### Age-related macular degeneration

**Chair-side reference**

This chair-side reference was designed to assist optometrists in private practice when distinguishing between the different stages and phenotypes of age-related macular degeneration.

- **AMD-related phenotype and distinguishing clinical features**
  - **Optical coherence tomography (OCT)**
  - **Fundus autofluorescence (FAF)**

#### Optical coherence tomography (OCT)

- **Reticular drusen**
  - Indistinct, overlapping, yellow-white, round or oval lesions ranging from 25 - 900 µm in diameter
  - May be visible in red-free or blue light

- **Central retinal vein occlusion**
  - May reveal numerous hypo-fluorescent lines associated with loss of 60% of the overlying retina

- **Polypoidal choroidal vasculopathy (PCV)**
  - Multiple and recurrent serous and haemorrhagic PED detachments
  - Orange-red subretinal nodules
  - Spontaneous, recurrent subretinal haemorrhage
  - Drusen are stippled
  - Minimal fluorescein streaking Typically presents as a serosanguineous maculopathy in middle-aged (20-50 years) African or Asian women. Other bilateral but asymmetric

- **Cotton-wool spots**
  - Numerous, densely packed, relatively uniform, small drusen, better seen using FAF described as a 'starry-sky' pattern
  - 50 to 75 µm in diameter

#### Fundus autofluorescence (FAF)

- **Macular hole**
  - central PED pictured) or a peripheral PED (smaller PED pictured).

- **Dysplasia**
  - Reveals marked hyper-fluorescence of large drusen

- **Recurrent subretinal haemorrhage**
  - May reveal numerous hypo-fluorescent lines

- **Disciform scarring**
  - Consistently demonstrates uneven hypo-autofluorescence of the lesion, surrounded by marked hyper-autofluorescence

### AMD-related phenotype and distinguishing clinical features

- **Optical coherence tomography (OCT)**
- **Fundus autofluorescence (FAF)**

#### Optical coherence tomography (OCT)

- **Neovascular AMD**
  - Well-demarcated, highly hyper-reflective lesions associated with loss and dysplasia of the overlying retinal layers

- **Central retinal vein occlusion**
  - May be characterised by regression of serum leakage and an increase in the fibrous component, and may appear as a disconform bar

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