LETTER

Choroidal Thickness and Retinal Vein Occlusions [Letter]

Andrea Valerio Marino, Marco Gioia D, Ludovica Reda D, Aniello La Marca D

Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana", University of Salerno, Baronissi, Salerno, Italy

Correspondence: Ludovica Reda, Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana" University of Salerno, via S. Allende, Baronissi, Salerno, 84081, Italy, Tel +39 089672407, Email Ireda@unisa.it

Dear editor

We read with great interest the article by Moleiro et al¹ concerning peripapillary and subfoveal choroidal thickness (ChT) in case of retinal vein occlusions.

We congratulate the authors because BRVO and CRVO are leading causes of visual loss in the world, especially in the elderly and research on this topic is always interesting.

ChT measurements have been checked in several diseases^{2,3} but we have some concerns about the reliability of the measurements obtained in this paper. The reason is that, as shown in Figure 1, the foveal depression is not certainly identifiable because of retinal exudates, making the assessment of subfoveal ChT.

In the case of small structures to be precise is very important because a few microns could significantly change the results as ChT varies greatly from the foveal to the perifoveal area.

Even though it is known that the measurements should performed on images obtained in microns scale the authors evaluate ChT on images in pixels scale.

In addition, several papers prove a relationship between ChT and axial length: eyes with a shorter axial length are related to thicker choroid and longer axial lengths to thinner one, but the authors did not consider the possible physiological difference between the axial length of both eyes.

We are aware that axial length measurements are not very precise and some corrections are needed, but they should be precise enough for checking relationships.⁴

Funding

There is no funding to report.

Disclosure

The authors report no conflicts of interest in this communication.

References

- 1. Moleiro AF, Godinho G, Madeira C, et al. Peripapillary and subfoveal choroidal thickness in retinal vein occlusions. *Clin Ophthalmol*. 2022;16:3775–3783. doi:10.2147/OPTH.S379373
- De Bernardo M, Vitiello L, Battipaglia M, et al. Choroidal structural evaluation in celiac disease. Sci Rep. 2021;11:16398. doi:10.1038/s41598-021-95812-v
- 3. De Bernardo M, Salerno G, Gioia M, et al. Intraocular pressure and choroidal thickness postural changes in multiple system atrophy and Parkinson's disease. *Sci Rep.* 2021;11(1):8936. doi:10.1038/s41598-021-88250-3
- 4. De Bernardo M, Cione F, Capasso L, Coppola A, Rosa N. A formula to improve the reliability of optical 56 axial length measurement in IOL power calculation. *Sci Rep.* 2022;12:18845. doi:10.1038/s41598-022-23665-0

Marino et al **Dove**press

Dove Medical Press encourages responsible, free and frank academic debate. The contentTxt of the Clinical Ophthalmology 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Clinical Ophthalmology editors. While all reasonable steps have been taken to confirm the contentTxt of each letter, Dove Medical Press accepts no liability in respect of the contentTxt of any letter, nor is it responsible for the contentTxt and accuracy of any letter to the editor.

Clinical Ophthalmology

Dovepress

Publish your work in this journal

Clinical Ophthalmology is an international, peer-reviewed journal covering all subspecialties within ophthalmology. Key topics include: Optometry; Visual science; Pharmacology and drug therapy in eye diseases; Basic Sciences; Primary and Secondary eye care; Patient Safety and Quality of Care Improvements. This journal is indexed on PubMed Central and CAS, and is the official journal of The Society of Clinical Ophthalmology (SCO). The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

 $\textbf{Submit your manuscript here:} \ \texttt{https://www.dovepress.com/clinical-ophthalmology-journal}$



