

Good initial results with two new multifocals



Baha Toygar

Roibeard O'hEineachain in Lisbon

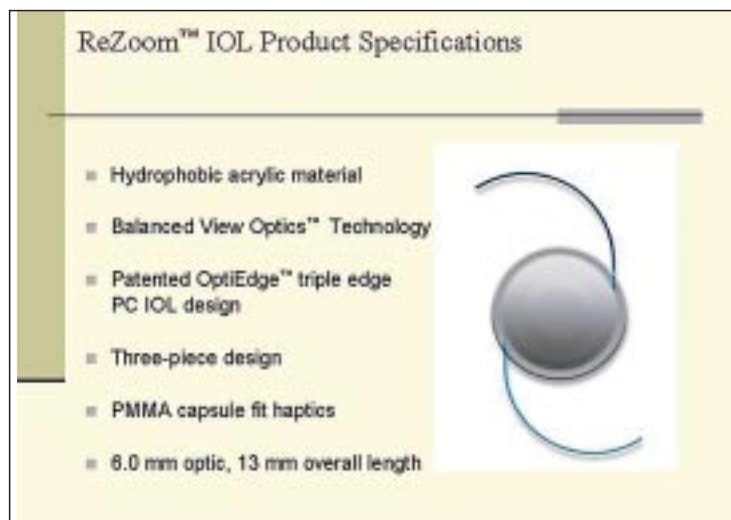
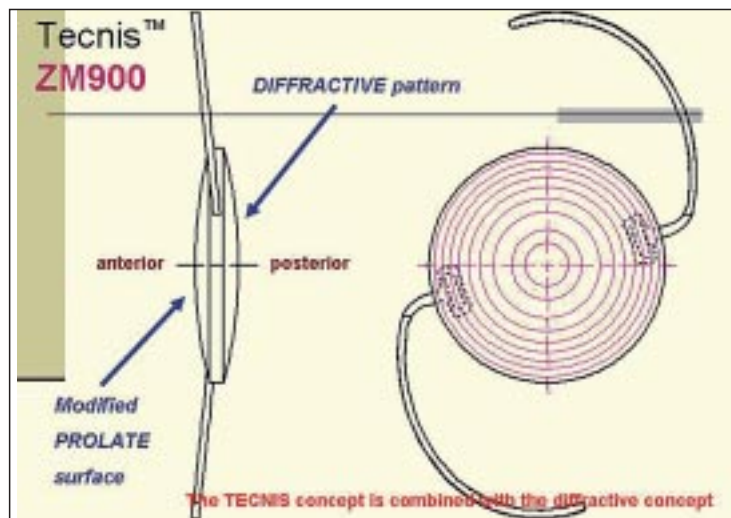
BOTH the Tecnis™ multifocal and the ReZoom™ multifocal IOLs (AMO) can provide good near and distance vision to cataract patients and those who wish to undergo refractive lens exchange. However, careful patient selection is critical for achieving optimal results with the lenses, said Baha Toygar MD, Dunya Eye Hospital, Istanbul, Turkey

Visual outcomes following implantation of the two lenses were assessed in patients with cataracts, high refractive errors or presbyopia. The majority of eyes with either lens achieved an uncorrected distance visual acuity (monocular vision) of 20/25 and a near visual acuity of J3, Dr Toygar told the XXIII Congress of the ESCRS.

“The Tecnis and ReZoom IOLs correct far and near vision, reducing the dependency on glasses. Predictability with the lenses is comparable to LASIK,” he said.

The Tecnis multifocal is a silicone IOL with an anterior prolate surface designed to compensate for the positive spherical aberration of the cornea. It also has a diffractive posterior surface to provide multifocality with a near add of 4.0 D independent of pupil size, Dr Toygar explained.

The ReZoom™ intraocular lens is a second-generation hydrophobic acrylic refractive multifocal



IOL that distributes light over five optic zones. It has a distance-dominant central zone for distance vision in bright light conditions when the pupil is constricted, he continued.

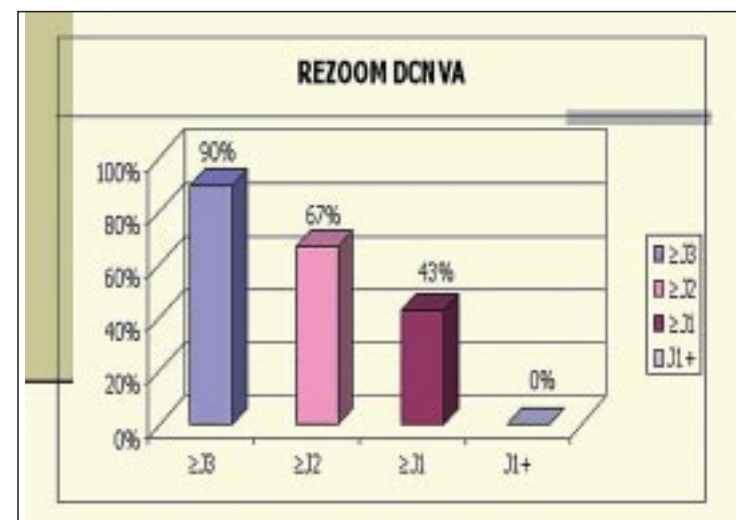
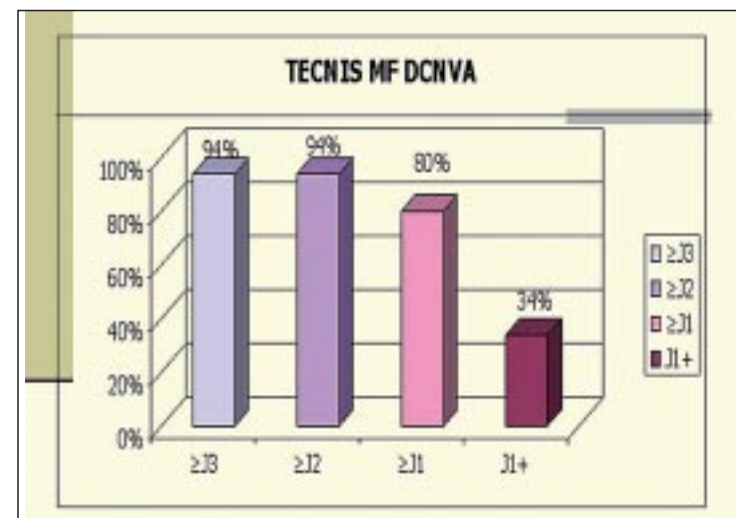
Dr Toygar's study involved 37 eyes of 20 patients implanted with the Tecnis multifocal and 21 eyes of 13 patients implanted with the ReZoom IOL. The patients in the Tecnis group had a mean age of 47 years (range: 22-65 years) and a mean spherical equivalent of -0.67 ± 5.96 D. Those in the ReZoom group had a mean age of 53 years (range: 26-81 years) and a mean spherical equivalent of -1.74 ± 5.47 D.

Good near and distance acuity in both groups

At a follow-up of up to three months, mean UCVA improved from a preoperative value of 0.29 to 0.67 postoperatively, in eyes with the Tecnis multifocal IOL, and from 0.25 to 0.83 in eyes with the ReZoom lens. Mean BCVA increased slightly from 0.80 to 0.81 in the Tecnis multifocal group and improved considerably from 0.73 to 0.94 in the ReZoom group.

As regards near visual acuity, in the Tecnis multifocal group 89.2% of the eyes achieved J3 or better and 62% achieved J1 or better. Moreover, distance-corrected near visual acuity in the Tecnis group was J2 or better in 94.6% of eyes and J1 or better in 81% of eyes.

In the ReZoom group, 86% of



the eyes achieved J3 or better and 29% achieved J1 or better. Distance-corrected near visual acuity was J3 or better in 91% of eyes and J1 or better in 43% of eyes.

Dr Toygar noted that in the Tecnis multifocal group, three patients with a dim light pupil larger than 6.0 mm experienced glare and haloes. In the ReZoom group, one patient with dim light pupil of 4.5 mm had a near visual acuity of only J7, while another with a dim light pupil of 7.0 mm experienced haloes.

He therefore suggested that based on the different optical design of the lens the ReZoom lens may provide better results than the Tecnis lens in eyes with a dim light pupil over 5.0 mm,

while the Tecnis lens may provide better results than the ReZoom lens in eyes with a dim light pupil under 5.0 mm. However, he noted that it can also take patients a few months for their vision to fully stabilise and to adapt to multifocality.

“Early refractive results after Tecnis and ReZoom multifocal intraocular lens implantation in high myopic, hyperopic and presbyopic eyes appear to be a safe, efficient and predictable method.

baha.toygar@dunyagoz.com