

# **Appropriate Management of the Refractive Surgery Patient**

## **Background**

The term refractive surgery describes various procedures that modify the refractive error of the eye. Procedures that involve altering the cornea are collectively referred to as keratorefractive surgery or refractive corneal surgery. Other refractive surgery procedures include the placement of an intraocular lens (IOL) implant, either in front of the crystalline lens (phakic IOL) or in place of the crystalline lens (refractive lens exchange). Refractive surgery may be considered when a patient wishes to be less dependent on eyeglasses or contact lenses, or when there are occupational or cosmetic reasons not to wear eyeglasses. Refractive surgery is an elective procedure. The surgeon must provide thorough informed consent of its risks, benefits, alternatives, and limitations. The outcome of refractive surgery is not totally predictable; glasses or contact lenses may be necessary to obtain satisfactory distance vision after surgery, and postsurgical patients who are presbyopic will likely require reading glasses.

## **The Informed Patient**

The decision to undergo refractive surgery should follow an appropriate period of information gathering by patients. They may learn about the procedures through the lay and scientific press, marketing materials (including print, radio, and television advertisements), internet websites, informational brochures, video tapes, discussions with ophthalmologists, medical doctors other than ophthalmologists, and other eye care professionals. It is the obligation of all health care professionals who provide information about refractive surgery to assure that the information is accurate, unbiased, and balanced, including a description of the potential risks and benefits of and alternatives to refractive surgery. The patient also has the right to know in advance of surgery who is expected to be participating in, and who will be responsible for, perioperative care and the professional training, experience, and qualifications of persons expected to be participating in that care, and the patient is free to give or withhold consent to these arrangements. The ultimate responsibility for obtaining accurate preoperative assessment and the patient's informed consent to refractive surgery rests with the ophthalmologist who performs the surgery.

## **Performance of Surgery**

Surgical treatment of refractive error, including excimer laser surgery, is appropriately performed by ophthalmologists who have advanced specialized training and experience in refractive surgery. An ophthalmologist's advanced specialized training in refractive surgery will generally include appropriate didactic courses, personal observation (on site or via unedited video) of live surgery performed by experienced refractive surgeons, wet laboratory hands-on experiences under the supervision of an experienced refractive surgeon, optional confirmation of knowledge and skills transfer through written examinations, monitoring by an experienced refractive surgeon of the ophthalmologist's first 10 to 20 refractive surgery cases, and attendance at annual continuing medical education courses for maintenance of the ophthalmologist's refractive surgical skills.

## **Perioperative Care**

The ophthalmologist who performs the surgery is responsible for the care of the patient during the postoperative period, during which time additional medical treatment (e.g., antibiotics, corticosteroids, other anti-inflammatory drugs, and analgesics) and/or surgical therapy might be indicated to minimize discomfort and maximize the likelihood of a positive outcome for the patient. The length of time involved in the important postoperative period of healing and modification of therapy varies substantially among different surgical procedures and patient healing responses. Although the risk is low, serious vision-threatening complications, such as infections, may occur after both incisional and laser refractive surgery. The ophthalmologist who performs the refractive surgery is ultimately responsible for the preoperative evaluation, the surgical procedure itself, and postoperative care of patients undergoing refractive surgery.

## **Appropriate Role of Other Providers After Surgery**

After refractive surgery, regular follow up of patients at the appropriate time in the postoperative period by nonphysician eye care providers may be acceptable practice in selected instances, with the advance consent of the patient. A substantial percentage of patients may require, or desire, full- or part-time use of corrective lenses, including eyeglasses and contact lenses. The optical management of patients including monitoring and measuring changes in refractive error and corneal topography, may be performed either by the ophthalmologist who performed the surgery, by other ophthalmologists, by other physicians, or by nonphysicians who are professionally trained, experienced, and qualified to do so at the appropriate time in the postoperative period.

The ophthalmologist who performs refractive surgery on a patient retains the ultimate responsibility for the perioperative care of the patient, even if the surgeon chooses to entrust any aspect of perioperative care to another physician or a health professional who is not a physician. However, it is considered appropriate for physicians other than the ophthalmologist who performed the refractive surgery or nonphysicians to participate in the perioperative care of refractive surgery patients in conformity to the following guidelines, provided the patient is promptly referred to the operating ophthalmic surgeon or other equivalently trained ophthalmologist for evaluation of the need for further medical and surgical treatment in the event of unsatisfactory healing or complication if:

1. Prior to the surgery there is mutual agreement between the ophthalmologist who performed the refractive surgery and another physician or a nonphysician regarding their respective roles and responsibilities in the care of the patient.
2. The ophthalmic surgeon delegates to the other physician or nonphysician the performance of only those services that are not within the unique competence of the ophthalmic surgeon and that the other physician or nonphysician is legally entitled and professionally trained, experienced, and qualified to perform.
3. In advance of surgery, the patient is accurately informed of the role that the other physician or nonphysician will play in the delivery of care and consents to these arrangements.
4. The ophthalmologist who performs the surgery or an equivalently trained ophthalmologist is available to provide, when and as required, any medical, surgical, or other care that the other physician or the nonphysician is not legally entitled or professionally trained, experienced, or qualified to perform.

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