Reviewer’s report

Title: Alteration of choroidal thickness in a case of carotid cavernous fistula: a case report and a review of the literature

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Reviewer: Astor Junior Grumann

Reviewer’s report:

General considerations:
The authors have presented a case report where they showed an increase in the choroidal thickness due to the venous congestion caused by a carotid cavernous fistula. Although the subject was original, the fistulas radiologic and ophthalmologic features were poorly described. The background review is based on incomplete concepts; the type of fistula, as well as the employed treatment for the fistula were superficially described. The conclusion is inadequate.

- Major Compulsory Revisions

Background
1 Line 1. The affirmation “Carotid cavernous fistula (CCF) is an abnormal arteriovenous communication in the cavernous sinus and internal carotid artery” This affirmation is not true, carotid cavernous fistulas are an abnormal communication either between the cavernous sinus and the external carotid artery. A literature review is required.

2 Line 2. The affirmation “These cases typically have a high flow …” is incomplete. The authors described a low flow fistula! A literature review is required.

3 Line 5. – the fistula’s classification is confused and incomplete. A literature review is required.

4 Line 10 – The treatment options should be better explained. Some cases of dural fistula could improve spontaneously.

Case presentation:
1 – How long had the patient had ophthalmic symptons?
2 – In the first instance, how was the exophthalmometry.?
3 – How was the opthalmic fundus at first? Did it have venous congestion?
4 – Did the patient have an optic nerve edema which would explain the low vision?
5 – Improve the description of the radiologic characteristics of the fistula.
6 – At the last visit had all the ophthalmologic signals and symptoms disappeared?
If no changes were noted between the pre- and postoperative fundus blood flow in her affected eye. How could the authors explain the reduction in the choroidal thickness?

Conclusion:
1 – The authors have suggested that it is possible to diagnose fistulas with the utilization of OCT. This exam can show, the fundus congestion caused by venous stasis, but this is a very unspecific find that can be caused by different pathologies. So I do not believe that the OCT could be used to diagnose the fistula, but only as a complimentary exam to follow diagnosed patients.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests' below