

MACULA LENS HAS PROMISE

New add-on IOL can improve outcomes for macula disease.

Cheryl Guttman Krader reports



The Scharioth Macula Lens (A45SML, Medicontur, Hungary), an add-on intraocular lens (IOL) for near visual rehabilitation in patients with macula disease, was designed to overcome the limitations of existing options and has demonstrated positive results in a proof of concept study enrolling patients with advanced age-related macular degeneration (AMD), according to its developer Gábor B Scharioth MD, PhD.

Speaking at the XXXIII Congress of the ESCRS in Barcelona, Spain, Dr Scharioth said that the simple bifocal lens provides about 2X magnification at 15cm, although the exact amount depends on anatomical factors. Made of hydrophilic acrylic, the optic has a central 1.5mm +10.0D optical zone, and a peripheral zone that is optically neutral or can have other powers. The IOL has polished round edges and a special haptic design to prevent iris chafing and/or iris capture.

The lens is implanted through a 2.2mm incision into the ciliary sulcus in the better-seeing eye, and its patented haptics design optimises centration.

"This add-on IOL can be implanted independent of lens status in a safe and easy procedure. It provides sufficient magnification to improve near vision, does not

adversely affect the visual field, distance vision, or retina diagnostics, and is less expensive than other implants as well as reversible," said Dr Scharioth, Senior Consultant, Aurelios Augenzentrum, Recklinghausen, Germany.

The proof of concept study was launched September 2013 and included eight eyes. There were no complications related to the surgery or implant, and Scheimpflug imaging showed adequate spacing between the add-on and primary IOL.

NEAR VISION

Outcomes assessments showed near vision tested with a Radner reading chart improved in seven eyes, with most patients achieving the ability to read newspaper size print. The patient who had no improvement had very advanced AMD in both eyes and still reported subjective improvement. Excluding that individual, visual acuity (VA) improved at 40cm by five lines and by 2.4 lines at 15cm. Best-corrected distance VA was unchanged in all eyes.

Dr Scharioth said that any patient with maculopathy complaining about difficulty with near vision is a candidate for the add-on IOL. As a simple screening test, patients are evaluated for improvement in near vision with testing at 15cm (+6.0D) versus at 40cm (+2.5D).

Although the add-on IOL can be implanted at the time of cataract surgery, Dr Scharioth said he prefers patients to undergo cataract surgery first, and then the VA screening test if they are unsatisfied with their vision postoperatively.

He acknowledged that there are financial issues to be solved in terms of coverage and that the selection criteria for the add-on IOL also need to be improved.

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