

LENSES

E-scoop case study

Dutch optometrist **Joanneke Kampen-Smalbrugge** describes a case where the E-Scoop lens offered the solution needed by a patient at her low vision clinic

The number of visually impaired people in the Netherlands is about 320,000, which is set to rise to 354,000 by the year 2020. As an optometrist, I see and advise about 10 patients attending my low vision clinic on a daily basis. Patients are usually referred to the low vision clinic by an ophthalmologist and undergo a full visual function examination. Such low vision clinics are to be found in the ophthalmology department of almost every hospital in the Netherlands.

E-SCOOP

The E-scoop is a lens especially designed to offer useful and comfortable vision for people who have age-related macular degeneration. E-scoop incorporates five distinct optical elements:

- Magnification
- Prism
- A selective contrast filter
- High quality coating
- Individual refractive correction

CASE STUDY

A 70 year old was referred to me by an ophthalmologist who I saw at the low vision clinic in the Academic Medical Centre in Amsterdam. Their referral stemmed from the ophthalmologist not being able to treat their glaucoma any further and they now had end-stage glaucoma in both eyes.

History and symptoms

The patient complained that reading had become very difficult. They also experienced reduced vision in the distance and was severely adversely affected by bright sunlight. On top of this they felt insecure walking in the street as a result of their limited sight. Visual fields were unremarkable beyond the central scotoma.

Refraction:

R plano/ -1.00 x 171
L -0.25/-1.00 x 13

Visual acuity (ETDRS chart decimal notation)

without E-Scoop:	with E-Scoop:
R 0.20	R 0.25
L 0.10-	L 0.10
Binocular 0.20	Binocular 0.25

FIGURE 1 Patient wearing E-Scoop lenses

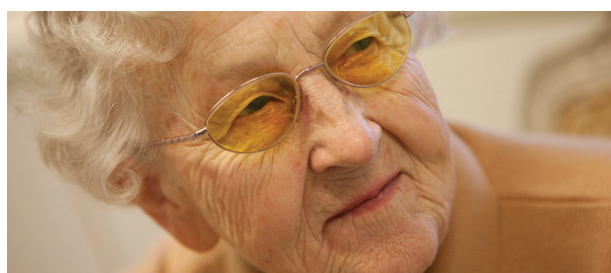


FIGURE 2 E-scoop trial set



Contrast sensitivity (Pelli-Robson chart)

without E-scoop:	with E-scoop:
R 1.05	R 1.20
L 0.15	L 0.15
Binocular 1.05	Binocular 1.20

Visual acuity @25cm

Binocular 0.15 with great difficulty (addition +4.00D)

Advice given

I recommended several low vision aids:

- A video magnifier for reading
- E-Scoop (type 1) for distance
- Shadowmaster – a small solar cover that can be fixed to the arms of the spectacle frame to protect the patient from direct sunlight.

I also advised mobility training for getting used to walking with a cane to help the patient move independently and safely.

Evaluation

Two months after their low vision examination, I saw this patient again for evaluation. They were very happy with the video magnifier, and was now able to read independently.

They were also very pleased with their E-Scoop lenses and found them particularly useful outdoors. The patient felt less affected by sunlight, was more confident and reported feeling more comfortable with their vision in general. The Shadowmaster was used when the light outside was very bright, preventing disabling glare, especially over the top of the frames.

Points to consider

E-Scoop lenses were originally designed for patients with age-related macular degeneration. These lenses can give an improvement in visual acuity, contrast sensitivity and can create a sense of improved visual comfort. I have worked with E-Scoop for several years now and have discovered that the lenses also offer improvements for other ocular pathology as well as AMD. Some of my glaucoma patients have also reported benefits when wearing the lenses. ○

Joanneke Kampen-Smalbrugge is an optometrist and policy officer at Revoir group in the Netherlands www.revoir-groep.nl