Results

The IntraLase group had significantly better mean uncorrected visual acuity (UCVA) at all intervals from 1 day to 3 months postoperatively. The mean spheroequivalent at 3 months was more myopic with the Hansatome (−0.34 diopter [D] ± 0.28 [SD]) than with the IntraLase (−0.19 ± 0.24 D) (P<.01). The mean residual astigmatism at 3 months was also significantly higher in the Hansatome group than in the IntraLase group (0.32 ± 0.25 D and 0.17 ± 0.20 D, respectively) (P<.01). The differences in UCVA persisted after spheroequivalent outcomes were controlled for but equilibrated when the analysis was modified to control for manifest postoperative astigmatism. Aberrometry showed significantly higher astigmatism and trefoil in the Hansatome group. Recovery of corneal sensation and epithelial integrity was similar between groups **(S Durrie et al, 2005)**.

Conclusions

The statistically better UCVA and manifest refractive outcomes after LASIK with the IntraLase femtosecond laser may be the result of differences in postoperative astigmatism and trefoil. These findings are consistent with previous findings of better astigmatic outcomes with the IntraLase laser and may have clinical significance for wavefront-guided treatments **(S Durrie et al, 2005)**.