Femtosecond laser-assisted cataract surgery

Traditionally, surgeons use blades and other cutting instruments to create the capsulotomy, an incision of the outer layer of the cataract, during cataract surgery. The surgeon then uses ultrasonic power to break up the natural lens and remove it from the eye.

Emory Eye Center now offers femtosecond laser technology for cataract surgery patients, which can replace the use of blades during surgery. Benefits of using this type of laser can include:

✔ Bladeless incisions that are customized for each patient
✔ Increased surgical precision and consistency because of how the incision is made
✔ No stitches necessary
✔ Significantly less ultrasound energy in the eye
✔ Enhanced implantation and centering of intraocular lenses (IOLs)

Femtosecond laser assisted cataract surgery location:
The Emory Ambulatory Surgery Center at Dunwoody
4555 N. Shallowford Road
Dunwoody, GA 30338

404-778-2733 (2SEE)

Femtosecond laser-assisted cataract surgery is not for everyone. Your doctor can determine if it’s right for you.

Emory Eye Center’s main location:
Emory Clinic, Building B
1365B Clifton Road, NE
Atlanta, GA 30322

eyecenter.emory.edu
Examinations prior to cataract surgery

Before your surgery, several measurements will be taken to determine the optimal type and power of IOL to implant. This is standard for all cataract surgery patients; however, additional measurements are taken for patients who are interested in more specialized lens implants to reduce the need for contacts or glasses after surgery.

Healing and post-operative outcome

While the method used to calculate the IOL power is very accurate, the final result may differ from what you and your surgeon planned, due to differences in healing. Patients who have a history of extreme nearsightedness, farsightedness, or have had refractive surgery previously (LASIK, RK, or PRK) have the greatest risk of differences between planned and actual outcomes.

Risks

Potential risks of IOL surgery include mild discomfort and seeing more night glare, halos, double or ghost images. Complications from removing the eye’s natural lens could include bleeding, infection, swelling/clouding of the cornea or retina, retinal detachment, or increased astigmatism. IOL dislocation is also a risk.

Since your surgeon will operate on only one eye at a time, you may experience a period of imbalance between your eyes. This usually cannot be corrected with eyeglasses because there’s so much difference in the prescription. If you don’t have complications, your surgeon can operate on the second eye once the first has stabilized, usually within two weeks.

Cataracts and astigmatism

Some patients have astigmatism after cataract surgery—a condition where an irregularly shaped cornea causes objects to appear somewhat distorted at all distances.

If you have a high level of astigmatism, your surgeon could recommend insertion of toric IOLs after your cataract surgery. The femtosecond laser can be used to correct lower amounts of astigmatism.

What is a cataract?

A cataract is the result of the natural lens inside your eye becoming cloudy and hard. Cataracts usually develop from normal aging, but may occur in rare circumstances following eye trauma or after using certain medications. Cataracts may cause blurred vision, dulled vision, sensitivity to light and glare, and/or ghost images, but otherwise do not usually cause damage to your eye.

Removing the cataract will help correct the decreased vision it causes. An artificial lens, called an intraocular lens (IOL), will be implanted permanently in the eye. This is not something you will feel or see directly.

Most people still need to wear glasses or a contact lens after routine cataract surgery. Choosing a specialized lens implant will minimize, but may not eliminate, your need for glasses or contact lenses postoperatively.