

IMPLANTABLE CONTACT LENS PROCEDURE

Frequently Asked Questions

WHAT IS THE IMPLANTABLE CONTACT LENS (ICL) PROCEDURE?

The ICL is a very thin implant that is inserted through a microscopic opening in the cornea and positioned between the iris and the normal crystalline lens. The implant has a central thickness similar to a human hair, which is 50 microns.

HOW DO I KNOW IF I AM A GOOD CANDIDATE FOR THE ICL PROCEDURE?

Patients that are not satisfactory candidates for laser vision correction are usually good candidates for the ICL. This usually means that the prescription is too high, and/or the corneas are too thin or are irregular. Usually whatever vision you have with glasses or soft contact lenses can be achieved postoperatively without optical aids. Patients should have a pupil size measured in dim light of 7 mm or smaller. There must be a satisfactory distance between the back surface of the cornea and the crystalline lens of 3.0 mm or greater. The eyes should be healthy inside without evidence of cataracts or significant macular degeneration.

WHAT TESTS ARE PERFORMED TO BE SURE THAT I QUALIFY FOR THE ICL?

A refraction is performed to determine your prescription and your vision. An instrument called the Colvard pupillometer is used to measure the pupil size in dim light. A Pentacam or Orbscan is performed to determine the distance from your cornea to your crystalline lens. An IOL Master is performed to determine the width of your cornea to assist in determining the length of the implant.

SHOULD I DISCONTINUE MY CONTACT LENSES PRIOR TO THE PREOPERATIVE TESTING?

Yes, it is important to stop wearing soft contact lenses for approximately 5 days and rigid gas permeable lenses for at least 3 weeks prior to the preoperative testing. Contact lenses can potentially change the shape of the cornea and it is important that the corneas return to their normal shape prior to the preoperative testing.

IS THE ICL CUSTOMIZED FOR MY EYE?

Yes, the ICL is ordered directly from Switzerland where it is custom made for your eye. The lens has a specific prescription to correct nearsightedness, farsightedness, and/or astigmatism. In addition it is ordered with a specific length so that it fits well inside your eye.

HOW LONG DOES IT TAKE TO RECEIVE THE ICL FROM THE TIME IT IS ORDERED?

It takes approximately 6 weeks for the Bochner Eye Institute to receive the ICL from Switzerland after it has been ordered.

WHY IS A LASER IRIDOTOMY NECESSARY PRIOR THE ICL PROCEDURE?

A YAG iridotomy is a simple laser procedure to create a microscopic opening in the iris. This is important prior to the ICL procedure to prevent a buildup of eye pressure. Fluid normally flows inside the eye directly through the pupil. The ICL can potentially block fluid flow and create a high intraocular pressure. A small opening in the iris is created which allows fluid to travel through the iris and prevent a buildup of pressure.

ARE BOTH EYES TREATED THE SAME DAY?

Usually the eyes are treated on different days, a few days apart. Dr Stein wants to make sure the first eye is perfect before treating the second eye.

HOW DOES THE ICL PROCEDURE DIFFER FROM A REFRACTIVE LENS EXCHANGE?

There is no tissue removed with the ICL. With a refractive lens exchange the crystalline lens is removed using ultrasound and an artificial lens is inserted.



WHAT ARE THE ADVANTAGES OF THE ICL OVER A REFRACTIVE LENS EXCHANGE?

By leaving your own crystalline lens in place you will retain your ability to see up close to a similar degree that you had prior to surgery with your glasses or contact lenses. With age the crystalline lens becomes harder and loses its ability to naturally change shape and help with focusing for near objects. This typically occurs between 42 and 46 years of age. By leaving your own crystalline lens in place you will retain your reading ability without glasses. If you are in your mid 40s then reading glasses will be required.

IS THERE ANYTHING I CAN DO TO AVOID READING GLASSES?

Monovision can be performed in which one eye is treated to give the best distance vision and the other eye is treated to provide reading vision. Patients will often get used to their vision and function well. Sometimes driving at night may be more difficult and a simple pair of distance glasses can be prescribed so the reading eye is sharp for distance.

HOW IS THE ICL PROCEDURE PERFORMED?

The procedure is performed in the operating room. Your pupil will be dilated with dilating drops. Your eye will be frozen with anesthetic drops. Your lids and surface of the eye will be cleaned with a disinfectant solution. A paper drape will be placed over your body and head. There will be a small opening that exposes your eye. A speculum will be inserted to open your lids. A small incision will be made in the cornea. The ICL, which has been folded, is then inserted through a microscopic corneal incision into your eye. The ICL is then carefully positioned behind your iris and in front of the crystalline lens. Your pupil will then be constricted with drops. An antibiotic medication will then be instilled. You will then sit up and be escorted to the recovery area. After 30 to 45 minutes you will be taken to the first floor where Dr Stein will examine your eye and check your eye pressure. You will then be able to go home to rest. A follow-up appointment will be arranged for the next day.

CAN I RECEIVE SOME SEDATION FOR THE PROCEDURE?

Although most patients find the procedure relatively easy, an anesthetist will be present, and if you feel you would like some sedation this can be administered.

HOW QUICKLY WILL MY VISION RECOVER?

There is usually a rapid improvement in vision over 24 hours. Most patients have satisfactory vision for driving by the next day. It may take a few months for final healing to occur.

WHAT ARE THE POTENTIAL COMPLICATIONS OF THE ICL PROCEDURE?

Complications are uncommon with the ICL procedure. There is less than a 1% risk of developing a cataract or clouding of the lens. If this occurs the ICL can be removed, the cataract extracted, and a new implant inserted. The success rate is excellent at restoring vision. There is a theoretical risk of infection but no cases have been seen at the Bochner Eye Institute.

WHAT CAN BE DONE IF I HAVE A SMALL PRESCRIPTION AFTER MY ICL PROCEDURE?

If you have a small prescription after the ICL then laser vision correction can be performed. Usually we wait a few months to be sure that your prescription is stable and your eye is fully healed.