Cosmetic iris implants

Iris prosthetic devices offer significant benefit in patients with iris defects with subsequent glare and light sensitivity. These devices are properly made and properly placed devices and have been shown to have excellent results. The same cannot be said for cosmetic iris implants, unapproved devices for which patients are travelling to Panama to change the colour of the iris, typically to blue. Researchers at the New York Eye and Ear Infirmary report a case series highlighting some of the serious problems associated with the implants. The report covers 14 eyes of seven patients who received the NewColorIris cosmetic iris implants. Nine eyes presented with decreased visual acuity, seven had elevated IOP, five had corneal oedema, and five had anterior uveitis. All 14 eyes had explantation of the iris prosthesis. Intraoperative complications included suprachoroidal haemorrhage during explantation in one eye. Postoperative complications included corneal oedema, cataract, and increased IOP/glaucoma. In an accompanying editorial, Dr Nick Mamalis calls for both patients and physicians to seriously reconsider the use of this cosmetic iris implant device in healthy phakic eyes.

Cross-linking plus phakic IOL

Correcting refractive errors with phakic IOLs in cases of progressive keratoconus has hitherto not been considered a good idea because the refractive correction and uncorrected distance visual acuity achieved would not be maintained over the long term. However, with the advent of corneal collagen cross-linking for the treatment of keratoconus, researchers are reconsidering this dogma. Guell and colleagues report medium-term outcomes in 17 eyes of nine keratoconus patients who underwent cross-linking, and then, once the cornea stabilised, also underwent toric Artiflex/Artisan phakic IOL implantation for cataract. With a median follow-up of three years, 14 eyes (82 per cent) were within ±0.50 D of the attempted SE correction and 13 eyes (76 per cent) were within ±1.00 D of the attempted cylinder correction. The mean difference in simulated keratometry between preoperatively and the last follow-up was 0.17 ± 0.45 D (range -0.55 to 1.45 D). The postoperative UDVA was 20/40 or better in 16 eyes (94 per cent). No eye lost lines of CDVA. No significant decrease in central endothelial cell count occurred (P>.05). The researchers believe this combination approach can effectively and safely correct myopic astigmatism in selected patients with progressive mild to moderate keratoconus.

Multifocal IOLs for AMD patients

Strategies for treating cataract in patients with age-related macular degeneration (AMD) include implantation of intraocular telescopic lenses and implantation of low-power IOLs that provide telescopic vision when combined with spectacles. A new approach using multifocal IOLs with myopic postoperative targets could offer a new option. Surgeons evaluated this approach in 20 eyes of 13 AMD patients. They implanted the AcrySof ReSTOR SN60D3 multifocal IOL, targeting an SE of -2.0 D, which yielded +5.2 D near addition. At six months the uncorrected near visual acuity improved in 18 eyes and was unchanged in two eyes. The corrected distance visual acuity improved in 14 eyes, was unchanged in four eyes, and decreased (≤3 lines) in two eyes. Patients reported improvements in vision, mental health symptoms due to vision, and limitations with peripheral vision. The researchers believe the preliminary results in this study suggest this multifocal-magnification strategy holds promise for visual rehabilitation of AMD patients with cataract. They note that it may be useful in guiding researchers and manufacturers in the design of high-magnification IOLs for AMD patients.


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