



Age-related macular degeneration: what should a general practitioner know?

Age-related macular degeneration is a progressive condition which results in loss or distortion of the central visual field and is the leading cause of blindness in New Zealand. To reduce the risk of developing age-related macular degeneration, patients can:

- Quit smoking; this is the single biggest step patients can take to reduce their risk
- Consume a diet high in fruit, vegetables and fish
- Avoid UV light


Regular optometrist examinations from the age of 45 years can facilitate **early detection of macular degeneration**, which is usually asymptomatic. If patients are unable to attend an optometrist, visual acuity testing and assessment of retinal changes by direct funduscopy in general practice can help identify those most in need of further clinical attention.

Patients with early or intermediate macular degeneration can take supplements to **reduce progression of early and intermediate disease**. A major study found that a daily supplement containing the following vitamins and minerals was effective in reducing progression to advanced age-related macular degeneration:^{1,2}

- 500 mg vitamin C
- 400 IU vitamin E
- 25 mg zinc
- 2 mg copper
- 10 mg lutein
- 2 mg zeaxanthin

Advanced disease can be classified as “dry” geographic atrophy, or “wet” neovascular age-related macular degeneration. Anti-vascular endothelial growth factor intravitreal injections are **highly effective at reducing vision loss in patients with neovascular age-related macular degeneration**, which accounts for most cases of severe vision loss and blindness. There are currently no pharmacological treatments for patients with geographic atrophy.

Clinicians should assess the psychological wellbeing of patients with age-related macular degeneration as vision loss can often cause depression. Patients with a visual acuity $\leq 6/24$ in the better eye with corrective lenses or with serious visual field defects can be referred to the Blind Foundation of New Zealand.

 For further information, see: “Age-related macular degeneration”, BPJ 70 (Sep, 2015).

References:

1. Age-Related Eye Disease Study Research Group. A randomized, placebo-controlled, clinical trial of high-dose supplementation with vitamins C and E, beta carotene, and zinc for age-related macular degeneration and vision loss: AREDS report no. 8. *Arch Ophthalmol* 2001;119:1417–36.
2. Age-Related Eye Disease Study 2 Research Group. Lutein + zeaxanthin and omega-3 fatty acids for age-related macular degeneration: the Age-Related Eye Disease Study 2 (AREDS2) randomized clinical trial. *JAMA* 2013;309:2005–15.