

CATARACT SURGERY WITH CRYSTALENS IMPLANTS



Dr. Joseph Hoffman has been performing cataract surgery with intraocular lens implants since 1983. The Crystalens is the first and only pseudoaccommodating implant on the market. Dr. Hoffman recommends the Crystalens to all his patients who desire spectacle freedom after cataract surgery. We hope that the information below will help you understand this wonderful new technology that is now available to all cataract patients.

For those wanting to see in the distance, up close, and everything in the middle, nothing compares to Crystalens® in our opinion. **Crystalens®** is a replacement lens for the cataractous human lens or a mis-powered human lens. Crystalens® lenses move and focus at different distances similar to the way the human natural lens works when we are younger. This allows one to focus at different focal lengths or distances without the aid of glasses or bifocals. For those desiring a surgical option or an option at the time of cataract surgery, Monovision and Multifocals are the other options. Monovision isn't appropriate for those who haven't lived their life in monovision (in contacts) prior to surgery. Loss of depth perception is common. Multifocals work for some, but again you should prove prior to surgery that the patient likes multifocal vision with multifocal contacts. Multifocals work by splitting light. Halo's around lights are very common and very bothersome to some people. Some are not bothered with time but some never get past it. Also intermediate distance vision (like computer distance) tends not to be good. ReZoom and Restor lenses are multifocal lenses.

With Crystalens® those loss of depth perception, contrast and intermediate distance vision issues are not issues. But Crystalens® requires extraordinary effort on the part of the surgeon and staff. We are proud of our results and invite you to learn more about this technology.

FREQUENTLY ASKED QUESTIONS ABOUT CRYSTALENS:

Q: What is the crystalens?

A: The crystalens is a new technology that is designed to mimic the eye's natural ability to focus on distant, middle, and near objects. Used in conjunction with standard cataract extraction methods, the crystalens was designed to provide a continuous range of vision, from distance to intermediate to reading vision without total dependence on glasses or contact lenses.

Q: What makes the crystalens different from other intraocular lenses?

A: The crystalens has the unique ability to focus on objects at varying distances using the eye's natural focusing system. This means that the crystalens can provide a continuous range of vision, without corrective lenses, from near to far and everything in between.

Standard (single vision) lens implants do not have the ability to provide a full range of vision. Most people who have single vision lens implants **MUST** wear glasses for middle and near vision. It was shown in the two year clinical trial that supported the FDA approval of the crystalens that significantly more patients implanted with a crystalens (88%)

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could see better at all distances than patients implanted with a standard lens (36%).

Q: Can my vision be corrected to 20/20, for both reading & distance?

A: The crystalens has been designed to focus your eyes at all distances after cataract surgery. While virtually everyone will experience a significant improvement in their uncorrected vision after surgery, some people will not see 20/20 at all distances.

It is interesting to note that many people who have not had surgery are not able to see 20/20 at both near and far even with glasses or contact lenses. This is due to a variety of ocular and physiological problems as well as lifestyle preferences, yet most of these people function quite normally although their vision is reduced.

The two-year clinical trial that supported the FDA approval of the crystalens indicated that 92% of the people enrolled in the study (implanted bilaterally) could see 20/25 or better at distance, 96% could see 20/20 at arm's length and 73% could see 20/25 at near without glasses or contact lenses.

What is more exciting is that 98% of these people could pass their drivers test, 100% could see their computer and dashboard, read the prices in the supermarket or put on their makeup, and 98% could read the telephone book or newspaper, all without glasses or contact lenses. It is important to keep in mind that visual acuity is subjective and depends upon each individual's own ocular and physiological conditions as well as lifestyle preferences. Some patients implanted with the crystalens still require glasses for certain activities.

Q: What about my middle vision, like working on the computer. Will it be like wearing trifocals?

A: Your ability to see at approximately arm's length (middle vision) will be greatly enhanced with the crystalens.

Over 96% of people enrolled in the clinical study were able to see 20/20 at arm's length without correction.

In addition, the quality of vision compared to wearing trifocals is significantly improved. You will have a full range of vision, without having to tilt your head to find that portion of your glasses that allows you to see clearly. You simply look at something and the crystalens will automatically focus your eye at near, arm's length, or distance. The crystalens mimics the natural focusing ability of your eye.

Q: Will I be able to read in all light conditions?

A: The crystalens functions very much like the normal human lens. It is important to remember that reading vision in low light is also influenced by the overall health of your eye and by the condition of the light sensors in the retina. As we get older our ability to see in low light conditions may start to decrease. It is always best to read in good light conditions.

Q: How do I know if I am a good candidate for crystalens implantation?

A: Your doctor will perform a thorough examination and advise you of a customized treatment plan for effectively correcting your vision.

Virtually everyone with good general health is a candidate for implant surgery, but people with chronic infections, uncontrolled diabetes, or other health problems may have to wait until these conditions are under control prior to having surgery.

People who have had prior corneal refractive surgery are acceptable candidates for crystalens implantation as long as their eye is in good health. Talk to your doctor.

If you have already had cataract surgery, you are not a candidate for the crystalens procedure.

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Q: Should I have the crystalens implant put in both eyes?

A: Typically cataracts will develop in both eyes. If only one eye has a cataract, only one implant is necessary. If both eyes have cataracts and the vision in one eye is worse, the surgeon will elect to implant that eye first. If both eyes are the same, the surgeon usually starts with the 'non-dominant' eye.

Your doctor will look at a number of factors in deciding which eye to implant first and when, if necessary, to implant the other eye. Most surgeons prefer to wait two to three weeks between surgeries, but this may vary based on how well the first eye is healing and the visual outcome.

Q: How long will the surgery take? Will I feel anything?

A: The crystalens procedure is typically performed in an outpatient surgical facility. You will arrive at the surgery center about an hour before the procedure. A number of topical drops will be placed in your eye and you may be administered medications to help you relax. The eye drops anesthetize your eye and dilate your pupil.

Once in the surgery suite, you will lie down on a comfortable bed, a microscope will be positioned over your eye and you will be asked to look up into the light of the microscope.

The actual surgery usually takes less than 20 minutes. The surgeon will stabilize your eye with a device to keep your eyelids open. You will feel no pain, only slight pressure on your eye. All you have to do is relax and hold still.

Once the surgery is complete, additional drops will be placed in your eye to prevent infection, decrease inflammation, and keep your pupil dilated. A patch may be placed over your eye and someone will need to drive you home. Once at home, you should rest for the remainder of the day. You should avoid any strenuous activities. Your doctor will see you the day after surgery to remove the eye patch and examine your eye. Do not rub your eye.

The doctor will give you additional medications that you will need to put in your eye for the next week or two. These drugs help the eye heal, leaving no residual effects.

Q: What are the chances that something could go wrong with the surgery? What would they be?

A: The contemporary treatment for cataracts is to remove the crystalline lens and replace it with an implantable lens. The crystalens represents the state-of-the-art in implantable lens design and is the result of over 50 years evolution in the treatment of cataracts.

The medical procedure to implant the crystalens is the same safe, proven cataract surgery performed annually on over 7 million eyes globally. Over 40 million procedures have been done in the last 25 years. But because it is surgery, it is not completely risk-free.

Complications of cataract surgery range from minor, usually temporary side effects, to sight-threatening complications. Fortunately, significant sight-threatening complications are extremely rare, and include, but are not limited to, infection, hemorrhage, and retinal detachment. These and other complications may occur as a result of the removal of a cataract, whether or not an intraocular lens is implanted, and may result in poor vision, total loss of vision, or loss of the eye. Dislocation of the lens and the need for additional surgery, such as lens removal and replacement are also possible risks of the procedure. In addition, people with existing medical conditions such as diabetes, high blood pressure, chronic inflammatory conditions, and chronic infections are at a higher risk of developing complications. Current data indicates that 98% of people have no complications after cataract surgery and more than 95% have improved vision. Please note that the crystalens implant will only be inserted in your eye if everything goes perfectly well and your eye is suitable for this implant.

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Your doctor will perform a thorough examination and fully inform you of any increased risk of a complication.

Q: What will my vision be like after surgery?

A: Your distance vision will usually be very good within a day or two after surgery. However, your middle and near vision may be somewhat blurred at first. You may need to wear reading glasses to help you read during this time. After about 2 weeks, you will notice that your middle (arm's length) vision is improving and your near vision is also starting to get better. It is important that you discontinue the use of the reading glasses at this time so that you strengthen the focusing muscle of your eyes.

It may take several months for your eyes to reach their full focusing potential. The more you try to read without reading glasses, the quicker you will be able to read without them. You may notice a difference in your vision from one eye to the other after your eyes heal. This is normal. If the difference in your vision is significant, your doctor may recommend additional corneal refractive surgery. This is often done for the correction of astigmatism after implant surgery.

Everyone's focusing ability is different. Most people will be able to see clearly in the distance, have excellent middle vision, and will be able to read a newspaper without glasses, but some people may be more comfortable with additional correction, particularly at night or in dim light.

It is important to remember that implant surgery cannot resolve pre-existing visual conditions such as floaters, flashes, or visual field loss that are a result of conditions of the eye and not related to the lens.

Your doctor will thoroughly discuss the restoration of your vision after surgery and will recommend a specific plan for optimizing your uncorrected vision for near and far. It is important to remember that while virtually everyone experiences much improved vision after cataract surgery, some people will have better uncorrected vision than others.

It may be necessary for some people to wear glasses for distance and/or near vision to obtain optimal visual acuity. The difference from standard lenses is that most people will not be dependent on these supplemental vision aids to function normally.

Since this information isn't intended to replace the advice of a health care professional, be sure and talk with your doctor before making any decisions regarding vision correction procedures.

The long-term safety and effectiveness of this lens have not been established.

Q: What can be done if my implant does not provide sufficient focusing power?

A: There are various reasons why the power of your implant may not be sufficient to provide you with a continuous range of vision, including, but not limited to, measurement error, prior refractive surgery, e.g., LASIK, RK. In these cases, your doctor will decide the best course of treatment, which may include additional surgeries, such as removal and replacement of the crystalens implant.

Q: What about glare, problems driving at night and sensitivity to light? Can implant surgery create these problems?

A: These symptoms are much less likely to occur with crystalens than any other presbyopia-correcting lens. These symptoms can be produced or exacerbated by cataract surgery. Many people report these problems before cataract surgery and even after surgery; however, they are rarely debilitating.

Sensitivity to light is often a temporary symptom. The crystalens optic material is so clear that in some people it takes time to get used to how bright colors are and how intense lights can be, particularly at night.

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As with any intraocular lens, glare can be a problem at night when the pupil widely dilates and occasionally light can reflect off the edge of the implant and create a flash or halo of light. This typically does not occur in your central field of vision, but rather in the periphery. People who have worn contact lenses in the past may be familiar with this phenomenon.

Again, glare is rarely debilitating and if it does bother you, there are a number of things that your doctor can do to improve your vision at night including medications or night driving glasses.

One advantage of Crystalens over the other presbyopia correcting IOL's is that Crystalens patients generally complain a lot less about night time driving glare than the multifocal ReZoom or Restor lenses. Also, Crystalens requires less "brain adaptation" to the new vision as do ReZoom or Restor multifocal lenses which can take 6 months or a year for a patient adaptation.

Q: When will I be able to return to normal activities after crystalens refractive implantation?

A: Typically, you will be able to return to normal activities within several days after implantation with some limitations. Your eye may be sensitive to touch and bright light, but you should be able to drive and return to work in two to three days.

Your doctor will provide you with medications to prevent infection and decrease inflammation, and may provide a protective shield to cover your eye while sleeping. A pair of plastic, disposable sunglasses will decrease your sensitivity to light as well as providing protection during the day.

It is important that you avoid heavy lifting or straining that would increase the pressure in your eye for several days after surgery. You also must avoid rubbing or pushing on your eye. You should refrain from activities that could increase your chances of getting hit in the eye. Wear your protective sunglasses when outdoors.

You can shower and wash your hair as long as you avoid getting soap or shampoo in your eye. Refrain from using eye makeup, lid liner, and mascara for several weeks after implantation. You should avoid public swimming pools, hot tubs, or other sources of bacterial or viral contamination for several weeks.

Consult your doctor on recommendations for specific activities.

Q: How often do I need to have my eyes checked after surgery?

A: Your doctor will advise you as to how often your eyes need to be checked. Typically, the doctor will see you one day after surgery, after 1 to 4 weeks, and again around 3 to 6 months after surgery. Thereafter, an annual exam is usually sufficient unless you have a specific problem.

Q: Can I go to any eye doctor for check-ups after the surgery?

A: Your surgeon and/or his/her staff will want to see you right after the surgery to ensure your eye is healing properly. This includes the 1st post-operative visit and usually the following visit. After that, the surgeon may allow you to see another qualified doctor to perform your follow-up visits.

You should inform your surgeon if you would like a different doctor to follow-up with you after surgery so he/she can consult with that doctor to ensure a high level of care. You should immediately contact your surgeon if you have problems or any doubts about your eyes after surgery.

Q: Will I have to have cataract surgery again?

A: Once your cataracts are removed and replaced with an implantable lens, you will never have to have cataract

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surgery again. Occasionally, several months after the lens has been placed in the eye, the vision may start to become cloudy once again. This is sometimes called a **secondary cataract** and refers to the clouding of the membrane that surrounds the implant.

This membrane (the capsular bag) originally surrounded the human lens. When the cataract was removed, all that remained was this membrane into which the artificial lens was implanted. The membrane healed around the artificial lens, securely holding it in place in the eye. Unfortunately, sometimes the same conditions that caused the original cataract will cause the build up of cells on the membrane behind the implant. These cells will block the vision and have to be removed.

A laser is used to make an opening in the membrane behind the implant, immediately improving vision. This is done painlessly without an anesthetic and takes just a few minutes. Once this is done, no further surgery related to your cataracts will be required.

Q: I have dry eyes. Will lens implantation help this condition or will I still have to use artificial tears?

A: Implant surgery typically will have very little influence on chronic dry eyes. This condition is related to a variety of internal and external medical conditions and is sometime associated with aging. You should consult your doctor on a therapy that is most suited to the cause and severity of your condition as well as your lifestyle. Don't Smoke. Smokers have worse dry eye and worse surgical results. Dr. Hoffman treats dry eye prior to surgery and wants patients to know that chronic eye conditions still need treatment afterwards. Crystalens is not a treatment for dry eye.

Q: Will security eye scanning still work after crystalens implantation?

A: Security scanning should not be affected after crystalens implantation. Security scanning usually relates to iris or retinal pattern recognition. The implant has no influence on iris scanning and should not interfere with retinal visualization through a normal-sized pupil.

Q: What will the crystalens procedure cost? Will insurance cover any of it?

A: Insurance coverage varies greatly from policy to policy and state to state. Generally speaking, private insurance may cover the cataract surgical procedure and anesthesia and may also allow a certain additional amount for the artificial lens implant. The insured is then required to pay a deductible as well as any additional amount above the primary coverage. (Some patients are completely responsible for payment – not all insurance companies will cover some of the patient cost).

Payment for conventional IOLs furnished in an outpatient setting is covered by Medicare. However, Medicare does not consider presbyopia correcting IOL's medically necessary. After all, you could wear reading glasses after surgery. Initially Medicare beneficiaries had no choice. They could not have Crystalens if Medicare paid any part of their cataract surgery. Then Medicare changed the rules and allowed the patient to upgrade to Crystalens without jeopardizing the Medicare's payment for the rest of the surgery. A Medicare beneficiary may request insertion of a presbyopia-correcting IOL in place of a conventional IOL during cataract surgery. In this case, the presbyopia-correcting IOL device and associated services for fitting one lens are considered partially covered by Medicare. The beneficiary is responsible for payment of that portion of the charge for the presbyopia-correcting IOL and associated services that exceed the charge for insertion of a conventional IOL following cataract surgery.

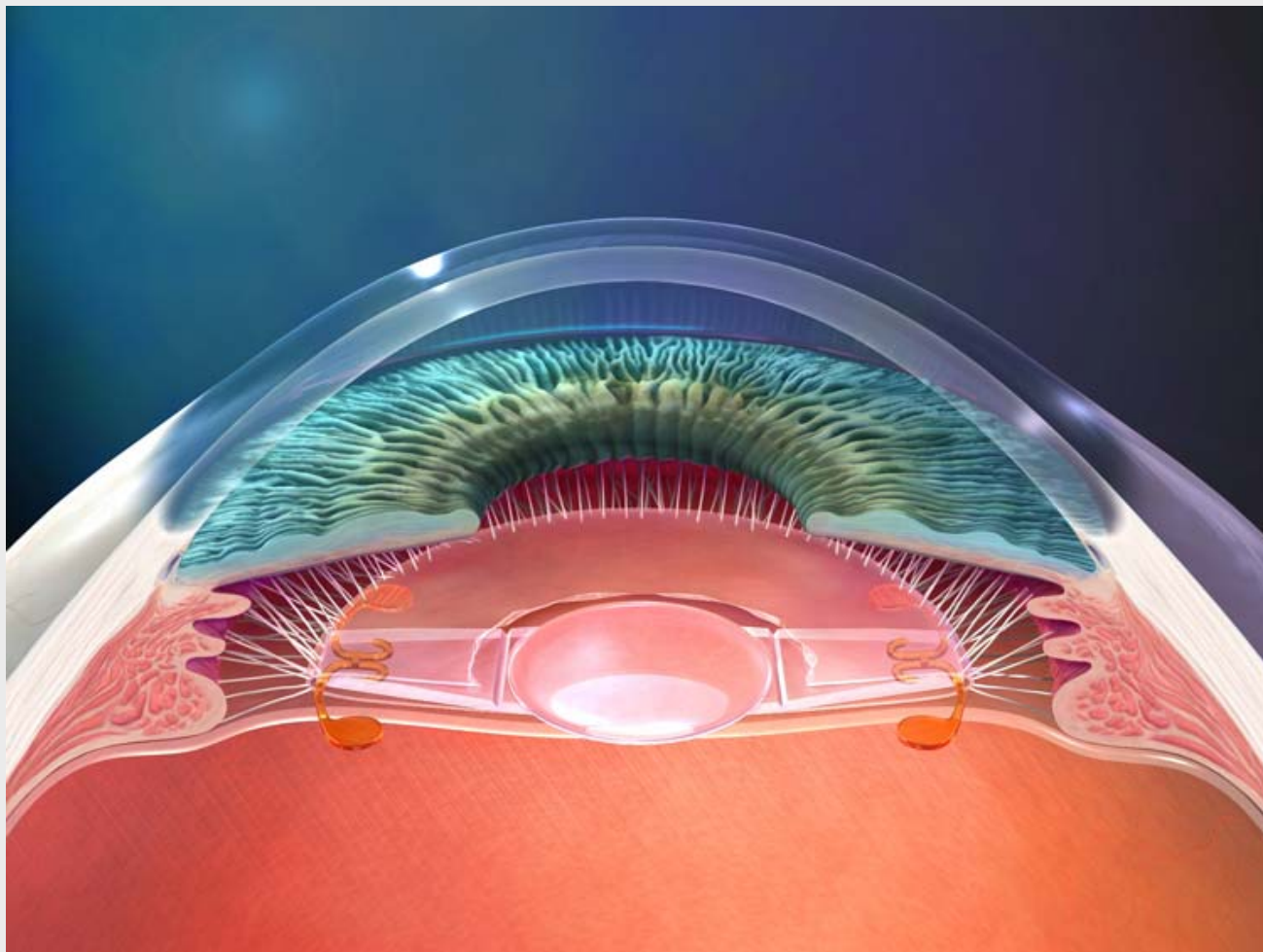
We cannot bill your insurance or Medicare for services that we know in advance are not covered or medically

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necessary- ie, Crystalens. In the past, patients who have tried to submit their Crystalens upgrade costs to their insurances have put their ability to get their other eye done in serious jeopardy. Don't even think about it. Since each patient's vision is different and unique, the cost for the crystalens procedure will vary. We make great effort with each patient to show before the surgery what the costs will be.

Q: How long will the crystalens continue to work?

A: The crystalens has been implanted in over 50,000 patients with great success. Since FDA approval was received in 2003, data continues to be collected that shows excellent visual outcomes with few reports of complications, including glare and halos. One test, seen at a national meeting shows the hinge of the lens being moved by a turning bolt over 2 billion times without affecting the lens! In our experience, the lens works better, i.e, the near vision improves with time.



Call 305-947-0027 or 954-493-5033 for more information or schedule a consultation. You can also visit our website at www.myeyecenters.com or email us at info@myeyecenters.com.

Thank you for your interest. Our goal is to help you see better.