

E-Scoop lens® – enhancing vision for AMD patients

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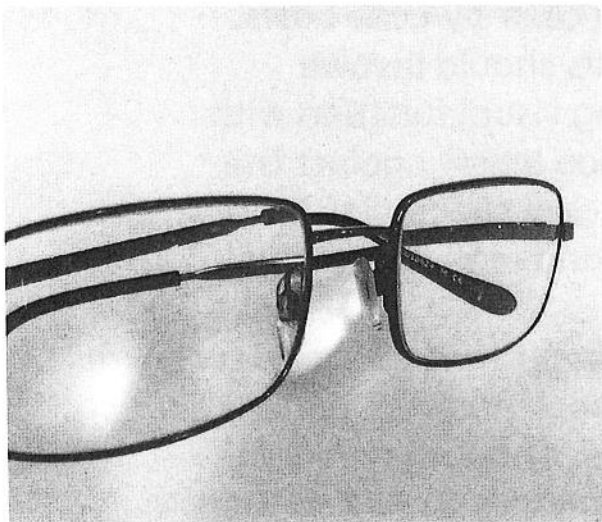
There are a significant number of individuals with age-related macular degeneration (AMD) for whom there is currently no medical treatment. A variety of spectacle lens types, often incorporating a coloured filter, have been proposed as being of benefit to patients with AMD, with varying amounts of success being reported.

One such lens is the E-scoop lens®, which uses a number of basic optical features with the aim of enhancing vision in individuals with AMD (and other ocular diseases). The lens includes the patient's up-to-date

prescription while the thickness and curve of the lens ensures a magnification of 6% for distance vision. The lens can be supplied with differing amounts of prism (4, 6 or 8 prism dioptres), which is intended to shift the retinal image from the fovea in the macula to a healthier part of the retina to further enhance the patient's vision.

The lens is available as a normal clear lens or can be tinted yellow or brown, which patients often feel improves their vision due to improved contrast and reduced glare. The lens is supplied by the Norville Group optical company in the UK through a variety of optometrists and can be made for both single vision distance glasses and reading glasses.

An optometrist and I have recently completed a study investigating how using the E-scoop lens® affects the vision in 22 individuals with dry AMD and early vision loss. All of the



participants had their distance visual acuity and ability to see differences in contrast measured while wearing their normal clear spectacle lenses. We examined how well the individual could read by measuring both the smallest size of print the person could see, and also how fast they could read fluently with their reading glasses. All participants then had the vision tests repeated when wearing a yellow E-scoop lens® with prism, which moved the image the person sees away from the fovea into the superior macular area.

The study found that, for the group as a whole, the E-scoop lens® improved their ability to see in the distance by over one full line on a letter acuity chart (LogMAR), and it also improved their ability to see smaller differences in contrast. However, there was considerable individual variation in the amount of improvement measured; some individuals did not experience any difference in their ability to read letters while others' ability improved quite dramatically. Some individuals also displayed much faster reading with the E-scoop lens®.



This research study has found that the E-scoop lens® can significantly improve some clinical measures of visual performance in some AMD patients. However, not all individuals show a measurable change in vision with these lenses. Therefore, optometrists should consider the benefit of prescribing such lenses in individuals with AMD on a case-by-case basis. Ideally this should involve comparing visual function with the E-scoop lens® against the patient's own spectacles for distance and reading tasks.

Also it is important to consider any feedback from the patient as to whether or not they feel the lenses can bring benefit to them in their everyday life.