

Maximize Outcomes, Minimize Risks During Cataract Surgery

Cataracts were among the top causes of blindness in the WESDR study.

BY ALEJANDRO ESPAILLAT, MD

It is estimated that the global prevalence of diabetes will double from 110 million to 221 million between 1994 and 2010.¹ Cataracts are more prevalent in patients with diabetes; patients younger than 65 years have a three- to fourfold increased risk and those older than 65 years have up to a twofold increased risk.²

Cataract is an important cause of visual loss in diabetes patients. In the Wisconsin Epidemiological Study of Diabetic Retinopathy (WESDR), cataract was the most common cause of legal blindness in older-onset diabetes, and the second most common cause in diabetic patients with younger-onset disease.³ The 10-year cumulative incidence of cataract surgery in patients with diabetes in the WESDR was two to five times higher than in comparable nondiabetic population.⁴ Visual acuity after cataract surgery in diabetes may be poor,⁵

Diabetic patients may have a greater risk of developing certain complications following cataract surgery.

and the incidence of complications high.⁶ Indications for cataract surgery in diabetic patients include the need for visual rehabilitation and the need for visualization of the posterior segment for evaluation and treatment.

HYPHEMA FROM RUBEOSIS

Diabetic patients may have greater incidences of developing complications like intraoperative and postoperative hyphema from rubeosis and increased vascular fragility, corneal edema, postoperative inflammation with higher levels of intraocular pressures, iris trauma, capsular tear and vitreous loss from a small pupil, progression of diabetic retinopathy (DR), clinical significant macular edema (CSME), epiretinal membrane formation and sterile endophthalmitis.⁶

Therefore, in addition to the complete ophthalmic history, surgeons should pay attention to important elements prior to cataract surgery. These include systemic control of diabetes, visual function of the fellow eye, level of DR, history of vitrectomy, history of CSME and the outcome of cataract surgery in the other eye. Other things to be aware of include risk factors for progression of DR like duration and type of

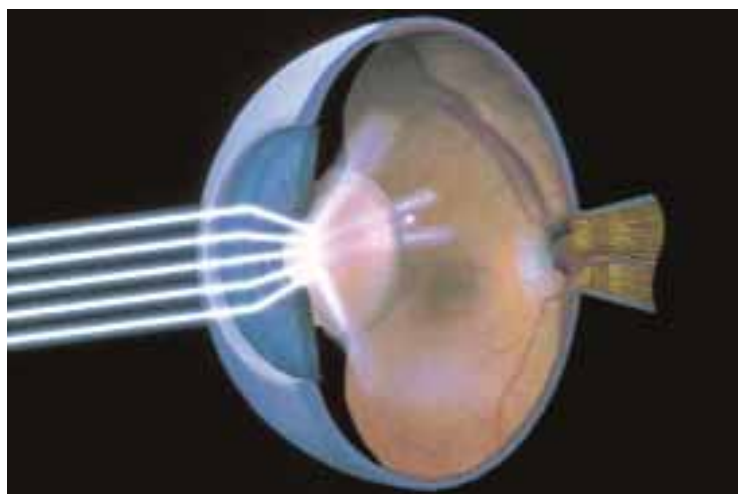


Figure 1. Surgeons adopting strict preoperative measures, including laser retinal treatment prior to cataract surgery when clinically indicated, will help minimize risks and maximize outcomes of cataract surgery in diabetic patients.

RETINOPATHY

diabetes, levels of HbA1c, and cholesterol, blood pressure, coronary artery disease, renal disease, anemia and pregnancy.

TIPS FOR SURGEONS

- It is important that surgeons discuss the specific risks and possible complications of the cataract surgery with their patients. Patient satisfaction is based on realistic expectations of the visual outcome.

- Discuss potential risk factors with the patient's other health care providers. Control the patient's systemic disease as well as possible.

- Treat any active retinopathy and CSME when possible prior to cataract surgery.

- Intraocular lens (IOL) choices should include an IOL with a large optic to allow a better visualization of the retina for future laser treatment.

Individuals who have diabetes not only develop cataracts more frequently than nondiabetic patients, but do so at a younger age. Cataract is a frequent cause of visual loss in older-onset diabetic patients and is second only to proliferative DR in younger onset diabetic patients. Surgeons adopting strict preoperative measures including intense control of the diabetes systemically, laser retinal treatment prior to cataract surgery when clinically indicated, careful control of the intraocular pressure and postoperative follow-ups, and being certain to discuss with the patient what are reasonable expectations for visual outcome in the context of their level of DR, will help to minimize the risks and maximize the outcomes of the cataract surgical procedure. ■

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