Case report by Angelica Ly

A 63 year old Caucasian female was referred to CFEH following findings of numerous macular drusen by her optometrist. She denied any visual or ocular symptoms. Her ocular and medical histories were unremarkable. She reported that a distant cousin has macular degeneration.

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<tr>
<th>OD</th>
<th>OS</th>
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<tbody>
<tr>
<td>Entering unaided acuities</td>
<td>6/6+</td>
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<tr>
<td>Amsler grid</td>
<td>Unremarkable</td>
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<tr>
<td>Contrast sensitivity – MARS test (normal Range 1.52 – 1.96)</td>
<td>1.68 units</td>
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Summary: The findings were consistent with reticular macular disease in both eyes. There was no current evidence of exudative changes.

Management plan: Review in 6 months with repeat imaging, self monitor with Amsler, discuss dietary modification and supplementation.
Clinical implications

- **Both soft drusen and RPD occur in patients with age related macular degeneration (AMD), especially late AMD.**

Like soft drusen, RPD have been described as a high risk sign for late AMD with an estimated prevalence of 9-36% in AMD patients.\(^1\)\(^-\)\(^8\) The high association between RPD and late AMD has led previous authors\(^9\) to conclude that their absence might indicate the presence of other diseases that mimic the late AMD phenotype.

- **The risk factors and pathogenesis of RPD may be similar to AMD.**

Independent studies conducted by Joachim et al.\(^1\)\(^-\)\(^10\) and Finger et al.\(^1\)\(^-\)\(^13\) have shown that these include age, gender, smoking and genetic risk factors. Differences in choroidal integrity in eyes with RPD have also been noted by several studies. These include decreased choroidal filling in early fluorescein angiography frames\(^1\)\(^-\)\(^4\) and reduced subfoveal choroidal thickness in eyes with RPD.\(^1\)\(^3\) Thus, it has been suggested that RPD may be related to choroidal hypoxia which, in turn, could be related to choroidal neovascularisation.\(^1\)\(^4\)

- **The presence of RPD is a strong risk factor for progression to late AMD.**

Other strong risk factors for progression include large drusen and pigmented abnormalities\(^1\)\(^-\)\(^15\) while factors such as total area of RPD and central location were not significant in predicting 5 year progression to late AMD. In particular, RPD has been linked to an increased risk of progression to geographic atrophy, more so than the neovascular form.\(^1\)\(^2\) Consequently, patients with AMD should be carefully evaluated for RPD and their presence should alert the eye-care professional to conduct more regular follow up.

References


