



## The Annual ACES/SEE Caribbean Eye Meeting delves into hot topics for anterior segment surgeons and health care professionals.

From February 5 to 8, 2021, the upcoming Caribbean Eye Meeting promises to be as engaging as in previous years. This one-of-a-kind meeting, held at Hyatt Regency Grand Reserve in Puerto Rico, will gather well-known leaders in ophthalmology to discuss important topics in eye care against the breathtaking backdrop of the Caribbean Sea. The American College of Eye Surgeons (ACES) and the American Board of Eye Surgery (ABES) were started in 1989, with ACES as the educational arm. ACES and ABES, along with the Society for Excellence in Eyecare (SEE), are proud to be entering the 31st annual meeting! Together, ACES, ABES, and SEE share a commitment to the belief that the primary focus for today's ophthalmologist must, and should, be to promote, encourage, and enhance quality ophthalmic surgical care for the benefit of all patients.



### PEARLS FROM THE DEEP: MARKS THAT MATTER

Iris registration software compared to intraoperative aberrometry for toric IOLs.

By Denise M. Visco, MD, MBA

Corneal astigmatism affects cataract surgical outcomes for many patients. Astigmatism must be addressed at the time of cataract surgery to achieve optimal refractive outcomes and decrease patients' spectacle dependence.

I conducted a prospective study to evaluate visual and refractive outcomes achieved using the IntelliAxis-L system on the Lenstar Laser System (Lenstar), which creates a capsulotomy with small nubs located 180° apart on the steep axis of astigmatism for toric IOL alignment. The study included 46 eyes of 46 patients. All of them had at least 0.50 D of stable regular keratometric cylinder, and the

readings were consistent between the Cassini (i-Optics) and the IOLMaster 700 (Carl Zeiss Meditec). All patients were expected to have less than 0.50 D of cylinder after surgery.

I performed a secondary evaluation of recommendations from the ORA System (Alcon) for the magnitude and axis of cylinder treated. The study design allowed me to adjust the magnitude but not the axis; no matter the results of intraoperative aberrometry, I left the IOL aligned with the capsular marks.

Mean corneal astigmatism was 2.03 D before surgery and 0.12 D after surgery. It is noteworthy that the amount of residual astigmatism was 0.50 D or less in 100%

of patients and 0.25 D or less in 82% of patients (Figure).

Intraoperative aberrometry agreed with the planned axis of IOL alignment in 91% of cases and disagreed in 8.5% of cases. Had I rotated the lens based on the guidance, the results would have been worse in all four cases. In 57% of cases, however, I changed the magnitude of the cylinder to be treated based on intraoperative aberrometry. If I had stayed with my preoperative choices, my outcomes would have been significantly worse.

Based on the results of this study, the IntelliAxis-L system is safe and extremely effective. When preoperative measurements are clear but intraoperative aberrometry readings differ, I will change the magnitude but not the axis of cylinder to achieve the best refractive outcomes. ■

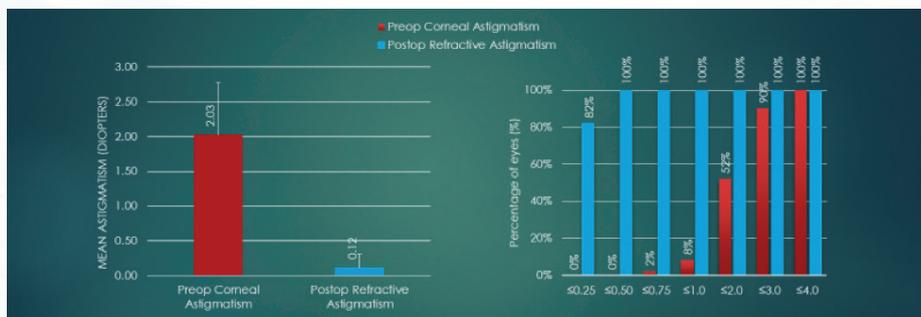


Figure. At left, a comparison of pre- and postoperative astigmatism (mean ± standard deviation). At right, cumulative frequency distribution of pre- and postoperative astigmatism.

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To learn more about the 2021 Caribbean Eye Meeting and register to attend, visit

[caribbeaneyemeeting.com](http://caribbeaneyemeeting.com)