



AK

The Procedure

Astigmatism is present when the cornea is steeper in one meridian than it is in the opposite 90° meridian, thus being shaped more like a football than a basketball. This usually occurs “naturally”, but may result from prior surgery such as LASIK, EPI-LASEK, PRK, LASIK, RK or cataract surgery.

ASTIGMATIC KERATOTOMY (AK) is the surgical correction of astigmatism using a precision diamond scalpel to perform tiny, thin, deep corneal incisions. These incisions relax the cornea in the steeper meridian which results in a decrease in astigmatism.

Astigmatic keratotomy has been performed since the late 1970's and its effects are well-studied. I have performed thousands of AKs since 1983. The success rate is quite high and serious complications are rare. Side effects are also low.

The lower the amount of astigmatism, the more accurate the procedure (this is also true of astigmatic correction with the laser). Below 2.50 diopters, the success rate (uncorrected visual acuity 20/40 or better) is over 95% and enhancement procedures are required in less than 10% of cases. Over 3.00 diopters, the success rate begins to drop, and over 4.00 diopters, it is about 50% and the need for enhancements increases to about 50%.

The procedure takes less than five minutes, is painless (topical anesthetic drops are very effective), and post-operative discomfort is usually minimal. In some cases, patients wear a bandage soft contact lens for a few days after the procedure. Most

patients describe a “foreign body” sensation for one to two days. Very few people experience significant pain. Return of vision occurs within a week, and usually remains quite stable with little or no regression.

As always, if you have any questions, please call us at:

1-877-210-2020

www.optimaeye.com

Side Effects of AK

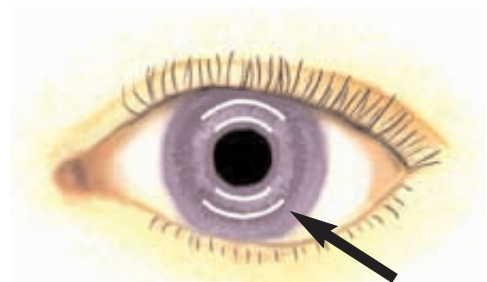
Side effects are not common and may include mild fluctuation of vision, some glare and light sensitivity, mild haze or “ghost images”, and recurrent erosions (where the cornea develops tiny recurrent surface breakdowns causing discomfort for one to two days at a time).

A microperforation of the cornea into the inside of the eye occurs in about 2% of cases and rarely causes a problem. Usually, the only treatment required is antibiotic drops for four to five days and no rubbing of the eye for two weeks. Occasionally, if a perforation occurs, a contact lens or sutures are required to treat the perforations.

Infections, significant over- or under-corrections, loss of correctable vision, irregular astigmatism, significant corneal scars, and macroporforation of the cornea requiring a suture to close the incision are all quite rare. Exceedingly rare is a perforation that results in the introduction of bacteria into the eye causing a serious, potentially blinding internal eye infection.

ASTIGMATIC KERATOTOMY (AK)

A precision diamond scalpel is used to make tiny, thin, deep corneal incisions. these incisions relax the cornea which results in a decrease of astigmatism.



ARCUATE INCISIONS

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