

# Age-related macular degeneration

**M**acular degeneration is a group of degenerative diseases that affect the macular region of the retina. By far, the most common form is age-related macular degeneration (ARMD), which affects 1 in 7 people over the age of 50. Whilst most of these people do not have any symptoms, a proportion will develop blindness and as such this disease accounts for 50% of all registered blindness.

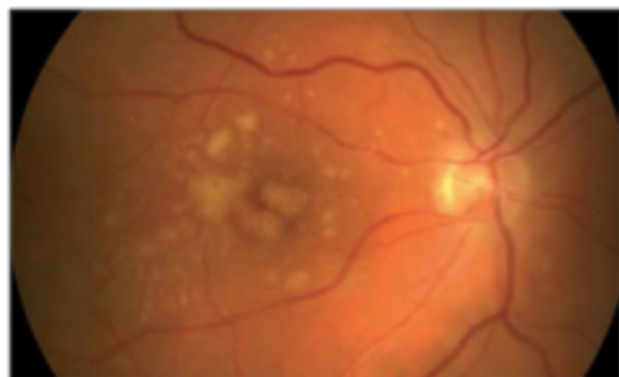
## Major risk factors

- ARMD is rare before the age of 50, but the risk progressively increases thereafter.
- Hereditary - there is a 50% risk of developing ARMD if you have a family history.
- Smoking - increases risk 2-4 fold.

## Types of ARMD

Broadly, there are two forms of ARMD

- Dry ARMD (Figure 1): This is the most common form and is slowly progressive. A small proportion will develop abnormal blood vessel growth underneath the retina - thus developing 'wet' ARMD.
- Wet ARMD: This is an accelerated form that results in rapid blindness if not treated urgently. It is essentially a similar disease to dry ARMD, except that an abnormal choroidal blood vessel membrane has



■ Fig1 dry macular degeneration

grown underneath the retina. These membranes have a very high risk of unpredictable subretinal haemorrhage, oedema and consequently retinal scarring. EARLY treatment is essential with intravitreal injections.

## Symptoms

- Difficulty reading, threading needles or other fine visual tasks.
- Difficulty recognising faces.
- Distortion of straight lines.
- Central scotomas.

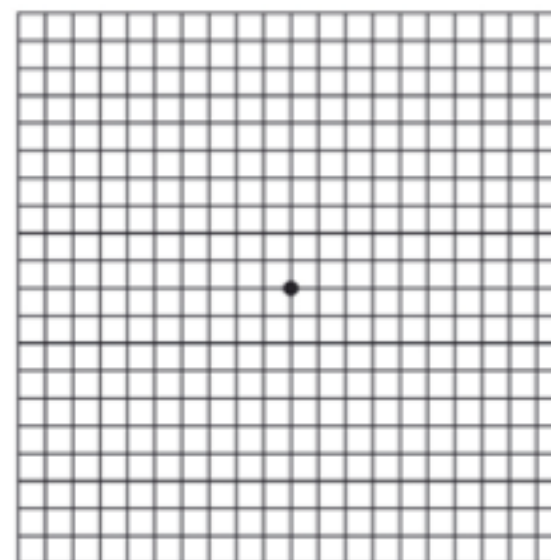
## Advice to patients

People who have developed, or are at significant risk of, ARMD should all be given advice on how to detect changes, and how to reduce their risk of further deterioration.

How to detect vision changes:

- Regularly monitor central vision at home. This can be done with an 'Amsler grid' (Figure 2), by looking at the grout pattern of tiles at home, or at the straight lines of window or door frames.
- Any distortion or new scotoma should be reported and investigated immediately as it may be the first sign of wet ARMD.

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■ Fig2 Amsler grid

## How to reduce the risk of deterioration

- Quit smoking.
- Detect wet macular degeneration early (as late treatment is seldom effective).
- Vitamin supplements: Currently only AREDS formulations have been shown to be effective in a proportion of patients. There is a lack of evidence supporting their use in patients without any sign of ARMD, or in patients with advanced ARMD in both eyes.
- Diet: a diet high in green leafy vegetables, lots of fresh fruit and fish 2-3 times per week. Saturated fats should be avoided as much as possible. A handful of raw nuts (e.g. walnuts, brazil nuts) every week may also help. ●

*Declaration: Perth Eye Centre P/L, managing the Eye Surgery Foundation, supports this clinical update through an independent educational grant to Medical Forum.*