

Dear Review Professor,

On behalf of our entire research team, I extend our heartfelt appreciation to you. Your meticulous review and insightful feedback have significantly enriched our research. With your expert guidance, we've gained a clearer perspective on our study, which offered us substantial opportunities to augment the quality of our manuscript.

In line with your suggestions, we have undertaken a thorough revision of the manuscript to align with the standards and expectations you set forth. Your devoted review has indubitably enhanced the rigor of our work. Thank you once again.

Thank you again for your invaluable feedback and guidance.

Sincerely,

Han-wen Zhang

2023-11-13

Many thanks to the reviewer professors for reviewing this manuscript. This article has been revised in accordance with the requirements of the reviewer professor, and relevant certificates, including ethics review certificates and other materials, have been uploaded.

Review 1

There are a few points that must be brought to the attention of the authors or the authors must provide clarification on:

Q1. 1. ABSTRACT: The last sentence in the abstract is too strong and may be modified or completely removed without losing the essence of what the manuscript is about. The suggested modified version will be suggested under the conclusion for the whole manuscript below.

A1. We are very grateful to the reviewer professor for his comments. We have corrected or deleted the relevant sentences in the **abstract and the final conclusion of the text** in accordance with your request. Thank you for your review.

Q2: In the **second paragraph** under MRI protocol to make it clearer to reader I suggest the authors break down sentence to shorter ones as: The scanning protocols included conventional brain and cerebrovascular imaging. The conventional brain imaging included: T1WI, T2WI, fluid-attenuated inversion-recovery (FLAIR), and the cerebrovascular

imaging included: 3-dimensional time of flight-MRA (3D TOF-MRA) and high-resolution vascular wall imaging technology HR-VWI: 3D-SPACE sequence.

A2: The way of expression suggested by the reviewer professor indeed makes the article more scientific. We have modified the relevant parts according to your statement. Thanks.

Q3: In the continuation of the sentence under consideration in point 2 above. The authors dealt with 5 imaging modalities but they have number up to 6 with nothing under 4 ie 4 and 5 are together please correct.

A3: We apologize for our mistake. Thank you very much for reminding.

Q4: In the last sentence of the first paragraph of the Results, the authors should please change "could be" merged to "was" merged. Under the discussion the authors should please change the word coarctation to constriction.

A4: We have corrected the text (the last sentence of the first paragraph of the Results).

Q5: In the last statement of the conclusion authors themselves not that further studies are needed thus this statement is too strong based on their results. The authors may consider modifying "and the results of this study

provide a basis for the prevention of ischaemic stroke." by introducing the word may and also talk about reducing the incidence and severity of ischaemic stroke by predicting dangerous plaques.

A5: Thanks to the reviewer professor for his suggestions on our language expression. We have revised the article according to your suggestions.

Q6: In looking at factors affecting plaque authors considered total cholesterol but the non-HDL cholesterol or LDL cholesterol may have correlated better with the dangerous plaque why was this not used.

A6 : A6: In recent years, studies have shown [1-3] that serum non-HDL-C levels are positively correlated with the occurrence of cardiovascular events, and it has become a new risk indicator for cardiovascular disease. This has attracted everyone's attention and attention and has been included in domestic and foreign guidelines. However, some previous studies [4] have shown that the occurrence and formation of plaques are not significantly related to non-HDL-C levels.

This study is a retrospective study. During the examination period of the enrolled cases, clinical attention was not paid enough to non-HDL-C levels. Therefore, when collecting laboratory test indicators of relevant cases, it was found that many patients did not detect non-HDL-C, Or relevant data are missing. At the same time, non-HDL-C indicators were

not included in the previous ethics application to the local ethics review committee. So serum non-HDL-C levels were not included in this study. Thank you very much to the reviewer professor for his comments. We will take this into account in subsequent research.

Thank you very much for your review of this manuscript.

References

- [1] Brunner FJ, Waldeyer C, Ojeda F, et al. Application of non-HDL cholesterol for population-based cardiovascular risk stratification: results from the Multinational Cardiovascular Risk Consortium. *Lancet* (London, England). 2019. 394(10215) : 2173-2183.
- [2] Quispe R, Elshazly MB, Zhao D, et al. Total cholesterol/HDL-cholesterol ratio discordance with LDL-cholesterol and non-HDL-cholesterol and incidence of atherosclerotic cardiovascular disease in primary prevention: The ARIC study. *Eur J Prev Cardiol*. 2020. 27(15): 1597-1605.
- [3] Su X, Cai X, Pan Y, et al. Discordance of apolipoprotein B with low-density lipoprotein cholesterol or non-high-density lipoprotein cholesterol and coronary atherosclerosis. *Eur J Prev Cardiol*. 2022. 29(18): 2349 -2358.
- [4] Gardener H, Della Morte D, Elkind MS, Sacco RL, Rundek T. Lipids and carotid plaque in the Northern Manhattan Study (NOMAS). *BMC*

Cardiovasc Disord. 2009. 9: 55.

Review 2

Dear Author(s), To begin, I'd want to thank the author(s) for their efforts. To improve the study even more, I recommend the following modifications:

Q1. Modify the title of the paper to be consistent with the goal of the current study, and keep it to no more than twenty words.

A1. Thanks to the reviewer professor for the comments, we have modified the title according to your request.

Q2. While committing to providing the most essential findings that the current study has reached in the results portion of the study abstract, without delving into excessive detail, balance must be addressed in listing information between the different components of the study abstract.

A2. We have modified the corresponding parts to make the text more concise while ensuring scientificity. The suggestions of the review professor are very appropriate.

Q3. The introduction/background of the study must be modified in three paragraphs to accomplish the following: - In the first paragraph, explain why the current study is significant. - The second paragraph explains the knowledge gap that the current study seeks to fill. - The third paragraph

defines the goal of the current investigation, or, in other words, what research problem the current study attempts to address.

A3. We have reorganized the introductory language according to your request. This makes this part of the language expression more layered. Thank you for your suggestion.

Q4. Is there a reason why the current statistical method was chosen to analyze the study data that can be included in the statistical analysis portion of the procedures section?

A4. We have added application descriptions to this section.

Q5. Please separate the conclusion and discussion sections.

A5. We have modified it as requested.

Q6. Is the current study's goal of resolving the research problem met? Please include an answer to this question in the study conclusion.

A6. This study has achieved the objectives of the research, which have been stated in the conclusion section.

Q7. Some references are out of date and should be replaced; I advocate using references from 2023 and five years before.

A7. Thanks. Some old references have been updated as required.

Q8. I recommend that the author(s) adhere to the journal's policy on producing scientific papers, as there is a pre-prepared template that must be used for font size, line spacing, and other restrictions outlined in the authors' instructions.

A8. Thanks. We have corrected the full text in accordance with the journal's requirements.