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Update

CATARACT & REFRACTIVE

NEW TORIC IOL

Good predictability and stability shown
in initial results with new lens

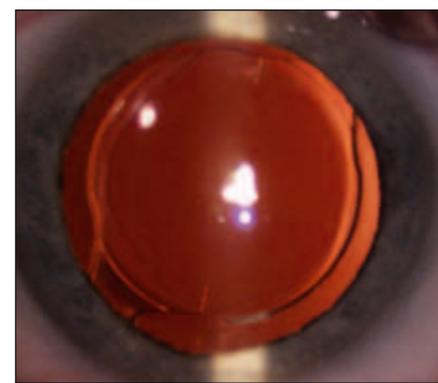
by Roibeard O'hEineachain in Istanbul

A new toric IOL called the Basis Z toric (FirstQ) shows promising early results in cataract patients with astigmatism, although it does require some extra care during implantation, according to a study presented by Detlef Holland MD, Augenklinik Bellevue, Kiel, Germany, at the 15th ESCRS Winter Meeting.

The study involved 41 eyes of 32 patients with cataract and a mean corneal astigmatism of -2.0 D. At a follow-up of four weeks to six months following implantation of the Basis Z IOL, subjective astigmatism was -0.5 D, while mean postoperative sphere was -0.25 D. Furthermore, among eyes with six months of follow-up, uncorrected visual acuity was 0.8 and best corrected acuity was 1.0.

The patients in the study had a median age of 70 years and their corneal astigmatism ranged from -1.03 D to -5.29 D. Dr Holland and his associates excluded eyes with corneal pathologies by means of corneal topography. All underwent biometry with the Zeiss IOLMaster with an online calculator program to calculate the cylinder power, using the Haigis formula.

In all cases, patients underwent implantation of the Basis Z toric with a 2.4mm clear cornea incision and the Firstinjektor (FirstQ) lens injecting system. Immediately prior to surgery, they marked the axis preoperatively in each case with Gerten marker. The implanted lenses had a median sphere of 19.0 D and a median cylinder of +2.5 D with the aim of achieving



Z-Flex Toric at first postoperative day

target refraction of -0.17 D sphere and -0.18 D cylinder.

Dr Holland noted that all IOLs could be implanted within the capsular bag with good centration, without complications and only a very negligible impact on corneal astigmatism. The IOLs had a mean deviation three degrees from the planned axis after six months. In three of the earlier cases the IOL had to be repositioned due to rotation. However, since adopting the practice of using a 5.0mm rhexis that fully overlaps the optic by at least 1.0mm, followed by slower removal of the viscoelastic, no rotations have occurred, he reported.

The basis Z toric IOL is a foldable IOL with z-haptics and is composed of hydrophilic acrylic material, he noted. It is available in spherical powers from zero to 30 D and in cylinder powers from 1.5 D to 9.0 D. It is also available in both clear and blue-blocking versions, he said.

Dr Holland noted that at the time of his report he and his associates had implanted 117 of the new toric lenses. In addition, they are now carrying out a study in which patients undergo phacoemulsification and implantation of the lens through 1.8mm incision, in order to reduce the astigmatic effect of the surgery to a minimum.

"The new Basis Z toric IOL is easy to implant and shows good centration and good refractive predictability. We will need a longer term follow-up concerning its rotational stability and PCO," Dr Holland concluded.



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Detlef Holland MD

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