Improved Stability, Refractive Results With the Aspira-aXA IOL—A Novel IOL With Enlarged Optic Diameter


BY ECKHARD BECKER, MD; AND JENS SCHRECKER, MD

The Aspira-aXA IOL (HumanOptics AG) was launched in 2018 (ESCRS, Vienna, Austria) and offers a series of novel features compared to conventional IOLs. The design combines a 7-mm optic with a cut-out haptic for improved stability and accurate refractive results (Figures 1 and 2). The enlarged optic allows for an extended view at the fundus periphery and reduces dysphotopsia, especially in patients with large pupils.

PANORAMIC VIEW AT THE FUNDUS PERIPHERY

"The Aspira-aXA offers excellent clinical outcomes regarding biocompatibility and visual function," explained Jens Schrecker, MD, Department of Ophthalmology, Rudolf Virchow Klinikum Glauchau, Germany, at the DGII 2020 congress in Mainz, Germany, in his presentation of interim results of a clinical evaluation. Four months postoperatively, patients achieved a mean monocular uncorrected distant visual acuity of 0.0 logMAR. No intra- or postoperative complications occurred, and all eyes showed a well-centered and stable IOL position. "The IOL can conveniently be implanted through a 2.6-mm (or 2.0 by docking implantation) small incision, and the enlarged 7-mm optic diameter allows for an edge-free view into the outer retinal periphery. That is why the Aspira-aXA is convenient for combined phaco-vitrectomies," said Schrecker.[1]

Eckhard Becker, MD, Augentagesklinik Oranienburg, Germany, confirmed that the Aspira-aXA, in contrast to a conventional IOL, offers an advantage regarding the view of the entire fundus and the periphery, as well as the possibility of a bigger rhexis. Retinal surgery can be more convenient due to the panoramic view.[2]

Figure 1. Preloaded SAFELOADER autoloading system.

Figure 2. ASPIRA-aXA with an enlarged optic diameter of 7 mm.

ALL BENEFITS OF THE ASPIRA-AXA AT A GLANCE:

- Premium monofocal, foldable, posterior chamber IOL
- Enlarged 7-mm XL optic, which allows for an enlarged rhexis and provides an excellent view at the fundus periphery
- Overall diameter of 11 mm with cut-out haptic design for improved stability
- Preloaded and with the same incision sizes at 6-mm optic IOLs
- Diopter range from -10 D to 30 D
- Aspheric, aberration-free optic design
- Glistening-free, highly biocompatible acryl
- SNR technology for brilliant, clear, and sharp images

PREVENTION OF DYSPHOTOPSIA

The phenomena of positive and negative dysphotopsia after cataract surgery still remains an unsolved challenge according to Becker. Large pupils are one of the reasons for the incidence of dysphotopsia. Furthermore, even with smaller pupil diameters, peripheral light might cause disturbing effects. Becker considers Aspira-aXA a good approach to minimize dysphotopsia. In contrast to conventional IOLs, the optic is larger than the pupil, and the IOL edge is covered. Especially in patients with a white-to-white diameter greater than 12 mm, he finds the Aspira-aXA to be advantageous. In a clinical study, he compared the Aspira-aXA (n = 50 eyes) with a conventional C-loop IOL (n = 50 eyes) including the occurrence of dysphotopsia. All patients that received the Aspira-aXA stated that they perceived no dysphotopsia. "Since product launch of the Aspira-aXA, we successfully implanted more than 1,000 of them, and the 100% positive patient response is very promising," he confirmed.[2] ■

1. Schrecker J. A new intraocular lens with a large optical diameter and micro-cut implantation. Presented at: DGII. Feb. 13-15, 2020, Mainz, Germany.
2. Bolz M. The Aspira-aXA from the perspective of one Retinologen. Presented at: DOC 2018.

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