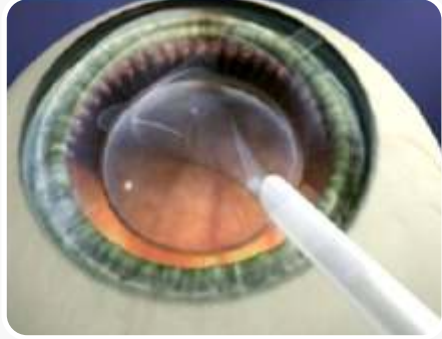


# ICL



## Implantable Contact Lens (ICL)

### *An excellent Vision Correction Option*

The ICL (Implantable Contact Lens) is a state-of-the-art refractive error solution that is ideal for anyone who has the need or desire for removal of power with high quality of vision correction. ICL or Implantable Contact Lens, as the name suggests, is a kind of lens which is implanted into the eye and does not require frequent removal like a normal contact lens. This phakic intraocular lens has numerous advantages including its correction of the widest range of myopia (near sightedness), hyperopia (far sightedness) and astigmatism (cylindrical power).

- ICL can correct a wide range of vision errors by permanently inserting a Contact lens in front of the natural lens of the eye.
- ICL is a kind of soft contact lens which is inserted into the eye through a very small incision
- Just like LASIK or Wavefront Lasik it takes only 5-10 minutes for the procedure

- The lens is customized according to each eye's shape and size
- Widest power correction range from +10D to -20D with cylinder upto 6D
- Made from a material called "Collamer" which is bio compatible (safe to stay in the eye for very long time)
- This new technique is similar to cataract surgery, but the natural lens remains in place so the eye's natural focusing ability is preserved.
- An implantable contact lens is beneficial because it becomes a permanent fixture of the eye, avoiding time consuming maintenance.
- It does not get lost, or have to be replaced like glasses and contact lenses.
- ICL procedures are being used on highly nearsighted and farsighted patients who may not be candidates for the more common laser procedures such as LASIK, LASEK, and PRK. Unlike laser vision correction procedures that permanently change your vision, it is possible to later remove an ICL.

### How do I know if I am a suitable ICL candidate?

- ① Candidates for the ICL are above 18 years of age, suffer from myopia (nearsightedness), hyperopia (farsightedness) and/or astigmatism (cylindrical power) and want to experience superior vision correction.
- ② Candidate with refractive error who are unsuitable for laser refractive surgery.
- ③ Prospective person should consult his/her ophthalmologist (eye surgeon) for more information, including an assessment of their candidacy.
- ④ Women who are pregnant or nursing should wait to have the ICL implanted. Lastly, those without a large enough anterior chamber depth or endothelial cell density may not be a good ICL candidate.

### Advantages of ICL?

- No blood! No pain! No hospitalisation!
- Almost all levels of power can be treated
- Excellent quality of vision
- Easily removed or replaced (5-10 minutes)
- Cosmetically good as it's INVISIBLE!!
- Fast recovery

## Why Patients Seek ICL

Patients seek the ICL because they expect the highest quality of results from their refractive vision correction procedure. The advantages of this phakic IOL (highlighted below) make the ICL a sought after treatment for nearsightedness & farsightedness.

- High quality of vision : The ICL not only corrects your refractive power or number, but it also enhances your quality of vision by producing sharp vision.
- Wide treatment range : In comparison to other refractive procedures, the ICL offers the widest treatment range for correction of vision.
- Foldable : because the ICL is foldable, a small incision is required during the procedure. This feature makes the procedure efficient (no sutures needed) and improves healing time.
- Invisible : the placement of the ICL into the posterior chamber of the eye makes the lens invisible to both the patient and any observer.
- Collamer composition : Collamer is made from collagen, which is a substance that naturally occurs in the body. This makes the lens highly biocompatible with the eye.
- Proven track record : Implanted in over 65,000 eyes worldwide, the safety and amazing improvement in vision quality of the ICL has been proven over the last 15 years.

Because the ICL is also ideal for patients with contraindications for laser refractive surgery, some people may consider the ICL as an alternative to LASIK; however, as you can see, it is so much more than that. It is often compared to the corneal refractive procedure because the ICL takes refractive surgery beyond the limits of LASIK. Patients, who may not discover the ICL until they begin to search for an alternative treatment to avoid LASIK or PRK, realize that the ICL is not just an alternative; it is the good choice for superior vision quality.

## Advantages of ICL

- Preserves accommodation
- No corneal tissue removed
- Retains corneal asphericity
- Possibly retains contrast sensitivity
- Removable

### How does the ICL work?

- Similar to a contact lens
- Designed to remain inside the eye
- Doesn't get dirty and needs no maintenance unlike a contact lens
- Once-a-year visit to hospital recommended for examination

### How does the ICL differ from other refractive procedures?

- Does not cut or remove tissue from the cornea
- Cornea retains its natural shape
- Safer for higher degrees of myopia, hyperopia, astigmatism and thin corneas
- Less glare issues on patients with large pupils
- Very stable over time, no regression

### What to expect on the procedure?

- Procedure should take 10-15 minutes per eye
- Laser Iridotomies done prior to surgery
- Dilating and anesthetic drops

### The ICL Procedure:

- The implant surgery is quick and painless, lasting only about 10 - 15 minutes.
- The area around your eyes will be cleaned and a sterile drape may be applied around your eye.
- Eye drops or a local anesthetic will be used to numb your eyes.
- When your eye is completely numb, an eyelid speculum will be placed between your eyelids to keep you from blinking during the procedure.
- The recovery time is short and the results of the surgery are almost immediate.
- Most patients resume normal activities within a week.

### Potential ICL risks include:

- Overcorrection: This complication occurs if the prescriptive power of the implanted ICL is too strong. In most cases it can be corrected with

corrective eyewear or with an ICL replacement.

- **Undercorrection :** The opposite of overcorrection, undercorrection is the result of an implantable contact lens with too weak of a prescription. Correction methods are similar to those of overcorrection.
- **Infection :** During most surgeries, there is a potential of an infection.
- **Increased intraocular pressure :** Pressure may build in the eye after an ICL procedure. The sooner a surgeon is alerted to this, the greater the chance of avoiding serious damage.
- This is detected during your follow up visits with us or in case you face acute blurring of vision or headaches, you must visit the eye clinic.
- ICLs have the potential, however slight, of needing to be repositioned.
- **Damage to crystalline lens :** because implantable contact lenses are implanted into the eye, there is a potential that the eye's natural lens may be damaged during the procedure. If the damage is severe, the crystalline lens may need to be replaced with an intraocular lens.
- **Cataract development :** Over 50 percent of the population will develop cataracts by the age of 65, however, it is believed that the use of some implantable contact lenses may cause cataracts at an earlier age, this however is rare.
- **Halos, glare, and double vision :** Updated ICL models greatly diminish the risks of halos, glare, and double vision.
- **Retinal detachment :** Less than 1 percent of patients in the clinical studies were affected by retinal detachment. It should be noted, however, that the occurrence of retinal detachment increased as the degree of myopia increased.

### **Where is the ICL placed?**

A trained ophthalmologist will insert the ICL through a small micro-incision, placing it inside the eye just behind the iris in front of the eye's natural lens. The ICL is designed not to touch any internal eye structures and stay in place with no special care.

### **What is Toric ICL?**

The Toric ICL is only a variant of ICL. Toric ICL corrects your nearsightedness as well as your astigmatism (cylindrical power) in one single procedure. Each lens is custom made to meet the needs of each individual eye.

### **What is the track record of the ICL?**

Prior to being placed on the market, the ICL was subject to extensive research

and development. Today, more than 65,000 patients worldwide enjoy the benefits of the device. In an USFDA clinical trial, over 99 percent of patients were satisfied with their implant. The ICL has a track record of stable, consistently excellent clinical outcomes. The lens has been available internationally for over 12 years.

### **Does it hurt?**

No, most patients state that they are very comfortable throughout the procedure. Your ophthalmologist will use a topical anesthetic drop prior to the procedure and may choose to administer a light sedative as well.

### **What is the ICL made of?**

The ICL is made of Collamer®, a highly biocompatible advanced lens material which contains a small amount of purified collagen. Collamer does not cause a reaction inside the eye and it contains an ultraviolet filter that provides protection to the eye. Collamer is a material proprietary to STAAR Surgical Company, the company that manufactures ICL.

### **What if my vision changes after I receive the ICL?**

One advantage of the ICL is that it offers treatment flexibility. If your vision changes dramatically after receiving the implant, your doctor can remove and replace it.

Patients can wear glasses or contact lenses as needed following treatment with the ICL. The implant does not treat presbyopia (difficulty with reading in people 40 and older), but you can use reading glasses as needed after receiving the ICL.

### **What type of procedure is involved in implanting the ICL?**

The implantation procedure for the ICL (Implantable Contact Lens) is refractive eye surgery that involves a procedure similar to the intraocular lens (IOL) implantation performed during cataract surgery. The main difference is that, unlike cataract surgery, the ICL eye surgery does not require the removal of the eye's natural lens. The ICL procedure is a relatively short outpatient procedure that involves several important steps. The surgical procedure to implant the ICL is simple and nearly painless.

As a ICL candidate, your doctor will prepare your eyes one to two weeks prior to surgery by using a laser to create a small opening between the lens and the front chamber of your eye (iridotomy). This allows fluid to pass between the two areas, thereby avoiding the buildup of intraocular pressure following the surgery. However, some surgeons choose to do this step on the same day of

the surgery.

The implantation procedure itself takes about 10-15 minutes and is performed on an outpatient basis, though you will have to make arrangements for someone to drive you to and from the procedure. You can expect to experience very little discomfort during the ICL implantation. You will undergo treatment while under a light topical or local anesthetics. Following surgery, you may use prescription eye drops or oral medication.

The day after surgery, you will return to your doctor for a follow-up visit. You will also have follow-up visits one month and six months following the procedure.

Although the ICL requires no special maintenance, you are encouraged to visit your eye doctor annually for check-ups following the ICL procedure.

### **Can the ICL be removed from my eye?**

Although the ICL is intended to remain in place permanently, a certified ophthalmologist can remove the implant in a very quick & short procedure.

### **Is the ICL visible to others?**

No, the ICL is positioned behind the iris (the colored part of the eye), where it is invisible to both you and observers. Only your doctor will be able to tell that vision correction has taken place.

### **Will I be able to feel the ICL once it is in place?**

The ICL is designed to be completely unobtrusive after it is put in place. It stays in position by itself and does not interact with any of the eye's structures.

### **Where can I get my ICL procedure done?**

Please be aware that ICL procedure is presently available at select centres & hospitals in India as it requires precision and skills. In our Institution our Cornea and LASIK experts will guide you better if you are the right candidate for this procedure.

# ICL



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Refractive Surgery Centre

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