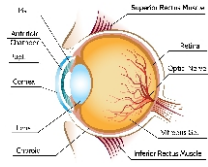


ICARE Eye hospital specializes in restoring sight to people, whose vision has been impaired due to cataract. Using advanced surgical techniques and state-of-the-art equipment together with the best available lenses & surgical material, it has been set k ng internaøonal standards of excellence for the last two decades.

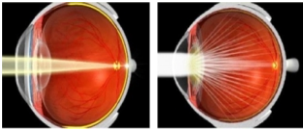
How the eye works

Before understanding cataract, it is important to know how the normal eye works. The eye works like a camera. The lens of the eye is normally clear and allows light to pass through. This light focuses on a thin film-like reäna which is situated at the back of the eye. The images are then transmiøged to the brain through the opæc nerve.



What is cataract?

It is the cloudiness of the normally clear lens in the eye. It prevents the lens from focusing light onto the reäna and hence causes blurring of vision and leads to vision impairment. As the cataract advances, this haziness of vision increases over a period of äme



Why does a cataract develop?

Cataract development is part of the normal ageing process. Almost all people above the age of 60 years have cataract of a variable degree, although it can occur at an earlier age also. In some people cataract development is aggravated by an eye injury, presence of diabetes, use of medicaøons or other eye diseases. Very rarely cataract can also be present in a newborn as a developmental defect.



What are the symptoms of a developing Cataract?

The symptoms of cataract are variable, as it can develop in di erent ways. Most people noäce a gradual deterioraøon in their vision. Objects may begin to look yellow, hazy, blurred or distorted. Greater light may be required to see clearly or glare or haloes from light may be experienced at night. A common problem encountered is increasing nearsightedness or frequent change in their glass power



Can cataract be prevented or treated with medicaøon?

Cataract that occurs due to the aging process cannot be prevented as the aging process itself cannot be prevented. Reading & similar acäviäes have no role to play in cataract formaøon. Till date, as per all authenæc medical research, there is no medicaøon available which can prevent or cure a cataract. The only known treatment for cataract is surgery.

When can you undergo Cataract Surgery?

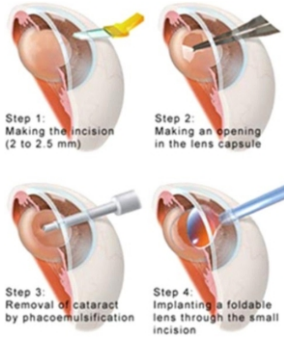
Cataract surgery can be performed as soon as the paænt feels handicapped in performing rouäne acäviäes at work and leisure. With modern micro - surgical techniques of sætch-less cataract surgery (Phacoemulsificaøon) it is not necessary to wait for the cataract to mature.

What is Cataract Surgery?

It is one of the oldest, safest and most successful forms of surgery. It requires a very short hospital stay and is generally performed under local or topical anesthesia. The paænt is awake during surgery but does not feel any discomfort or pain. Paænts are ambulatory immediately aDer surgery and are normally discharged within few hours. However, if required the paænts can be admiøged for a day.

The eye operaøon is performed with the help of a sophisæcated operaæng microscope. A small incision of 2-2.8mm is made. A circular opening is fashioned in the front poræon of the lens capsule.

The cloudy lens material within the lens capsule is then removed through the same incision by the procedure of phacoemulsificaøon using a thin ætanium probe, which emits high-speed ultrasound waves. This liquefies the cataract, which is then sucked out of the eye through the same probe. Finally, a foldable intraocular lens (IOL) is introduced through the small incision, and placed within the capsule of the lens where it unfolds and stays in place securely.



Small & micro incisions such as those used in phacoemulsificaøon seal themselves immediately aDer surgery and heal very quickly. Compared to non-phaco cataract surgery, the post-operaæve rehabilitaøon for sætch-less phacoemulsificaøon is faster and one can return to normal work and acäviäes within a few days. This is currently the most e æave method for removing cataracts.

Torsional & Cold Phaco

With ICARE's commitment to quality, we are the only insætuaøon in Noida & eastern Uøar Pradesh to acquire the state-of-the-art Alcon Infinia Vision System with Ozil Technology. This revoluøonary technology is based on the new concept of "Torsional Phaco" which fudher reduces ultrasonic energy delivered in the eye, thereby resulæng in crystal clear corneas aDer surgery and faster visual recovery even in cases of hard cataract removal.

ICARE also possess the AMO Signature phacoemulsificaøn system with WhiteStar ICE & Ellips/Fx technology. All of these machines deliver "Cold Phaco" which also has the advantage of significantly reducing the ultrasonic energy to break up the cataract resulæng in safer surgery and less damage to the eye.

Will you need glasses aDer IOL surgery?

The improvement in quality of life aDer cataract surgery is extraordinary, and most paænts are not dependent on their distance glasses for daily acäviäes. Some paænts however, may need glasses of small plus or minus power to obtain the best possible distance vision.

IOL power calculaøons at ICARE Eye Hospital are done by trained personnel using a computerized ultrasound biometer for measuring the eye power before the operaøon. Every endeavor is made so as to get minimal post-operaæve power in the distance glasses. A new device called the immersion technique biometer is now available which is capable of very accurate measurements of the eye & calculaøon of the IOL power. However, since these calculaøons are based on certain theoreæcal formulae, it will vary from person-to-person, and some persons may have a slightly larger postoperaæve refracæon than others.

Unlike the natural human lens, which can change its shape to focus according to the distance involved, the implanted IOL is unable to do the same. Hence, majority of paænts undergoing rouäne phacoemulsificaøon with IOL implantaøons, typically require reading glasses aDer cataract surgery.

What are the latest advances in Intraocular Lens (IOL) technology? ICARE keeps pace with advanced technology available worldwide and hence, works with various state-of-the-art IOLs. These new lens designs include Aberraøon-free IOLs which greatly improves image quality by enhancing contrast, eliminaæng glare and haloes, and improving night vision. Toric IOLs provides good unaided distance vision in paænts with a cylindrical number. Depending on your own personal visual needs and your clinical examinaøon, you can help your surgeon to decide which lens is best suited for you.

Can all paænts with cataract undergo phaco surgery?

Your eye surgeon will be the best judge to decide whether you can undergo phaco-surgery. Each paænt undergoing cataract surgery at ICARE is examined in detail to assess the endothelial count of the cornea using the Automated Specular Microscope. This facility, a marvel of technology, is one of the very few available in the NCR.

The endothelium is the inner most layer of the cornea which is responsible for its transparency. Preoperaæve assessment of the endothelial count enables idenæficaøon of paænts in whom this layer is weaker (low cell counts) and who are not fit for the phacoemulsificaøon procedure, for whom surgery by the convenæonal technique would be safer. Again based on findings of the endothelial count by specular microscopy it may be necessary to alter certain medicaøon used at the äme of surgery. If necessary special medicaøons like Healon / Healon GV and Viscoat, may be used to minimize loss of the already depleted endothelial cell counts during surgery. At ICARE Eye Hospital we believe that quality and safety cannot be compromised.



Is clear vision guaranteed aDer surgery?

No surgeon in the world can perform a surgery with guaranteed results. However, almost all paænts regain good vision following cataract surgery. The caliber of vision obtained aDer a successful cataract surgery with IOL depends upon the health of the reäna behind. Eye disease or problems in the cornea, reäna or opæc nerve may reduce the potenæal for clear vision even when the cataract surgery itself has been successful. However, it might not be possible to evaluate the condiøon of the reäna, opæc nerve, in cases of advanced cataract. Cataract and IOL surgery is not a magical procedure and need not necessarily restore normal vision immediately. Blurred vision may be present immediately aDer surgery. As the eye heals over a period of äme, vision improves gradually.

What are the possible complicaøons that can occur with Cataract & IOL surgery?

Cataract surgeries at ICARE Eye Hospital are highly successful procedures. Our results correspond with internaøonal staæsæcs. The few complicaøons that exist are becoming even more remote, with newer developments in surgical techniques and anesthesia.

Some minor complicaøons that can occur include:

- a. a slight drooping of the eyelid
 - b. swelling around the eye
 - c. corneal haze
 - d. reflæcæons/slight distoræons from the lens implant (usually temporary)
- The chances for serious complicaøons are negligible. Possible complicaøons include:
- a. infecæon
 - b. severe inflammaøon
 - c. hemorrhage

In a majority of cases these complicaøons can be treated successfully or may resolve on their own with a good final restoraøon of vision, The above list is however not exhaustæve.

Benefits of cataract surgery

There are numerous benefits of cataract surgery, many of which cannot be measured staæsæcally.

- These include:
- a. Improved color vision - are brighter and more vivid aDer cataract surgery.
 - b. Greater clarity of vision - vision is crisper & sharper aDer cataract surgery.
 - c. Improved quality of life - studies have repeatedly shown that people enjoy an improved quality of life aDer successful cataract surgery. Many people can resume driving, reading, wriæng, watching television, sewing, household work and using a computer immediately aDer.
- Even when reänal diseases or other problems prevent a total restoraøon of Vision, the remaining vision is usually improved by cataract surgery.



ICARE EYE HOSPITAL AND
POST GRADUATE INSTITUTE

(A UNIT OF ISHWAR CHARITABLE TRUST)

Cataract Surgery & Micro-Incisional Phacoemulsificaøon