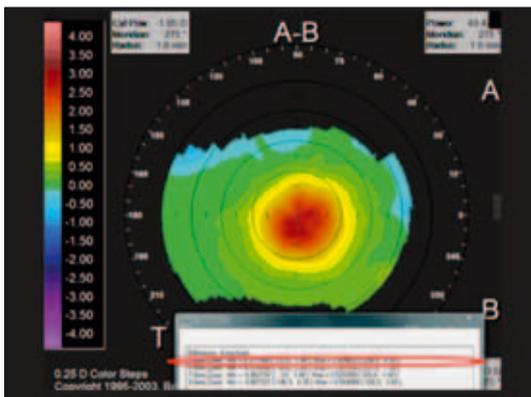


PRESBYOPIC LASIK

New technique enhances near vision without reducing distance vision

by Roibeard O'hEineachain in Istanbul



The central steepening of the procedure is evident in this Orbscan change map showing the difference between pre- and postoperative corneal curvature

Preliminary results with a new refractive laser technique called Supracor, a LASIK procedure that steepens only the central cornea, appears to be very effective in improving the near visual acuity in hyperopic presbyopes, said Stephen Slade MD, Houston, Texas, US.

In a study involving 40 eyes of 20 presbyopic patients who underwent the new LASIK procedure, uncorrected near visual acuity (UCNVA) at one month's follow-up was 20/32 in 88 per cent of eyes, and 20/20 or better in 38 per cent. No eyes lost more than one line of corrected distance visual acuity (CDVA), with 100 per cent achieving 20/25 or better CDVA and 88 per cent at 20/20 or better, Dr Slade said at the 15th ESCRS Winter meeting.

The patients in the study had a mean age of 49.6 years. The mean preoperative spherical equivalent refraction of the Supracor-treated eyes was 1.25 D. All patients underwent Supracor in one eye and conventional LASIK in their other eye with the Technolas laser (Carl Zeiss Meditec).

"Like Intracor, Supracor increases the steepness of the central cornea but leaves the remaining cornea unchanged (see image above). However, unlike Intracor, which involves the creation of nested cylinders within the stroma to create its effect, Supracor can be combined with other LASIK treatments for hyperopia and astigmatism and myopia," Dr Slade noted.

Among 14 eyes with six months of follow-up, UCNVA was 20/32 or better in all eyes, 20/25 or better in 92 per cent and 20/20 or better in 64 per cent. In addition, uncorrected distance visual acuity (UCDVA) was 20/40 or better in 90 per cent of eyes throughout

the follow-up period and 20/32 or better in around three quarters of eyes. By comparison, only 76 per cent were 20/40 or better preoperatively.

All had a corrected distance visual acuity (BCDVA) of 20/20 or better from one month postoperative onward. Only one eye lost a line of BCDVA and among 14 eyes with six months of follow-up seven had gained one line of best-corrected visual acuity.

Binocular UCNVA was 20/25 or better in 90 per cent of 20 patients at one month, 85 per cent of 20 patients at three months and all eight patients tested at six months. Binocular UCDVA was 20/25 or better in all patients and 20/20 or better in 87 per cent of patients tested at one month, 100 per cent tested at three months, and 87.5 per cent tested at six months.

Furthermore, in response to a questionnaire at three months' follow-up, 74 per cent of patients said they could read newspapers without glasses, compared to only nine per cent preoperatively. 78 per cent said they could read menus and package inserts without glasses, compared to only 18 per cent and 21 per cent preoperatively. In addition all except for one of 27 patients said they would undergo the procedure and even that patient would recommend the procedure to a friend.

"Preliminary results find this presbyopic LASIK treatment provides good improvement in near vision to treat presbyopia, without compromising distance vision. The algorithm allows enhancement to adjust the target sphere. A myopic presbyopic study will be undertaken in the near future," Dr Slade added.

contact Stephen Slade – sgs@visiontexas.com

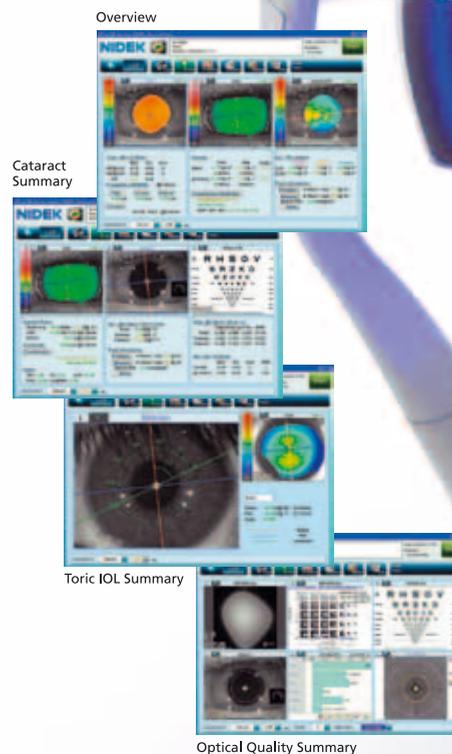


NEW



OPD-Scan III

REFRACTIVE POWER/CORNEAL ANALYZER



Optical Quality Summary



- ◆ IOL calculation for post-refractive surgery
- ◆ TORIC IOL support
- ◆ Quantitative analysis of optical quality
- ◆ Easy analysis of long-term corneal change
- ◆ User-friendly operation with tilttable touch screen

NIDEK

<http://www.nidek.com>

THE ART OF EYE CARE