11-Jun-2022

Dear Dr. Rustici:

Manuscript ID NRJ-22-0070 entitled "The angio-architectural features of brain AVMs: is it possible to predict the risk of rupture?" which you submitted to The Neuroradiology Journal, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter.

The reviewer(s) have recommended publication, but also suggest some revisions to your manuscript. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into https://mc.manuscriptcentral.com/nrj and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

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You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using bold or colored text.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Center.

When submitting your revised manuscript, you will be able to respond to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to The Neuroradiology Journal, your revised manuscript should be uploaded as soon as possible. If it is not possible for you to submit your revision in a reasonable amount of time, we may have to consider your paper as a new submission.

Once again, thank you for submitting your manuscript to The Neuroradiology Journal and I look forward to receiving your revision.

Sincerely,
Professor Luca Saba
Editor in Chief, The Neuroradiology Journal
lucasabamd@gmail.com

Reviewer(s)' Comments to Author:

Reviewer: 1

Comments to the Author
It is my opinion that angioarchitectural factors seen at presentation cannot be used to dictate risk. This could determine a major confusion: risk only can be predicted with cohorts of untreated patients prospectively followed. The number of cases is low and that makes statistics hard with so many subgroups. It is not clear how you've done measurements on angiograms. Some basic language issues have to be solved (founded? as past form of to find).

Reviewer: 2

Comments to the Author
In this retrospective study the authors analyzed the radiological features associted to the risk of avm rupture. The results are coherent with the findings from literature and give useful tips for the standardization of the assessment of avm risk of rupture.
In my opinion there are some minor revisions to be done:
1) a linguistic and grammar need to be performed in order to improve the quality of the paper and to correct some typos/inconsistencies.
2) in "data acquisition", please indicate the years of radiological experience of the neuroradiologists who performed the imaging evaluation. Further, please switch the formula "presence" to "presence/abscence"
3) in the "discussion" section, please avoid to repeat the statistical results. All the results are already reported in the tables and in the "results" section.

Editor in Chief(s)' Comments to Author:

Associate Editor: Yang, Qi
Comments to the Author:
(There are no comments.)

Author's revision letter

We are grateful to all reviewers for their brilliant and stimulating comments and observations, that allowed us to ameliorate our paper. We have deeply revised our manuscript following their appreciated suggestions and we provide our point-to-point responses.

We thank again the reviewers and editors, and we hope that the revised manuscript could be accepted to Journal of Neurosurgical Sciences.

Reviewer: 1

Comments to the Author

It is my opinion that angioarchitectural factors seen at presentation cannot be used to dictate risk. This could determine a major confusion: risk only can be predicted with cohorts of untreated patients prospectively followed. The number of cases is low and that makes statistics hard with so many subgroups. It is not clear how you've done measurements on angiograms. Some basic language issues have to be solved (founded? as past form of to find).

Response to Reviewer #1.

We thank the Reviewer for his/her careful reading of our manuscript. We agree that retrospective studies have limitations and prospective ones are needed to assess the risk of rupture for AVMs. The aim of our study is to report different angioarchitectural features of ruptured and unruptured AVMs, to suggest the needing for a neuroradiological score to assess the risk of rupture, as it has been already done for aneurysms.

Nevertheless, for retrospective studies the odd ratio (OR) could be used to determine whether there is an association between exposure to certain risk factors and the onset of a disease. Although the term "risk" in statistical language refers simply to the probability that an event will occur, we have modified the term "risk" through all our manuscript with the term "probability", to avoid misunderstandings.

We added a limitation section at the end of the discussion, also including the limited number of cases considered in our series. However, the number of cases in our series is consistent with previously retrospective series reported in literature, because AVMs are considered rare pathologies.

We added explanations of angiograms measurements in the "Data Acquisition" section.

The English language has been deeply reviewed.

Reviewer: 2

Comments to the Author

In this retrospective study the authors analyzed the radiological features associted to the risk of avm rupture. The results are coherent with the findings from literature and give useful tips for the standardization of the assessment of avm risk of rupture.

In my opinion there are some minor revisions to be done:

1) a linguistic and grammar need to be performed in order to improve the quality of the paper and to correct some typos/inconsistencies.

2) in "data acquisition", please indicate the years of radiological experience of the neuroradiologists who performed the imaging evaluation. Further, please switch the formula "presence" to "presence/abscence"

3) in the "discussion" section, please avoid to repeat the statistical results. All the results are already reported in the tables and in the "results" section.

Response to Reviewer #2.

We thank the reviewer, we sincerely appreciated his/her good suggestions and advice, and we feel very encouraged by these feedbacks, which would certainly improve the quality of the paper.

1. The English language has been deeply reviewed to correct the typos/inconsistencies.
2. In data acquisition we have added the years of radiological experience of the neuroradiologists who performed the imaging evaluation. Further, we changed the formula "presence" to "presence/abscence" as requested.
3. We have shortened the discussion section and deleted redundant repetition of the statistical results.