

Title: RE: Relationship between reticular pseudodrusen and choroidal thickness in intermediate age-related macular degeneration.

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Dear Editor, we read with interest the study by Dr. Ho et al.¹ about the relationship between reticular pseudodrusen (RPD) and choroidal thickness in intermediate age related macular degeneration and would like to comment on their results and conclusions.

The authors infer, at the end of the paper, that choroidal insufficiency may be a less important variable in the aetiology of RPD than had previously been thought. They reported that age and more myopic refractive error, but not the presence of RPD, was associated with reduced choroidal thickness in their cohort.¹ We carefully looked at their data and their statistical analysis and we think the authors should be more cautious before drawing this conclusion.

It is known that choroidal thickness decreases with ageing and bulb elongation regardless of the presence of RPD. We do not think that this is enough to conclude that there is no correlation between choroidal thickness and the presence of RPD. In fact, older people have both thinner choroids and a higher prevalence of RPD.

Looking at the graphs reported in Figure 4¹ it seems that before 72 years of age, choroidal thickness in subjects with RPD is mostly below the regression line for non-RPD patients. This could mean that subjects with RPD actually do have thinner choroids when the choroid is still thick enough in the normal population to detect a difference. The difference may not be evident as the choroid gets thinner due to ageing, as both the RPD and non-RPD population have thin choroids. In other words, thinner choroids may be associated with RPD, but as everyone ages, even the non-RPD people have thin choroids, whereas the RPD group just stays thin throughout. This concept was demonstrated in a previous publication by Cheng et al.² The fact that Ho et al. did not find a difference in the younger half of their population¹ may be because the sample size was too small or the division of the groups was performed at the wrong age.

Choroidal insufficiency is definitely not enough to explain the development of RPD. Myopic eyes in elderly do not show a higher prevalence of RPD than emmetropic eyes.³ Also, no abnormalities in the choriocapillaris have been found in areas of the fundus affected by RPD.⁴ However, the reports of an association between RPD and choroidal thinning from several independent groups⁵ cannot be ignored.

In conclusion, the etiology of RPD is likely multifactorial and the possible causative effect of choroidal insufficiency on RPD development as well as its extent is still to be established.⁵

References

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