A 35-YEAR-OLD man underwent filtration surgery for uncontrolled secondary glaucoma. His intraocular pressure ranged from 40 to 45 mm Hg with maximal medical therapy. A trabeculectomy with adjunctive administration of mitomycin C (0.4 mg/mL for 2 minutes) was performed. In the first postoperative week, the intraocular pressure ranged from 1 to 2 mm Hg, gradually increasing to 10 mm Hg 1 month later. During the 8-month follow-up, the intraocular pressure ranged from 10 to 14 mm Hg. The visual acuity initially dropped from a preoperative 20/30 to counting fingers at 1 m, gradually returning back to baseline at 4 months. Choroidal effusion was not noted throughout the postoperative course. The Figure shows the gradual resolution of what we consider a typical case of hypotony maculopathy.

COMMENT

When hypotony, which often occurs after filtering surgery, is associated with choroidal folds, macular striae, and decreased visual acuity, it is termed hypotony maculopathy. This condition is more commonly seen after trabeculectomy performed with adjunctive mitomycin C. Hypotony may be defined as an intraocular pressure lower than around 5 mm Hg or the presence of structural or functional ocular abnormalities. Young age, as well as scleral rigidity and myopia, have been proposed as predisposing risk factors for the development of hypotony maculopathy. Persistent hypotony maculopathy presents a difficult management challenge.

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REFERENCES

Fundus images. A, Four weeks postoperatively (intraocular pressure [IOP], 10 mm Hg; visual acuity, 20/60). Note the choroidal folds (mainly peripapillary), the retinal striae radiating from the fovea, and the absence of cupping (related to the retinal nerve fiber layer edema). B, Six weeks postoperatively (IOP, 12 mm Hg; visual acuity, 20/100). C, Three months postoperatively (IOP, 14 mm Hg; visual acuity, 20/50). D, Eight months postoperatively (IOP, 12 mm Hg; visual acuity, 20/30).