READERS' COMMENTS

Effect of a Capsular Tension Ring on Prevention of Intraocular Lens Decentration and Tilt and on Anterior Capsule Contraction After Cataract Surgery

To the Editor:

The authors are to be congratulated on their fine article on this subject.¹ The advantages of the use of the capsular tension ring are well described. However, we are surprised that they do not mention the unique symptoms of pseudoexfoliation syndrome, which afflicted 15 (31.9%) of their patients. In our experience,^{2–6} the zonular pathology at the origin and the insertion of the zonular fibers together promote progressive weakening of the zonular fibers as well as defects of the blood–aqueous barrier. As a result, protein leakage facilitates lens epithelial proliferation, leading to anterior capsule contraction.

Therefore, we believe that patients suffering from this condition need to be made aware that, in spite of the capsular tension ring, either spontaneous subluxation or luxation of the lens implant, including the lens capsule, may still occur. It is better to inform the patient before surgery than to wait until after this complication has occurred.

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Authors' Reply

Drs. A. Jünemann, U. Schlötzer-Schrehardt, and G. Naumann raise a very important point regarding our article on the use of a capsular tension ring (CTR) for eyes with zonular instability.¹ We agree that lens zonules of eyes with pseudoexfoliation syndrome weaken progressively after cataract surgery. In a previous report,² we showed that the most important predisposing factor for in-the-bag intraocular lens (IOL) dislocation is pseudoexfoliation syndrome, possibly because of progressive weakening of the lens zonules. Furthermore, we also stated in our recent study¹ that the CTR does not prevent progressive zonular decline. As Dr. Jünemann and his colleagues point out, surgeons should be careful when using a CTR in eyes with pseudoexfoliation syndrome.

However, in-the-bag IOL dislocation is thought to depend upon the stretching of the lens zonules because of anterior capsule contraction, in addition to progressive weakening of the zonules. Because a CTR can decrease anterior capsule contraction, it may actually contribute to the prevention of IOL dislocation. On that basis, we believe that eyes with a slight zonular decline due to pseudoexfoliation syndrome may be treated with a CTR. However, a long-term follow-up study regarding the use of a CTR in eyes with pseudoexfoliation syndrome is certainly necessary.

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