Phacoemulsification in the presence of pseudoexfoliation: Challenges and options

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ABSTRACT

Phacoemulsification in the presence of pseudoexfoliation of the lens presents surgeons with particular challenges. The frequency of intraoperative and postoperative complications such as zonular dialysis, capsular tears, vitreous loss, and intraocular lens (IOL) decentration may be reduced with careful attention to detail and careful surgical technique. Improvements in phacoemulsification technology, IOLs, and new capsular supporting rings allow surgeons to perform safer surgery in these eyes. We present the challenges of and options for managing cataract extraction in the presence of pseudoexfoliation. *J Cataract Refract Surg 1997; 23:160–165*

Cataract surgery in the presence of pseudoexfoliation of the lens presents unusual challenges. In addition to a higher incidence of glaucoma, these patients have loss of zonular integrity, occasionally associated with lens subluxation, and pupils that dilate poorly. Although the use of phacoemulsification in experienced hands has resulted in a low incidence of intraoperative and postoperative complications such as zonular dialysis, capsular tears, vitreous loss, and intraocular lens (IOL) decentration,[1] special care should still be exercised when performing cataract surgery in these patients. Improvements in phacoemulsification technology, technique, and new capsular supporting rings will ultimately enable cataract surgery in these eyes with even fewer complications.

Surgical Technique

Glaucoma

Poorly controlled glaucoma with concomitant cataract and pseudoexfoliation is best managed by a glaucoma triple procedure. We prefer to use a limbal conjunctival incision without vertical releasing incisions and a self-sealing scleral tunnel incision (without vertical releasing incisions), located superiorly, through which phacoemulsification is performed. A Crozafon-De Laage punch (Moria #18069) is used to disrupt the posterior corneal lip, creating a fistula that usually results in a diffuse, shallow bleb that filters posteriorly. The conjunctival incision is sutured to the limbus at the conclusion of the procedure. Although this is our preferred method, any combined technique can be used with or without antimetabolites.

For patients with glaucoma who do not need filtration surgery at the time of cataract surgery, we prefer our usual clear corneal incision from the temporal periphery. This allows the entire procedure to take place through avascular tissue and does not prejudice future filtration surgery in a superior location.

Small Pupils

The small pupil can be managed in a variety of ways including sector iridectomy, iris hooks, iris rings, and pupillary stretching with or without the use of multiple half-width sphincterotomies.[2] At present, we find the Beehler pupil dilator (Moria #19009) to be uniformly

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