



Phramongkutklao College of Medicine,
Ratchathewi, Bangkok 10400, Thailand

Wisit Kaewput, M.D.
Department of Military and Community Medicine

Editor in Chief,
World Journal of Cardiology

May 20th, 2021

Re: Manuscript entitled "Associations of New-Onset Atrial Fibrillation and Severe Visual Impairment in Type 2 Diabetes: A Multicenter Nationwide Study"
Manuscript NO: 66583

Dear Editor,

Thank you for the thoughtful input and review of our manuscript. We believe as a result of this review, our study will have more value for your readers. We revised the manuscript based on the reviewers' suggestions. We have attached our point by point response.

Thank you for your time and consideration. If you have any additional questions or comments, please let us know.

With many thanks for your attention, I remain.

Sincerely yours,

Wisit Kaewput, MD,
Department of Military and Community Medicine,
Phramongkutklao College of Medicine,
Ratchathewi, Bangkok 10400, Thailand
Fax: +6623547733
E-mail: wisitnephro@gmail.com

Response to Editor(s)' Comments to Author:

Scientific quality: The manuscript describes an observational study of the associations of new-onset atrial fibrillation and severe visual impairment in type 2 diabetes. The topic is within the scope of the WJCC. (1) Classification: Two Grades B and Grade C; (2) Summary of the Peer-Review Report: The study was well conducted. The authors followed a simple but effective methodology. The results are clear and overall, the manuscript is easy to read with an interesting message. The questions raised by the reviewers should be answered; (3) Format: There are 3 tables; (4) References: A total of 33 references are cited, including 2 references published in the last 3 years; (5) Self-cited references: There is no self-cited reference; and (6) References recommendations: The authors have the right to refuse to cite improper references recommended by the peer reviewer(s), especially references published by the peer reviewer(s) him/herself (themselves). If the authors find the peer reviewer(s) request for the authors to cite improper references published by him/herself (themselves), please send the peer reviewer's ID number to editorialoffice@wignet.com. The Editorial Office will close and remove the peer reviewer from the F6Publishing system immediately. 2 Language evaluation: Classification: Grade A and two Grades B. 3 Academic norms and rules: The authors provided the Biostatistics Review Certificate, the Institutional Review Board Approval Form, and the written informed consent. No academic misconduct was found in the Bing search. 4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the WJCC. 5 Issues raised: (1) Recommendation: Conditional acceptance.

Response: We thank you for reviewing our manuscript and for your critical evaluation. We sincerely appreciate your input and found your suggestions immensely helpful. We have revised the manuscript comprehensively, based on the editors' suggestions. We have attached our point-by-point response.

Comment #1 The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text.

Response: Thanks very much for the helpful suggestions from the editor. As the editor suggested, we apologize for missing of the "Article Highlights" section. We add the "Article Highlights" section at the end of the main text. The following text has been added:

"ARTICLE HIGHLIGHTS"

Research background: Previous studies have shown an association between T2DM and AF. However, the independent contribution of diabetes mellitus and AF to the prevalence of visual impairments have not been evaluated.

Research motivation: Earlier studies found that AF is relatively common in diabetic patients and should be regarded as a marker of adverse outcomes of cardiovascular diseases in T2DM.

Research objectives: To analyze an association between T2DM with incident AF and visual impairment exists, and if so the prevalence and magnitude of this association.

Research methods: This study evaluated adult T2DM patients from 831 public hospitals in Thailand in the year 2013. The association between T2DM with incident AF and visual impairment were assessed using multivariate logistic regression.

Research results: A total of 27281 T2DM patients with available eye examination data were included in the analysis. The incident AF was 0.2%. The prevalence of severe visual impairment in all T2DM, T2DM without AF, and incident AF were 1.4%, 1.4%, and 6.3%, respectively. The incident AF was associated with an increased OR of 3.89 (95%CI: 1.17-13.38) for severe visual impairment when compared with T2DM patients without AF.

Research conclusions: T2DM patients with incident AF was independently associated with severe visual impairment. Early eye screening should be provided for these high-risk individuals.

Research perspectives: Overlapping diabetes and AF leads to an increased risk of thromboembolic events. However, the independent contribution of diabetes mellitus and AF to the prevalence of visual impairments have not been evaluated. It may be useful to screen for visual impairment and its etiologies in T2DM patients with incident AF."

Reviewers' Comments to the Author

Response: We thank you for reviewing our manuscript and for your critical evaluation. We sincerely appreciate your input and found your suggestions immensely helpful. We have revised the manuscript comprehensively, based on the reviewers' suggestions. We have attached our point-by-point response.

Reviewer #1:

Comment #1 "Associations of New-Onset Atrial Fibrillation and Severe Visual Impairment in Type 2 Diabetes: A Multicenter Nationwide Study" is a single multicenter nationwide observational study. The aim is to evaluate the prevalence of visual impairment in patients with diabetes mellitus and AF. I believe the study was well conducted. The authors followed a simple

but effective methodology. The results are clear and overall, the manuscript is easy to read with an interesting message. FINAL DECISION: Accept

Response: We thank the reviewer for the positive feedback.

Reviewer #2:

Comment #1 Recent 5 references from last 5 years must be added.

Response: Thanks very much for the helpful suggestions from the reviewer. We agree with the reviewer regarding adding recent 5 references from last 5 years. We add recent 5 references at the "reference" part. The following text has been added:

"2. Teo ZL, Tham YC, Yan Yu MC, Chee ML, Rim TH, Cheung N, Bikbov MM, Wang YX, Tang Y, Lu Y, Hin Wong IY, Wei Ting DS, Wei Tan GS, Jonas JB, Sabanayagam C, Wong TY, Cheng CY. *Global Prevalence of Diabetic Retinopathy and Projection of Burden through 2045: Systematic Review and Meta-analysis*. *Ophthalmology*. 2021:S0161-6420(21)00321-3. doi: 10.1016/j.ophtha.2021.04.027. Epub ahead of print. PMID: 33940045.

3. Das T, Takkar B, Sivaprasad S, Thanksphon T, Taylor H, Wiedemann P, Nemeth J, Nayar PD, Rani PK, Khandekar R. *Recently updated global diabetic retinopathy screening guidelines: commonalities, differences, and future possibilities*. *Eye (Lond)*. 2021 May 11. doi: 10.1038/s41433-021-01572-4. Epub ahead of print. PMID: 33976399.

4. Zhang J, Johnsen SP, Guo Y, Lip GYH. *Epidemiology of Atrial Fibrillation: Geographic/Ecological Risk Factors, Age, Sex, Genetics*. *Card Electrophysiol Clin*. 2021;13(1):1-23. doi: 10.1016/j.ccep.2020.10.010. Epub 2021 Jan 8. PMID: 33516388.

5. Kaneko H, Yano Y, Itoh H, Morita K, Kiriya H, Kamon T, Fujii K, Michihata N, Jo T, Takeda N, Morita H, Node K, Carey RM, Lima JAC, Oparil S, Yasunaga H, Komuro I. *Association of Blood Pressure Classification Using the 2017 American College of Cardiology/American Heart Association Blood Pressure Guideline with Risk of Heart Failure and Atrial Fibrillation*. *Circulation*. 2021 Apr 22. doi: 10.1161/CIRCULATIONAHA.120.052624. Epub ahead of print. PMID: 33886370.

8. Higa S, Maesato A, Ishigaki S, Suenari K, Chen YJ, Chen SA. *Diabetes and Endocrine Disorders (Hyperthyroidism/Hypothyroidism) as Risk Factors for Atrial Fibrillation*. *Card Electrophysiol Clin*. 2021;13(1):63-75. doi: 10.1016/j.ccep.2020.11.005. Epub 2021 Jan 8. PMID: 33516408.

32. Ponamgi SP, Siontis KC, Rushlow DR, Graff-Radford J, Montori V, Noseworthy PA. Screening and management of atrial fibrillation in primary care. *BMJ*. 2021;373:n379. doi: 10.1136/bmj.n379. PMID: 33846159.”

Comment #2 Linguistic and punctuation errors should be removed.

Response: We thank you for reviewing our manuscript. We really appreciated your input and found your suggestions very helpful. We agree with the reviewer regarding removing linguistic and punctuation errors as the reviewer suggestion.

Reviewer #3:

Comment #1 The manuscript is well written. The topic is interesting and worth publishing.

Response: We thank the reviewer for the positive feedback.

Language editor 's comments:

Comment #1 Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

Response: We thank you for reviewing our manuscript. We apologize for language grammatical and usage errors. We have now revised the manuscript comprehensively. In addition, the revised manuscript has also been reviewed, edited, and significantly revised by Dr. Michael A Mao, one of our coauthors, who is a native speaker and specialist in the research content from Mayo Clinic, USA.

All authors thank the Editors and reviewers for their valuable suggestions. The manuscript has been improved considerably by the suggested revisions!