

Improvements made to design of dual-optic accommodating IOL

LISBON, Portugal — A second generation of a dual-optic accommodating IOL has led to increased safety, better predictability and improved functionality of the lens, according to a presenter here.

At the European Society of Cataract and Refractive Surgeons meeting, H. Burkhard Dick, MD, PhD, explained that Visiogen's Synchrony IOL has been modified with design changes to address concerns noted with the first generation.

Dr. Dick said the posterior stabilizers have been improved to "ensure proper position, to compensate for size variations and to prevent decentration of the lens."

The IOL now includes fluid channels in the anterior portion to facilitate fluid exchange from the anterior chamber to the interface between the two optics, as well as to help support the anterior capsule, he said. In addition, the haptic design has been improved upon, and the spring force has been optimized. Dr. Dick said the new design incorporates displacement limiters to prevent direct contact between the two optics.

To ease implantation, Dr. Dick said, the new version of the Synchrony can be loaded into a specially designed injector system that was not available for the earlier version.

"The implantation is made easier and there is a controlled release of both IOLs. Once (the lens) is upside down it is easy to rotate in the bag," Dr. Dick said.

Dr. Dick said a prospective, multicenter trial of the new design of the Synchrony is under way. So far, he said, his center has 29 eyes implanted with the lens with 3 months of follow-up. Overall, the postoperative spherical equivalent in these eyes is much closer to what investigators wanted to attain than with the earlier version of the lens, he said.

He stressed the importance of careful biometry preoperatively, as well as careful intraoperative cleanup. Capsular fibrosis seems to be less of a problem with this second generation of the lens, as does posterior capsule opacification, he said.

"There were no additional surgical interventions. I see a clear improvement over previous lens refractive modalities," Dr. Dick said, adding that longer follow-up is needed.