XXV CONGRESS OF THE ESCRS STOCKHOLM 8-12 SEPTEMBER 2007

12 September WEDNESDAY

08:00-10:30

Results in high myopic and mixed astigmatisms with the solid state laser (213nm)

Purpose: To assess the safety, predictability and efficacy of the Pulzar Z1 solid state laser system (213nm) in laser in situ keratomalacia (LASIK) for high myopic and mixed astigmatism. Venue: Clinica Medellin Poblado, Colombia. Method: 10 eyes having astigmatism from -4.00 Diopter (D) to -6.50 D were treated with CustomVis Pulzar Z1, the solid state laser. All cases were followed for a minimum period of 8 weeks. One eye was of myopic astigmatism and the other nine were of mixed astigmatism. Moria CB Microkeratome was used in all cases. Average pre-operative cylinder was -5.2 D. Pre-operative uncorrected visual acuity was 20/60 to 20/400.

RESULTS: 80% of cases had 20/25 or better Uncorrected Visual Acuity (UCVA) at 8 weeks or longer follow up and all cases (100%) had a UCVA 20/30 or better. Average correction of astigmatism was 4.68D. On vector analysis average percentage vector change was 90% suggesting little undercorrection. Post operative patient satisfaction was high.

CONCLUSIONS: Pulzar Z1 solid state laser is safe, predictable and effective for the treatment of high and mixed astigmatism. Excellent results can be achieved by little adjustment of the nomogram. Financial Interest: 3

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