

Dear Editor:

Thank you very much for your letter and the comments from the referees about our paper submitted to World Journal of Clinical Cases Manuscript NO: 73194. We revised the manuscript in accordance with the reviewers' comments, and carefully proof-read the manuscript to minimize typographical, grammatical, and bibliographical errors. We described the treatment of the patient, also further explored the physiopathology of the specific cause of Nontraumatic convexal subarachnoid hemorrhage with anterior cerebral artery stenosis in the discussion section. Due to limited case reports and studies, we have not found epidemiological data on cSAH caused by anterior cerebral artery stenosis. We have provided the Signed Informed Consent Form(s) in Chinese, the original figure documents and other materials that need to be provided. Here below is our description on revision according to the reviewers' comments.

To Reviewer 1:

I am very grateful to your comments for the manuscript. According with your advice, we amended the relevant part in manuscript. Some of your questions were answered below.

--Comment: There are a wide spectrum of potential underlying causes of cSAH. However, the authors state that "In summary, the findings of the present study indicate that ACA stenosis can lead to occurrence of cSAH." This being a case report (and not study), the authors need to justify the statement.

--Response: Thanks for the referee's kind suggestion. Intracranial artery stenosis/occlusion caused by cSAH is common in MCA. The pathogenesis may be severe stenosis of the anterior cerebral artery, which can cause compensatory dilation and vulnerability of cortical lateral branch vessels in the corresponding region, when hemodynamic changes occur, such as a sudden increase in intracranial perfusion pressure, resulting in the rupture of the leptic lateral branch circulation vessels that have already undergone expansion or increased permeability, resulting in bleeding, or the arrival of embolus to the fragile collateral vessels causing blood vessel rupture and

causing a small amount of bleeding. In this case, detailed examinations ruled out other possible causes, so we think ACA stenosis may lead to the occurrence of cSAH. According the review's suggestion, we revised the sentence as **“In summary, the findings of the present study indicate that ACA stenosis may lead to occurrence of cSAH.”**

To Reviewer 2:

I am very grateful to your comments for the manuscript. According with your advice, we amended the relevant part in manuscript. Some of your questions were answered below.

--Comment1: Authors presented an interesting case report about a non-traumatic convexal subarachnoid hemorrhage due to stenosis of an anterior cerebral artery. The cortical or watershed subarachnoid hemorrhage has been already described and analyzed in literature in these studies: - Diana F, Frauenfelder G, Botto A, Saponiero R, Romano DG. Cerebral hyperperfusion syndrome after intracranial stenting: Case report and systematic review. *Interv Neuroradiol.* 2021 Apr 22;15910199211011860. doi: 10.1177/15910199211011860. Epub ahead of print. PMID: 33884930. Please include this studies in references and comment Authors' findings. Angiographic images are not clear.

--Response: Thanks for the referee's kind suggestion. By reading carefully the studies of “Cerebral hyperperfusion syndrome after intracranial stenting: Case report and systematic review”, the cortical or watershed subarachnoid hemorrhage may be the result of excessive cerebral perfusion. High-grade stenosis is always a sign of hemodynamic compromise, and collateral circulation might be a predictor of excessive cerebral perfusion. We include this research as a discussion part of the article.

--Comment2: Angiographic images are not clear. Please modify Fig 2 with magnified images to see in clear the arterial stenoses.

--Response: We have modified the angiographic images with more clearly images. All the lines and pages indicated above are in the revised manuscript.

Thank you and all the reviewers for the kind advice.

Yours sincerely,

Wen-Bin Ma