

## Round 1

1. Dear authors, thank you for your interesting report, that I recommend for publication. Please find below some suggestions: - please be more specific about the site of the pseudo-aneurysm and the site of the pseudo-aneurysm considered in your review.

**Response:** Thanks for your suggestion. I found that I ignored the description of the common location of PSA in the introduction part, and also lacked the description of the specific location of pseudoaneurysm in this case. I have revised it (lines 86-91). but specification of PSA in the literature about the position may be difficult, the location of some literature is blur, Therefore, the selection of specification may lead to inconsistent literature review formats.

2. In all section of the manuscript. - i suggest to use the definition "ischemic stroke" rather than "infarction, since in the images isn't possible to show blood infarction, but only hypodensity at CT scan -

**Response:** "Ischemic" stroke can describe a patient's condition more accurately than "infraction". I really appreciate your professional advice, which I have revised in the whole paper.

3. do not use subheading in the case report section....

**Response:** I am very grateful to you for your careful suggestion. I find the subheadings really unnecessary and I have deleted them in the new version.

4. sentences each, no need. - line 77 specify that there was no history of ACUTE trauma

**Response:** I have specified in the new version that the patient has no history of acute trauma. Thank you very much for your professional advice .

5. please add 10.1016/j.wneu.2019.12.179 in line 122 and 129 about trauma

**Response:** Thank you very much for the attached references, which I have cited in the new edition.

6. I found the discussion well written and organized. You could also discuss about the importance of the treatment choice based on the etiology 10.3171/2021.4.FOCUS21111. But in general the discussion sounds good. Congrats

**Response:** I appreciate your compliments on my part of the discussion, but it still leaves something to be desired. After reading the references you gave me, I have a deeper understanding of the treatment of pseudoaneurysm, and I have added the discussion content of this part in the new version.

7. Can you state most common location of carotid artery pseudoaneurysm; incidence of internal carotid artery pseudoaneurysm? Most common cause or risk factor? – in contrast to your case

**Response:** I really appreciate your professional comments, PSA typically occurs due to iatrogenic injury, trauma, infection, and tumor invasion, I have added further information in the introduction section (line 86-88). however, the etiology of ICA PA in this case remains unknown. As for most common location of carotid artery pseudoaneurysm, there is no clear literature on the most common location of carotid artery pseudoaneurysm, what's more, incidence of internal carotid artery pseudoaneurysm remains unknown. But I have tried my best to state the incidence and location of pseudoaneurysm, I hope the information that I added can make the case sounds more complete and logical (line 86-94).

8. Is the patient smoker?

**Response:** I am very grateful for your professional and careful advice. The patient is a non-smoker. Smoking is a risk factor for cardiovascular disease and may also lead to pseudoaneurysms and I have made supplementary explanations in line 117-118

9. Was there any problems noted on the cervical spine/ discs?

**Response:** We mainly focus on the status of vascularity and stroke. However, cervical spine should be considered too, this is the limitation for us, we should perform MRI to cervical spine, which can provide more comprehensive information for us, In a word, thanks for your professional suggestion, we will improve it in future clinical work.

10. DISCUSSION – Worth putting a short discussion about STROKE and the incidence of carotid artery pseudoaneurysm as etiology?

**Response:** Thanks for your professional advice. I have stated a short discussion about stroke and its relationship with PSA. you can review this at line 168-171.

11. Lesson to discuss: In patients presenting with stroke, an internal carotid PA should be considered and etc... Such that Carotid UTZ or cervical CTA should be considered.

**Response:** It is necessary to summarize the characteristics of the disease. I have revised the article as suggested and you can review it at line 204-206

12. Short sentence on how ICA PA would look like on CTA, Doppler UTZ, DSA

**Response:** It is necessary to elaborate the performance of PA on CTA, DSA and UTZ in detail, which can make the structure of the article more complete. I really appreciate your rigorous advice. I have revised it in the article, and you can review it at the line 210-213.

13. State guidelines in managing CA PA (if there's any available) State short sentence or 2 about indications to proceed with medical treatment, Endovascular and Surgery.. Including studies on their long term outcome

**Response:** Thank you for your professional advice. Currently, there are no specific guidelines for the treatment of carotid pseudoaneurysm, but there are some studies comparing the efficacy and long-term outcomes of endovascular intervention with surgical treatment. You can review it at the line 221-227.

14. Part of Conclusion, I suggest: "The etiology of spontaneous ICA PA remains unknown."

**Response:** Thank you for your professional advice. When I reviewed the whole treatment process of the disease again, I think your conclusion is little too absolute, and I have made modifications in line 258-259.

15. Suggest to include in your table 1. Another last column on "OUTCOMES" - state months follow-up and patient status Overall, great case report and literature review as it consolidates all available data on ICA PA presenting as stroke.

**Response:** Thank you very much for your suggestion. There is no doubt that the revised form is a more

complete and standardized table according to your suggestion. I really want to thank you again for your professional suggestion.

16. This is an interesting case report. It is nicely written and I do not have special major recommendations. Overall, I recommend accepting the manuscript. I have a few minor suggestions: In the Introduction, can authors assay more about the background of pseudoaneurysms? The Introduction can be broadened to bring basic information about the topic (incidence, pathology, pathophysiology, overview of symptoms ...)

**Response:** Thank you very much for your professional advice. I have added more detailed description of pseudoaneurysm, which you can review on line 86-94.

17. In the Case presentation, the authors do not report about the possible DSA. The DSA is mentioned in the follow up only. So, did the imaging involve also the DSA at the beginning of the treatment? The authors need to be more precise here

**Response:** I am so sorry for the inaccurate expression. The term cerebral angiography in the article refers to DSA. It was not accurate to describe DSA as cerebral angiography. I really appreciate your professional advice. I really appreciate your professional advice.

18. Babinski sign cannot be positive or negative. What is a negative Babinski? The plantar response is in flexion or extension and the plantar response in the extension is the 'positive Babinski'

**Response:** Thank you very much for correcting my expression about Babinski sign. After consulting relevant literature, I found that the positive expression of Babinski sign did not exist, so I have modified it in the article, and you can check it in line 124-125

19. Introduction: \* The author mentioned, "Rupture of the arterial wall may occur due to several reasons, such as iatrogenic injury, trauma, infection, or tumor invasion." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 82-83).

20. \* According to the CARE guidelines, It is recommended that the authors mention in the introduction what is unique about this case? What does it add to the literature?

**Response:** Thanks for the suggestion. We agree that it is necessary to elaborate on the uniqueness of the article. Based on the journal's format, we have included it in the "Core Tips" section (lines 73-78), which reads as follows: To best of our knowledge, this is the first report of spontaneous carotid artery pseudoaneurysm with stroke in a young adult. This case report may provide insights for diagnosis of carotid artery pseudoaneurysm in youngsters. Conservative therapy is a viable alternative for young patients with small carotid pseudoaneurysm.

21. Methods: Please mention when the literature was searched, search terms, and database used.

**Response:** Thanks for the insightful comment. In fact, we also wanted to show the retrieval process, but did not know which part to put this content in. After your suggestion to show the retrieval process, we have provided this information in the discussion section. We had initially only searched the Pubmed, and the search method was subject words plus free words. The specific search strategy as follows:

((((Ischemic Strokes[Title/Abstract]) OR (Stroke, Ischemic[Title/Abstract]) OR (Ischaemic Stroke[Title/Abstract]) OR (Ischaemic Strokes[Title/Abstract]) OR (Stroke, Ischaemic[Title/Abstract]) OR (Cryptogenic Ischemic Stroke[Title/Abstract]) OR (Cryptogenic Ischemic Strokes[Title/Abstract]) OR (Ischemic Stroke, Cryptogenic[Title/Abstract]) OR (Stroke, Cryptogenic Ischemic[Title/Abstract]) OR (Cryptogenic Stroke[Title/Abstract]) OR (Cryptogenic Strokes[Title/Abstract]) OR (Stroke, Cryptogenic[Title/Abstract]) OR (Cryptogenic Embolism Stroke[Title/Abstract]) OR (Cryptogenic Embolism Strokes[Title/Abstract]) OR (Embolism Stroke, Cryptogenic[Title/Abstract]) OR (Stroke, Cryptogenic Embolism[Title/Abstract]) OR (Wake-up Stroke[Title/Abstract]) OR (Stroke, Wake-up[Title/Abstract]) OR (Wake up Stroke[Title/Abstract]) OR (Wake-up Strokes[Title/Abstract]) OR (Acute Ischemic Stroke[Title/Abstract]) OR (Acute Ischemic Strokes[Title/Abstract]) OR (Ischemic Stroke, Acute[Title/Abstract]) OR (Stroke, Acute Ischemic[Title/Abstract])) OR ("Ischemic Stroke"[Mesh])) AND ((((((Aneurysms, False[Title/Abstract]) OR ((False Aneurysms[Title/Abstract])) OR (Pseudoaneurysm[Title/Abstract])) OR (Pseudoaneurysms[Title/Abstract])) OR (False Aneurysm[Title/Abstract])))) OR ("Aneurysm, False"[Mesh])) Filters: Case Reports. However, After reading the advice you gave me on including all the cases, I deeply realized that the cases I included were not comprehensive. Therefore, I re-searched literatures in Embase and Web of Science databases, and a total of 98 cases were retrieved in the three databases. Finally, 16 cases were selected and included. I really appreciate your suggestion, which makes my literature review more complete.

22. \* In the physical examination, would you please explain in more detail the neurological examination such as the motor in both upper limbs and lower limbs, reflexes, sensation, cranial nerve examination?  
**Response:** Thank you for your professional advice. As you said, it is necessary to fill in the details of the various inspections. We conducted a comprehensive physical examination of the patient after admission, but due to the length of the case presentation, it was unrealistic to present all the details of the examination, so we only presented the positive results. However, I think it is necessary for you to supplement the details of the positive results. So I changed it in the new version, which you can check out on lines 121-125.

23. Any previous surgery?

**Response:** The patient had no history of acute trauma, iatrogenic injury, or surgical procedures.

24. \* The author mentioned, "Cerebral angiography indicated a pseudoaneurysm at the origin of the left internal carotid artery with mild stenosis." What do the authors mean by angiography? Is it DSA? Please add a figure with this?

**Response:** Sorry for my inaccurate expression. The term cerebral angiography in the article refers to DSA. It was not accurate to describe DSA as cerebral angiography. I revised it in the whole paper. I really appreciate your professional advice.

25. \* Did the patient have an MRI or DWI?.

**Response:** It is better to assess the patient when they are stable. Unfortunately, we could not perform cranial MRI during the patient's hospital stay as the patient refused to undergo cranial MRI due to financial constraints.

26. \* In the final diagnosis section, would you discuss the cerebral infarction too?

**Response:** Thank you for pointing out this error. I apologize for the carelessness. We have added the discussion of ischemic stroke in the revised version, and the final diagnosis was Left ICA PSA complicated with ischemic stroke.

27. \* The author mentioned, "Low-dose alteplase and oral anticoagulation and antiplatelet therapy." Did the authors use alteplase for a five-day-old infarction? Would you please support this with scientific evidence?

**Response:** First of all, I would like to apologize for my carelessness. In fact, the real situation of the patient was ischemic stroke, and he was then transferred to our hospital to identify the cause of cerebral infarction and follow-up treatment after treatment at a local hospital. Secondly, the patient received timely thrombolytic therapy in the local hospital after ischemic stroke, rather than 5 days later. However, we mistakenly wrote thrombolytic therapy for ischemic stroke in the treatment section. Finally, to avoid any misunderstanding, we have revised the history of present illness and treatment sections accordingly (lines 147-149).

28. \* The author mentioned, "On cervical CTA, the size of pseudoaneurysm at the origin of the left carotid artery was significantly smaller than before, which was consistent with the results of digital subtraction angiography (DSA)." Would you please add figures for these images?

**Response:** The size of pseudoaneurysm was significantly reduced, which was shown in Figure 3, but the reason for this misunderstanding was that I did not indicate which figure was the follow-up result at the end of the text. I apologize for the confusion caused by our carelessness, and we have corrected it in the new version. Thank you very much for your professional advice.

29. \* In the follow-up section, would you please mention when the patient returned to work and any prophylactic measures discussed?

**Response:** In the follow-up section, we had omitted the patient's discharge advice, especially the intervention measures to prevent the recurrence of cerebral infarction. We have added the description of measures to prevent ischemic stroke. In addition, we learnt at the sixth month follow-up that the patient was a freelancer, and he had not yet returned to work. But in general, he is in good physical and mental condition.

30. Discussion: \* The author mentioned, "Spontaneous pseudoaneurysms are rare entities. Spontaneous pseudoaneurysms associated with stroke are exceedingly rare." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 174-175).

31. \* The author mentioned, "In the 14cases reviewed by us, the etiology of 7 cases (54%) was trauma[6-10]." These are five references. Are there two studies missing, or are there studies that had more than one case?

**Response:** We did not omit two studies. The reason for this is that the journals theoretically do not allow more than 5 references in one sentence, which is also what bothers me. However, after a search of all relevant literature according to your suggestion, we have excluded some studies of pseudoaneurysm

caused by cerebral infarction treatment. Finally, we have reviewed the etiology of pseudoaneurysm in the revised manuscript (lines 173-178).

32. \* The author mentioned, "The patient worked as a ceiling decorator, whose daily work required working with his face up for a long time. The prolonged neck extension may have caused damage to the wall of the internal carotid artery, which contributed to the formation of pseudoaneurysm." On what basis is your hypothesis? There are many jobs that the patients are looking up, but we don't see this commonly?

**Response:** We agree that our previous conclusion was a little too absolute. We have updated the conclusion in that the etiology of the patient is still unclear and may be related to the nature of the job as the ceiling decorator. However, the association between the etiology and the job characteristics should be considered in all patients who have unexplained pseudoaneurysms in jobs requiring prolonged extension of the neck as part of their work.

33. \* The author mentioned, "the thrombus embolized to the M1 segment of the left middle cerebral artery, resulting in ischemic infarction of the left cerebral artery." Which cerebral artery? Furthermore, MCA commonly causes UL weakness.

**Response:** We apologize for the mistake. What we really meant was that the blockage of the M1 segment of the middle cerebral artery resulted in ischemic stroke of the brain in its dominant area. We have corrected this in the revised manuscript (lines 187-189).

34. \* The author mentioned, "It is a noninvasive, cost-effective, and radiation-free method." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 194-197).

35. \* The author mentioned, "Surgery and endovascular therapy are two main treatment modalities for carotid pseudoaneurysm." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 224).

36. \* The author mentioned, "Open surgery is associated with a high risk of severe complications." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 225-228).

37. \* The author mentioned, "The specific treatment approach for carotid pseudoaneurysm depends on its location." Would you please add a reference to this sentence?

**Response:** We agree that all viewpoint should be supported by relevant references. In the revised manuscript, we have cited the references (lines 233-234).

38.\* Would you please include all the studies that reported the same pathology in your review of literature? For example: Chavan R, Ichaporia N, Vhora S, et al. Endovascular management of internal carotid artery pseudoaneurysms: Retrospective observational study. *Interdisciplinary Neurosurgery*. 2021;24:101042

**Response:** We have reviewed this study and have cited it in the revised manuscript. In addition, we searched other databases according to your suggestion and included the studies that fit the research purpose. Moreover, we have summarized all relevant studies in a table.

38. General: The English language level is poor, and there are too many errors to identify individually in this revision. Hence, a revision by a professional is highly recommended.

**Response:** I can conclude from your review comments that you are a professional reviewer. Besides, your English level is very high and you can always express your opinions accurately and standardly. Thanks for your suggestion. The revised manuscript has been edited and proofread for all language-related errors by Medjaden Biosciences Inc., a professional medical editing company. We hope this revision can meet your requirements.

## Round 2

1. Would you please add these search terms as a supplementary file so any researcher can reproduce your result?

**Response:** Thank you for your professional advice. it is necessary to provide a supplementary file that contains the search strategy to facilitate other researchers getting the same result. I have upload the supplementary file in my new version.

Would you please mention this in the results and in discussion as a limitation because of the short term follow-up?

**Response:** Thank you very much for your suggestion. The relatively short term of follow-up is the limitation of our report, I have mention in the sections of "OUTCOME AND FOLLOW-UP "and "DISCUSSION"(lines 165-166 and lines 257-258). In a word, I really appreciate the attention you pay for my manuscript.