

## Reticular drusen or Reticular Pseudodrusen

Reticular drusen, also known as reticular pseudodrusen, are a particular type of drusen observed in the retina, distinct from the more common soft or hard drusen usually associated with age-related macular degeneration (AMD). They are important in the context of retinal diseases, especially AMD, due to their unique characteristics and implications for disease progression and management.

Key points about reticular drusen include:

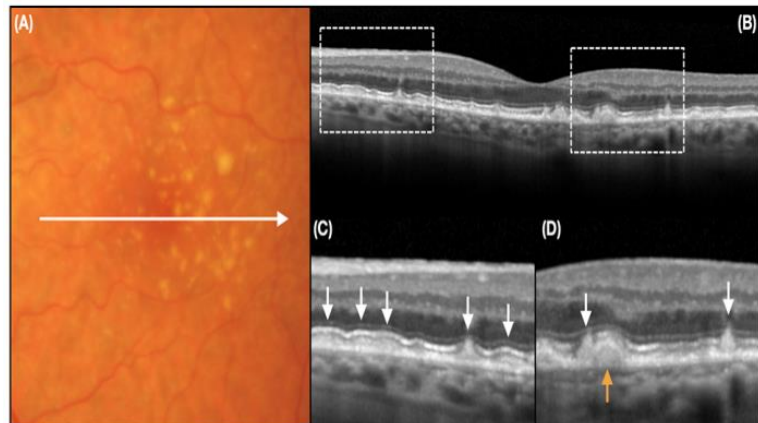
### 1. Appearance and Location:

Reticular drusen appear as a network of yellowish-white lesions on fundus examination, typically located above the retinal pigment epithelium (RPE) layer. Unlike typical drusen that are located deeper, reticular drusen are superficial and have a distinctive appearance described as a "reticular" or "net-like" pattern.

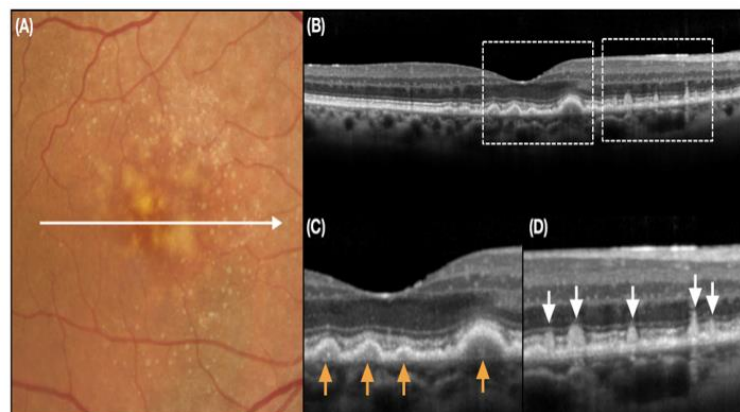
**2. Detection and Imaging:** They are best visualized using specific imaging modalities like spectral-domain optical coherence tomography (SD-OCT) and fundus autofluorescence (FAF). On OCT, they appear as subretinal drusenoid deposits. Their unique appearance on these imaging modalities helps differentiate them from typical drusen.

**3. Association with AMD:** Reticular drusen are strongly associated with age-related macular degeneration, particularly the late and more severe forms of the disease. Their presence can be a marker for an increased risk of progression to advanced AMD, including both the geographic atrophy and neovascular forms.

**4. Pathophysiology:** The exact pathogenesis of reticular drusen is still a subject of research. They are thought to arise due to changes in the choroidal circulation and RPE, leading to abnormal material accumulation above the RPE.



**Figure 1:** Example of an eye with large drusen and reticular pseudodrusen (RPD) as seen on a colour fundus photograph (A); note the faint network of broad interlacing ribbons of drusen-like deposits that represent RPD. An optical coherence tomography (OCT) B-scan (B) was taken through the fovea (indicated by the white horizontal arrow), and it reveals the presence of RPD above the retinal pigment epithelium (RPE; white vertical arrows on the magnified inserts in C and D, corresponding to the white dashed rectangles in B) that were distinct from conventional drusen below the RPE (orange vertical arrow).



**Figure 2:** Example of another eye with large drusen and reticular pseudodrusen (RPD) as seen on a colour fundus photograph (A); note the presence of pale-yellow, discrete deposits that represent RPD. An optical coherence tomography (OCT) B-scan (B) was taken through the fovea (indicated by the white horizontal arrow), and again reveals the presence of RPD above the retinal pigment epithelium (RPE; white vertical arrows on the magnified inserts in D, corresponding to the white dashed rectangles in B) that were distinct from conventional drusen below the RPE (orange vertical arrow in C).

**5. Clinical Significance:** The presence of reticular drusen in AMD patients signifies a distinct phenotype of the disease. It has implications for prognosis, with some studies suggesting a higher risk of progression to advanced AMD. They may also influence the response to treatments like anti-VEGF therapy.

**6. Management and Monitoring:** Patients with reticular drusen, especially those with AMD, require close monitoring for signs of disease progression. Regular follow-ups using OCT and other imaging modalities are crucial for early detection of complications like choroidal neovascularization. 6 monthly is a reasonable period for review which should include Optical Coherence Tomography

It's important to note that the understanding of reticular drusen is still evolving, and ongoing research continues to shed light on their significance in retinal diseases. As always, individuals concerned about their eye health or experiencing symptoms should consult with an ophthalmologist for personalized medical advice.

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Reference Macular Society Foundation Australia Reticular Pseudodrusen in Age related macular degeneration. Update for Optometrists.

URL to article: <https://www.mdfoundation.com.au/news/reticular-pseudodrusen-in-amd-update-for-optometrists/>