CATARACT & REFRACTIVE SURGERY

REFRACTIVE SURGERY – OPTIONS, POSSIBILITIES, LIMITS. CLINICAL EXPERIENCE

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TECNIS EYHANCE - PREMIUM IOL AT A REASONABLE PRICE

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Purpose: To evaluate the visual quality and performance after bilateral implantation of TECNIS Eyhance IOL Model ICB00 (Johnson & Johnson Vision, Santa Ana, Ca ,USA) with or without micro-monovision.
Design: Prospective, non-randomized clinical study.
Methods: The study comprised 31 patients. The subjects were divided into 2 sub-groups: Group 1 (n=16) who received bilateral implantation of TECNIS Eyhance IOL, targeted for emmetropia in both eyes, Group 2 (n=15) received bilateral implantation of TECNIS Eyhance IOL, with the target refraction of -0.75D in non-dominant eye (Blended Vision). The aim of the study was to evaluate and compare binocular Uncorrected Distance Visual Acuity (UCDVA), Uncorrected Intermediate Visual Acuity (UIVA) at 66 cm distance, Uncorrected Near Visual acuity (UCNVA) at 40 cm distance, the presence of photic phenomena (Halos, Glares, Starbursts, negative dysphotopsia) in both groups at 6 months postoperatively.
Results: There was no statistically significant difference observed between the 2 sub-groups in terms of binocular UCDVA: -0.03 vs 0.00 LogMAR. UCIVA was comparable between the groups: 0.15 LogMAR vs 0.14 LogMAR, ($p < 0.001$) respectively. In Group 2, patients had significantly better UCNVA (0.21 LogMAR vs 0.58 LogMAR) ($p < 0.01$). In regards to dysphotopsia profile, 1 patient in Group 1 complained of crescent-shaped shadowing in temporal hemifield (negative dysphotopsia), which did not resolve after 6 months postoperatively, and 1 patient from Group 1 complained of glare sensitivity.
Conclusion: TECNIS Eyhance IOL provided an excellent and equal binocular UCDVA in Group 1 and Group 2. Though TECNIS Eyhance IOL yielded good binocular UCIVA, no statistically significant difference was found between Group 1 and Group 2 in that regard. Group 1 demonstrated significantly better UCNVA compared to Group 2. Overall incidence and severity of photic phenomena was low.
CONFLICT OF INTEREST DISCLOSURES: None.