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Outcome and prognostic factors of phacoemulsification cataract surgery in Vogt-Koyanagi-Harada uveitis

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Abstract

Purpose: To investigate visual outcome and prognostic factors following cataract surgery in patients with Vogt-Koyanagi-Harada (VKH) disease.

Design: Retrospective, interventional case series.

Methods: The history, clinical characteristics, best corrected visual acuity (BCVA), full-field electroretinogram (ERG), intraocular inflammation, complications and extraocular manifestations were analyzed retrospectively.

Results: One hundred and forty-eight male (214 eyes) and 138 female (194 eyes) VKH patients with complicated cataract were included. Surgery was performed on 352 eyes after complete control of intraocular inflammation for at least 3 months. In another set of 56 eyes, surgery was done 1 month after intraocular inflammation control. There was no difference in postoperative complications or BCVA between these two groups. The main complications after surgery were hyphema, ocular hypertension and moderate anterior chamber reaction. Average preoperative visual acuity was 0.08. At last visit, BCVA was improved in 405 eyes (99.3%). The preoperative BCVA, treatment delay after disease onset, preoperative intraocular hypertension and iris synechiae were associated with final visual outcome. Other parameters such as postoperative inflammation, IOL type or presence of extraocular VKH features did not affect final BCVA. Poor visual acuity was caused by optic nerve atrophy, choroidoretinal neovascularization and subretinal fibrosis. Poor postoperative BCVA was associated with an abnormal preoperative ERG profile.

Conclusions: Phaco and IOL implantation in VKH patients can be safely and successfully performed in quiet eyes even after 1 month following the last signs of inflammation. Visual prognosis was associated with preoperative BCVA, treatment delay after disease onset, preoperative intraocular hypertension, iris synechiae and presence of preoperative ERG abnormalities.