

## **Cataract Surgery and Uveitis**

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Cataract develops in patients with uveitis because of the uveitis itself and also because of the steroids which is the cornerstone of treating uveitis. Cataract developing in an eye with a history of chronic or recurrent uveitis has historically been called cataracta complicata, and, indeed, the uveitic cataract is complicated cataract. It is complicated both from the standpoint of technical aspects of the surgery itself (limited access secondary to posterior synechiae, pupillary membrane, and pupillary sphincter sclerosis, iris delicacy and vascular abnormalities, and pre-existing glaucoma), and also because of the high likelihood of an exuberant postoperative inflammatory response which can ruin the desired surgical outcome. But the increasing availability of more delicate microsurgical techniques, through the use of pupil expanders, visco elastic material, small incision phacoemulsification techniques, etc. has dramatically reduced the misadventures that use to be so common.

Yet, despite these advances surgeons are frequently still disappointed with the visual outcome of cataract surgery in the patient with a history of uveitis. This typically occurs as a result of two things: damage done to the macula or optic nerve long before the time for cataract surgery has arrived, through the consequences of recurrent or chronic, even "low grade" inflammation; and significant ongoing chronic or recurrent inflammation which sabotages an initially good visual result from cataract surgery. Both these problems are avoidable, but avoidance of structural damage to areas of the eye critical for good vision requires a philosophy, on the ophthalmologists' part, of total intolerance to chronic or recurrent inflammation, achieving the goal of complete freedom of inflammation through a stepladder algorithm approach in aggressiveness of therapy. Indeed, prevention of cataract development in the first place often derives from such a philosophy. And postoperative inflammatory damage which sabotages an initially good visual outcome occurs, generally, if the patient is prepared ahead of surgery with treatment techniques that prevent exuberant inflammation postoperatively, and prevent a recurrence of inflammation or a continued low grade chronic inflammation longitudinally following surgery.

The exact details of surgical technique, above and beyond the routine required for adequate access to the lens and control of inflammation is very much patient and disease-specific. For example, many (indeed, perhaps even most) patients with a history of uveitis can have, as part of the surgical plan, implantation of a posterior chamber intraocular lens implant; exceptions to this generalization exist, for example, in most patients with uveitis on the basis of juvenile idiopathic arthritis, and in patients for whom

recurrent inflammation episodically through time is unpredictable and generally not preventable (i.e., patients with sarcoidosis, or even with patients with a history of multiple recurrences of toxoplasma retinochoroiditis.) Also, the exact details of which glaucoma procedure to perform, in the patient who needs glaucoma surgery in conjunction with cataract surgery, is also somewhat disease-specific and patient-dependent. And, finally the issue of simultaneous pars plana vitrectomy is very much disease-dependent. We believe, for example, that most patients with JIA-associated iridocyclitis and patients with pars planitis or uveitis that has been characterized by great "vitritis" or multiple recurrences affecting the posterior segment very much benefit from primary pars plana vitrectomy at the time of the cataract surgery. For further reading on this subject may I suggest the following references:

## **REFERENCES:**

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