Laser Cataract Surgery
By Praveen H. Keshava, MD

Cataract surgery today is safe, effective, and quite common. Thanks to advanced surgical instruments and lens implant technology, cataract surgery is not only one of the most frequently performed procedures in the United States, but it is also one of the most successful.

During the procedure, a small incision, about 2.5mm wide, is made in the cornea, the clear front “window” of the eye. The cataract is then removed using an advanced ultrasonic device. This procedure is called phacoemulsification. It is the most common method of cataract removal in the United States.

Lasers are used for many different eye procedures, but they have never been used successfully for cataract surgery – until now. In October 2010, The FDA approved the first femtosecond laser for use in cataract surgery. This laser can create incisions in the cornea and in the cataract itself. An eye surgeon must still use an ultrasonic device (phacoemulsification) to remove the cataract. This procedure is most appropriately called femtosecond-laser assisted cataract surgery or FLACS. Many refer to it more simply as “laser cataract surgery”.

Is laser cataract surgery safer?
Manufacturers and surgeons who have invested heavily in this new technology believe that laser cataract surgery will eventually prove to be safer and more predictable than surgery without a laser. To date, however, there are no randomized controlled trials demonstrating a safety benefit of laser cataract surgery over conventional surgery.

Will laser cataract surgery give me better vision?
Again, some surgeons believe that the increased precision of a laser will yield better vision. To date, however, there is no evidence to support this belief.

How much does laser cataract surgery cost?
Cataract surgery is considered a medically necessary procedure. Medicare and commercial payers will cover most of the costs. They will not, however, cover any additional expense associated with this new technology. Typically, patients will have to pay an additional out-of-pocket fee to have laser cataract surgery. This will likely be over $1000 per eye.

If laser cataract surgery is not better and costs more, why is it being done?
The cynical answer is perception and money. Laser surgery is perceived as safer, less painful, and better. It appeals to patients, who will then have to pay for the added expense of the procedure. I, however, prefer to be less cynical. Although there is no current evidence that laser cataract surgery produces better clinical results, this technology will evolve. Someday it may even lead to better outcomes.
**Should I have laser cataract surgery?**

Even among leading eye surgeons, there is no consensus regarding the role of this new technology. While most doctors agree that lasers can provide greater precision, there is no evidence that this translates into better vision. The financial dilemma also remains: if laser cataract surgery proves to be marginally better than conventional surgery, will this justify the $1000 out-of-pocket expense? Unfortunately, no one really knows the answers to these questions today.

Over the coming months, we will hear much more about laser cataract surgery. Some will promote it as the latest and greatest. They are the early adopters. These surgeons believe that laser cataract surgery will eventually lead to better outcomes. Some will ignore laser cataract surgery altogether. After all, why should they increase the cost of a procedure that is already safe and effective? Most surgeons, however, will be cautiously optimistic and pay close attention. They will wait for unbiased real-world data rather than jump in head first, with eyes closed.

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