Case Study 4
Iris Bombe Around Intraocular Lens Implant

TA is a 62-year-old diabetic with a history of proliferative retinopathy. His right eye had become phthisical after unsuccessful retinal detachment surgery, and the vision in his left eye had gradually decreased to the 20/200 level due to a combination of macular pathology and cataract formation. He underwent cataract surgery with the implantation of an anterior chamber intraocular lens implant (IOL) because of zonular dehiscence secondary to previous vitrectomy. His visual acuity improved to the 20/60 level, but he awoke on a Friday morning with a severe headache and marked reduction of his vision.

His ophthalmologist was out of town and a retinal specialist associated with the same group eventually saw him in the afternoon. Examination found vision OS of 20/400, intraocular pressure of 42, and "iris bombe" with iris bulging around the IOL in spite of an apparently patent surgical iridotomy. The patient was urgently referred for echography.

Immersion B-scan with a 20-MHz probe and a scleral shell filled with methylcellulose demonstrated an anterior chamber IOL with bulging of the iris almost to the cornea nasally and temporally, but otherwise, the anterior chamber was deep (Fig. 1). This was consistent with trapped pockets of aqueous. An yttrium aluminum garnet (YAG) iridotomy was performed for three spots in the areas of the iris bulge with almost immediate flattening of the iris and relief of the patient's headache. Intraocular pressure was measured at 34 mm and had decreased to 9 mm by the next morning.

Echography is equally important in the evaluation of visible fundus lesions. A-scan provides the unique capacity to characterize the internal structure of intraocular tumors that is highly correlated to the tissue characteristics of the lesion. The quantitative (spike height and regularity) and kinetic (rapid spike movement) criteria described by Ossoinig [2] provide high specificity and sensitivity in evaluation of ocular lesions.

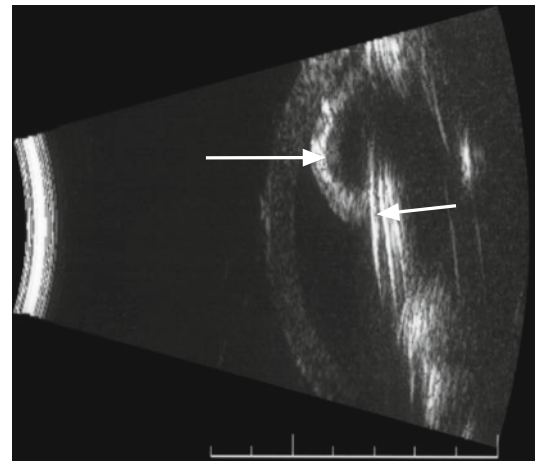

FIG. 1 Iris (*large arrow*) bulging around anterior chamber intraocular lens implant (*small arrow*)

R.P. Harrie, C.J. Kendall, *Clinical Ophthalmic Echography*,
DOI 10.1007/978-1-4614-7082-3_4, © Springer Science+Business Media New York 2014