

Cross-linking may halt hyperopia progression after corneal refractive procedures by Andy Moskowitz

LAS VEGAS — Collagen cross-linking with riboflavin may stop hyperopia progression in patients who have undergone radial keratotomy or laser ablative procedures, according to Brian S. Boxer Wachler, MD.

At the AAO meeting here, Dr. Boxer Wachler reviewed the results of a study evaluating whether corneal collagen cross-linking with riboflavin, or C3-R, can stabilize the progression of hyperopia in patients with previous refractive surgery.

The study included eight eyes of six patients that had documented progression of hyperopia after undergoing RK followed by a laser ablation procedure, either LASIK or surface ablation.

After the cross-linking procedure, hyperopia progression was halted in all eyes, Dr. Boxer Wachler said. No eye had more than a 1 D change of sphere or cylinder after the C3-R treatment, he said. There was little change in uncorrected visual acuity, best corrected visual acuity or keratometry after the treatment, he said, although corneal topography showed some steepening. No change in endothelial cell count was seen.

“These early results are suggestive that there may be stabilization occurring, and if follow-up in the long-term really shows improvement, this is going to be a nice treatment to offer patients that are suffering from progressive hyperopia,” Dr. Boxer Wachler said.

Following are other highlights of cornea/external disease sessions from the AAO meeting. Most of these items appeared first as daily coverage of the meeting on OSNSuperSite.com.

Laser-created Intacs channels improve results

Femtosecond laser-created channels for insertion of Intacs (Addition Technologies) may result in better visual outcomes than mechanically created channels in patients with ectasia or keratoconus, according to Sheraz M. Daya, MD.

Dr. Daya reviewed the results of a retrospective study including 32 eyes of 30 patients who underwent Intacs channel creation with the IntraLase FS femtosecond laser. These were compared to 17 eyes of 15 patients who underwent conventional mechanical channel creation.

Initially, the laser group suffered a decrease in visual acuity. At 6-month follow-up, however, 66.7% of the laser group had achieved BCVA of 20/40 or better. Only 8% of the control group achieved this outcome. The laser group also achieved great improvements in keratometry and astigmatism, according to Dr. Daya.

“IntraLase is more effective than conventional implantation, and I think a lot if it is due to our nomogram change and better diameter of ring channel,” he said.



Brian S. Boxer Wachler, MD, told attendees that collagen cross-linking with riboflavin may stop hyperopia progression in patients who have undergone radial keratotomy or laser ablative procedures.

Image: Moskowitz A, OSN