eyes. Best-corrected visual acuity (BCVA) in the left eye was 20/40, with −14.5 diopters (D), −1.5 cyl × 70°.

In September 1998, the patient underwent uneventful LASIK in the left eye. The flap was created with the Automatic Corneal Shaper microkeratome (Chiron Vision, Emeryville, CA) with the 130-μm plate, and the ablation was performed with a VISX 20/20 (VISX Inc., Santa Clara, CA) with a multizone ablation algorithm, aiming for emmetropia and a residual stromal thickness of more than 250 μm. Three months after LASIK, BCVA in the left eye was 20/30, with −0.5 D. In the last follow-up visit (November 1999), BCVA in the left eye was still 20/30, with −1 D (spherical equivalent). There was no significant change in the corneal curvature or the corneal thickness.

We believe our case does not support the hypothesis that a previous scleral buckle is a risk factor for corneal ectasia after LASIK, but we agree with the authors that special attention should be given to these patients, because LASIK could be a hazardous technique for them.

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Author reply

Dear Editor:
We agree with Dr. Belda et al that there is no scientific evidence that laser in situ keratomileusis (LASIK) could be a risk factor for vitreoretinal pathologic characteristics. In their article, Ruíz-Moreno et al[1] observed 1554 myopic eyes for up to 54 months after LASIK without finding an unexpected incidence of vitreoretinal complications.

Nevertheless, before the LASIK procedure, they treated any retinal lesion predisposing to retinal detachment (RD), without mentioning which lesions they consider a predisposing factor. Therefore, based on their data, we do not really know if LASIK would change the natural history of the RD rate in these eyes. Moreover, they considered only the influence of LASIK on RD. For example, possible posterior chorioretinal damage during LASIK suction and an increased risk of microruptures in Bruch's membrane or vascular stress theoretically could be higher in degenerative myopia, where a weak macula is already present. And we are not aware of case reports where these eyes have been evaluated separately from eyes with simple myopia.

Regarding the two cases of corneal steepening reported in our article, we would like to be precise that these are not cases of corneal ectasia (a progressive condition characterized by steepening associated with thinning and asymmetric bulging). These patients experienced a progressive corneal steepening, but the corneal thickness did not decrease over time. We admit that it is possible that a LASIK procedure leaving a corneal bed of 225 μm could be responsible for this process, but in one of these patients we removed the buckle, achieving a reduction in corneal steepening.

We agree with Dr. Belda et al that to date, LASIK is a safe procedure for myopic patients as it relates to vitreoretinal complications. The different question of a possible adverse relationship between vitroretinal and refractive surgery, in our opinion, is still open.

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Prevention of Bag-fixated IOL Dislocation in Pseudoexfoliation

Dear Editor:
The recent report by Jehan, Mamalis, and Crandall highlights the frequency and surprising latency of the syndrome of late dislocation of bag-fixated intraocular lenses (IOLs) in pseudoexfoliated eyes.[1] Because this series of eight cases included one plate haptic silicone IOL and eight polymethyl methacrylate (PMMA) IOLs, I wish to report on two of my own pseudoexfoliation patients with spontaneous, late bag dislocations of SI40 (Allergan, Irvine, CA) three-piece silicone IOLs.

One patient was a 67-year-old female whose IOL dislocated 5 years after an uncomplicated combined phacotrabeculectomy procedure in 1995. The second was a 76-year-old male whose IOL dislocated 3.5 years after uncomplicated cataract surgery in 1997. Both patients had sudden loss of vision secondary to their IOL dislocations at presentation, and both regained their former best-corrected acuity after exchange of their bag-enclosed IOLs with anterior chamber (AC) IOLs. Removal of these lenses was complicated by the fact that the haptics, which were encased within the capsular bag, were not easily accessible. Of interest was the fact that both eyes demonstrated significant capsulorhexis fibrosis and contraction to diameters of 3.0 to 3.5 mm.

An informal audience poll at a recent American Academy of Ophthalmology cataract complications course showed that roughly 20% of the audience (approximately 60 surgeons) had seen this complication. However, only a few surgeons had seen this occur with hydrophobic acrylic lenses. Collectively, these observations raise several issues with regard to prevention of this complication.

1. Given the delay in onset, the frequency of this complication is difficult to estimate. My two cases represent a tiny percentage of the hundreds of pseudoexfoliated eyes that I have implanted with three-piece silicone IOLs since 1990. Nevertheless, the true inci-

dence may be indeterminate until nearly a decade of follow-up has passed.[1]

2. Intraocular lens dislocation after a can opener capsulotomy apparently is rare. The incidence of this delayed complication appears to have skyrocketed after universal adoption of the capsulorhexis technique, which may be a key factor in causation.
3. Fibrosis and contraction of an intact capsulorhexis would place significant centripetal stress on the zonules. Is capsulorhexis shrinkage and contraction therefore the mechanism of postoperative zonular weakening, or rather a manifestation of significant pre-existing zonular weakness?[2–4] In other words, in the two cases I describe, was it the cause or the effect?
4. The authors discuss capsular tension rings as a possible preventive measure. An expansile ring would be expected to resist the centripetal tension exerted on the zonules by capsulorhexis contraction. By the same reasoning, rigid C-loop PMMA haptics may be preferable to polypropylene haptics, silicone plate haptics, or single-piece flexible acrylic haptics in these eyes.
5. To what extent does IOL material play a role? How much lower is the incidence with hydrophobic acrylic IOLs, such as Acrysof (Alcon, Ft. Worth, Tx) and Sensar (Allergan, Irvine, CA)? Despite being introduced chronologically later than silicone IOLs, this material has been implanted since 1994 and is associated with less anterior capsule fibrosis compared with PMMA, silicone, and hydrogel lenses.[5–7]

I agree that a long-term, prospective, randomized study may be necessary to answer many of these questions. Until then, and given the current unavailability of capsular tension rings in the United States, the following measures may be considered for IOL implantation in psuedoexfoliation patients.

1. A three-piece, hydrophobic acrylic IOL (e.g., Acrysof MA60 or Sensar) with PMMA haptics may reduce capsulorhexis contraction better through a combination of decreased anterior capsule fibrosis and greater haptic rigidity.
2. Although the capsulorhexis diameter should be sized smaller than the optic, a particularly small opening must be avoided. If necessary, secondary enlargement of the capsulorhexis can be performed after IOL placement by incising the edge and retearing it.
3. If capsulorhexis fibrosis and contracture are detected by 1 to 2 months after surgery, radial, relaxing cuts with the yttrium–aluminum–garnet laser may avert excessive traction on the zonules and would prevent visually significant capsulophimosis from occurring.[8]

Understanding the causative mechanisms of this newly described complication will direct us toward preventive strategies. I recommend that all ophthalmologists encountering these cases report the clinical findings to the ASCRS IOL Explant Registry.[9]

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Ocular Whipple's Disease

Dear Editor:

Chan et al (*Ophthalmology 2001;108:2225–31*) reported the use of the polymerase chain reaction (PCR) on vitreous for the diagnosis of ocular Whipple's disease (WD). The PCR technique has been used for WD in intestinal and extraintestinal sites, including blood and cerebrospinal fluid (CSF). The authors classified 77 cases from the literature of ophthalmic WD as "central," with central nervous system (CNS) involvement, or "peripheral," with eye involvement. I was curious to know if the authors consider vitritis, retinitis, or choroiditis with optic nerve involvement to be a sign of CNS involvement. The theoretic reason for making this distinction may be analogous to the diagnosis and treatment of CNS syphilis. Specifically, if CNS involvement is suspected in syphilis, then a lumbar puncture is performed for diagnostic purposes, and the type of antibiotic and course of therapy are selected for CNS penetration. In the case of CNS WD, a PCR analysis could be performed on the CSF and, if positive, not only would be diagnostic but also could be followed as an index of treatment efficacy. Pron et al[1] reported that PCR tests converted to negative within 4 to 6 months in 6 of 8 patients treated for WD. As the authors note, late CNS involvement is associated with a high rate of relapse, carries a poor prognosis, and is difficult to treat. Do the authors believe that diagnostic spinal fluid (including PCR analysis) would aid in the diagnosis and follow up of patients with posterior segment manifestations of WD?

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