Defining the Boundary Between Phakic IOLs and LASIK

BY JAY BANSAL, MD; WILLIAM I. BOND, MD; PARAG A. MAJMUDAR, MD; AND NANCY A. TANCHEL, MD

What parameters do you follow when considering a patient for LASIK or a phakic IOL?

JAY BANSAL, MD

I am significantly more inclined to discuss phakic IOLs with patients who have more than -10.00 D of myopia, thin corneas, irregular topography, and large pupils. In these cases, I spend considerably more time discussing the risks, benefits, and costs of refractive procedures, as I am not as comfortable with the currently available technology for this group of patients. However, if a patient simply is not a good candidate for LASIK, then my recommendation is refractive lens exchange, phakic IOL implantation, or to wait for future technology.

WILLIAM I. BOND, MD

I have had very good results with LASIK for the treatment of up to 14.00 D of ametropia. I will still treat as much as 14.00 D with LASIK, provided the patient has acceptable ocular parameters (corneal thickness, no questionable topography, etc.). LASIK's safety and ease for my patients and me is unsurpassed. I believe this is due to current methods for safely creating thin, consistent flaps with Nidek's MK-2000 keratome system (Gamagori, Japan). My patients—even highly myopic ones—have achieved great subjective quality-of-vision results with both the 200- and 400-Hz models of the Allegretto Wave Eye-Q laser (Alcon Laboratories, Inc., Fort Worth, TX).

Phakic IOLs are for patients who are not good candidates for LASIK. It is generally accepted that there is a potential for more severe, inside-the-eye risks with phakic IOLs than LASIK, particularly endophthalmitis. Also, IOLs are more costly to me and to my patients. Finally, I have been told IOLs are completely reversible. If you stick an ice pick into someone's head, and the entry point seals itself after you pull out the tool, was that reversible?

> "There is a potential for more severe, inside-the-eye risks with phakic IOLs than LASIK, particularly endophthalmitis."
> *- William I. Bond, MD*

PARAG A. MAJMUDAR, MD

Many factors would play into my decision to offer a patient a phakic IOL rather than LASIK. If I had to follow a general rule, I would use -10.00 D as the arbitrary cutoff. Many patients with a refractive error of less than -10.00 D may have thin corneas or "funny" topographies, but they would also qualify for a phakic IOL. The risk-reward ratio for implanting a phakic IOL must be discussed with the patient, who must take into consideration the many variables that we evaluate on a daily basis. One additional issue is cost. In most cases, the phakic IOL procedure is performed at an ambulatory surgical center. Consequently, fees (anesthesia, facility) are charged in addition to the actual price of the IOL. These costs usually are not a factor in LASIK. Nonetheless, we should not use cost as the sole criterion for selecting a procedure. Rather, we should, as usual, keep the best interests of the patient in mind.

NANCY A. TANCHEL, MD

LASIK has greatly improved over the years, as our understanding has grown regarding how to deliver the optimal corneal profile with the excimer laser and how

to create thin, consistent, safe flaps. Even very high myopes can achieve excellent results safely. Currently, I believe phakic IOLs are best suited to patients with -12.00 D of refractive error or more (although most higher myopes are still great LASIK candidates). Patients with lower myopia are also candidates if they have very thin corneas or topographic abnormalities. Phakic IOLs are as reversible as walking in the snow and then backing out and claiming you were never there, so it is not a benign procedure. Opening the eye has a very different risk profile than corneal surgery. ■

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