Accepted Manuscript

Results in combined cataract surgery with prosthetic iris implantation in patients with previous iridocyclectomy for iris melanoma

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PII: S0002-9394(16)30588-8

DOI: 10.1016/j.ajo.2016.11.013

Reference: AJOPHT 9961

To appear in: *American Journal of Ophthalmology*

Received Date: 4 August 2016

Revised Date: 24 November 2016

Accepted Date: 29 November 2016

Please cite this article as: Snyder ME, Osher RH, Wladecki TM, Perez MA, Augsburger JJ, Corrêa Z, Results in combined cataract surgery with prosthetic iris implantation in patients with previous iridocyclectomy for iris melanoma, *American Journal of Ophthalmology* (2017), doi: 10.1016/j.ajo.2016.11.013.

PURPOSE: To present visual and functional results following implantation of iris prosthesis combined with cataract surgery in eyes with previous iridocyclectomy for iris melanoma or presumed iris melanoma.

DESIGN: Retrospective non-comparative case series

METHODS: Sixteen patients (16 eyes) with iris defects after iridocyclectomy for iris melanoma in 15 cases and iris adenoma in 1 case underwent prosthetic iris device implantation surgery. Prosthetic iris implantation was combined with phacoemulsification and intraocular lens (IOL) implantation. The visual acuity, subjective glare and photophobia reduction, anatomic outcome, and complications were reviewed.

RESULTS: Best corrected visual acuity was improved in 13 eyes (81.25%), remained stable in 2 eyes (12.25%) and decreased in 1 eye (6.25%). Photophobia and glare improved in every case except for one (93.75%). Notably, after surgery 12 patients (75.00%) reported no photophobia and 10 patients (62.50%) reported no glare. The median postoperative follow-up was 29.5 months, with a minimum of 5 months and a maximum of 189 months. All iris devices were in the correct position, and all eyes achieved the desired anatomic result. The IOL optic edges were covered in all areas by either residual iris or opaque portions of a prosthetic iris device.

CONCLUSIONS: In patients who have undergone previous iridocyclectomy for presumed iris melanoma, combined cataract surgery and iris prosthesis placement, with or without iris reconstruction, can lead to visual improvement as well as reduction of both glare and photophobia.