Manag Care.* 2017;23(9 Suppl):S139-S148.

Corresponding Author: Mustafa Can Şenoymak, senoymak@gmail.com

This work is licensed under a Creative Commons Attribution 4.0 International License.

KASTAMONU MEDICAL JOURNAL

Letter to the Editor

Author reply "Relationship of Atherogenic Index of plasma with exercise, obesity and biochemical parameters'

Şirin Çetin

Department of Biostatistics, Faculty of Medicine, Amasya University, Amasya, Turkiye

Dear Editor,

Thank you for your thoughtful and constructive feedback on our manuscript.[1] We would like to take this opportunity to clarify a point regarding the exclusion of individuals using cholesterol-lowering medications from our study, which was raised in the review. We acknowledge that this important information was inadvertently omitted from the manuscript, and we sincerely apologize for any confusion this may have caused. While we are unable to make revisions to the manuscript at this stage, we appreciate your understanding of this matter and hope that this explanation will provide the necessary clarification.

Although the manuscript may not have clearly conveyed this detail, we would like to confirm that individuals using cholesterol-lowering medications were excluded from the study. This decision was made to prevent any potential confounding effects on the biochemical markers measured, as such medications can influence lipid profiles and other relevant parameters. Therefore, individuals on these medications were not included in the analysis to ensure the accuracy and integrity of our results.

In a study by Kucera et al.,[2] it was shown that 12 weeks of statin use did not lead to a significant change in Plasma Atherogenic Index (PAI) values. In our study, even though antihyperlipidemic agents were used, it was anticipated that they would not significantly affect the PAI values. This finding is in line with the existing literature, reinforcing the notion that the use of such agents may not lead to substantial alterations in the PAI during the treatment period.

Our study includes patients aged 18-65, and since individuals using antihypertensive, diabetic, or chronic kidney disease (CKD) medications, including those with hyperlipidemia, were excluded, the average age of the participants in the study is 38.02±9.78 years. This further supports our approach and the rationale for excluding individuals on certain medications.

We value your input and remain grateful for the opportunity to submit our work. Thank you once again for your time and consideration.

Sincerely,

REFERENCES

1. Olgun E, Topçu E, Çetin Ş. Relationship of atherogenic index of plasma with exercise, obesity and biochemical parameters. *Kastamonu Med J.* 2024;4(2):33-38. doi:10.51271/KMJ-0139
2. Kucera M, Oravec S, Gaspar L. Influence of atorvastatin on plasma atherogenic biomarkers. 1st ed. InTech; 2016.

This work is licensed under a Creative Commons Attribution 4.0 International License.