IOL Contingency Plans—Are You Prepared?

One of the most interesting and controversial topics in cataract surgery is that of IOL selection and fixation in the absence of optimal capsular bag support. We have therefore chosen this topic as the focus of our annual cataract complications issue.

Twenty years ago, there was not much to debate. Following a can-opener anterior capsulotomy, if posterior capsular rupture precluded sulcus implantation, we usually implanted an ACIOL. The increasing incidence of ACIOL complications—usually caused by sizing problems, movement, and closed-loop haptics—led to the development of techniques to suture PCIOLs to the sclera. Although technically more difficult, this option certainly avoided the complications specific to poor ACIOL design. Typical indications cited for suturing PCIOLs have included young age, glaucoma, abnormal iris/angle anatomy, and an increased risk of corneal endothelial decompensation.

Ever since we began to better understand the ACIOL design requirements and the sutured PCIOL complications, the debate over proper IOL selection and fixation has continued. Most significantly, longer-term follow-up of scleral-fixated IOLs is revealing an increased incidence of 10–0 polypropylene suture breakage, which results in abrupt posterior subluxation or dislocation of the IOL. The extent to which 9–0 polypropylene or GoreTex (W. L. Gore and Associates, Milpitas, CA) sutures may improve upon this problem will not be known for a long time. Interest in the iris-suture fixation of PCIOL haptics is growing as well. Whether iris sutures will prove to be more secure than scleral sutures in the long term is also unknown. Nonetheless, the pendulum of surgeon preference may be swinging away from sutured PCIOLs.

Finally, an increasing awareness of late bag-IOL dislocation in pseudoexfoliation patients, as first reported at the 2000 AAO Annual Meeting by Nick Mamalis, MD, et al,[1] has raised many additional questions. What is the incidence of this complication? Is bag fixation too risky for patients with weakened zonules? What is the risk with pseudoexfoliation in the absence of any intraoperative signs of zonular laxity? Will a capsular tension ring alone help, or will a sutured capsular device be necessary? What IOL design and material should be selected?

To help frame this debate, *Cataract & Refractive Surgery Today* has enlisted a group of leading surgeons to explore these multiple options and controversies in a series of 10 articles. In many cases, these experts are able to report on their own data and results. Who, 20 years ago, would have guessed that we would have so many choices and opinions regarding contingency IOL selection and fixation in 2004?

A new regular column edited by William J. Fishkind, MD, also debuts in this issue. Every week, myriad practical questions and decisions confront us during cataract surgery. Many of these topics may not be exciting or weighty enough to warrant a paper or podium presentation. Instead, we plan to pick a practical and relevant problem, such as the difficult capsulorhexis, and to survey several experts about their preferences and opinions regarding management. We also invite you, our readers, to submit topics that you would like to see discussed. I can think of no better editor for this column than Dr. Fishkind, a leading educator in phacoemulsification technology, cataract complications, and ASC-OR efficiency. ■

David F. Chang, MD, Chief Medical Editor

1. Mamalis N, Jehan FS, Crandall AS. Spontaneous late dislocation of intraocular lens within the capsular bag in pseudoexfoliation patients. Paper presented at: The AAO Annual Meeting; October 24, 2000; Dallas, TX.