Hassan, J Clin Exp Ophthalmol 2013, 4:3
http://dx.doi.org/10.4172/2155-9570.S1.014

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference on
Clinical & Experimental Ophthalmology
April 15-17, 2013 Hilton Chicago/Northbrook, USA

To evaluate clinical outcomes of intrastromal myoring implantation in the two depths of 250 and 300 micron

Hassan
Tehran University of Medical Sciences, Iran

A prospective interventional randomized controlled trial, a pilot study

Methods: Patients with keratoconus that were not appropriate cases for RGP contact lens use and having difficulty in visual improvement by nonsurgical plans were grouped randomly into two groups. Comprehensive examination, refraction, and imaging were performed. Implantation of intrastromal complete corneal ring was performed by one surgeon in two different stromal depths of 250 micron and 300 micron by femtosecond laser technology in the two groups. Visual outcomes, corneal biomechanical characteristics, higher order aberrations and other parameters were compared in the course of one-year postoperative follow up.

Results: In the both groups, change in the amount of UCVA between the preimplantation and last follow up session was statistically significant with the P value of 0.001. Change in best-corrected visual acuity was not significant in neither group (P value=0.48). Most of the improvement in vision and refraction occurred in the early post implantation period in both groups (P value = 0.0001).In higher order aberrations coma declined by the procedure in both groups (P value = 0.05 and 0.08) whereas spherical aberrations had a statistically nonsignificant increasing trend (P value = 0.18 and 0.4). None of the patients in both groups had intraoperative or postoperative complications.

Conclusion: Implantation depth of 250 micron has comparable outcomes as the previously used 300 micron implantation depth.

khojasthe63@gmail.com