



Complete Guide to
CATARACT SURGERY



**SOUTHERN CALIFORNIA'S
PREMIER EYECARE CENTER**

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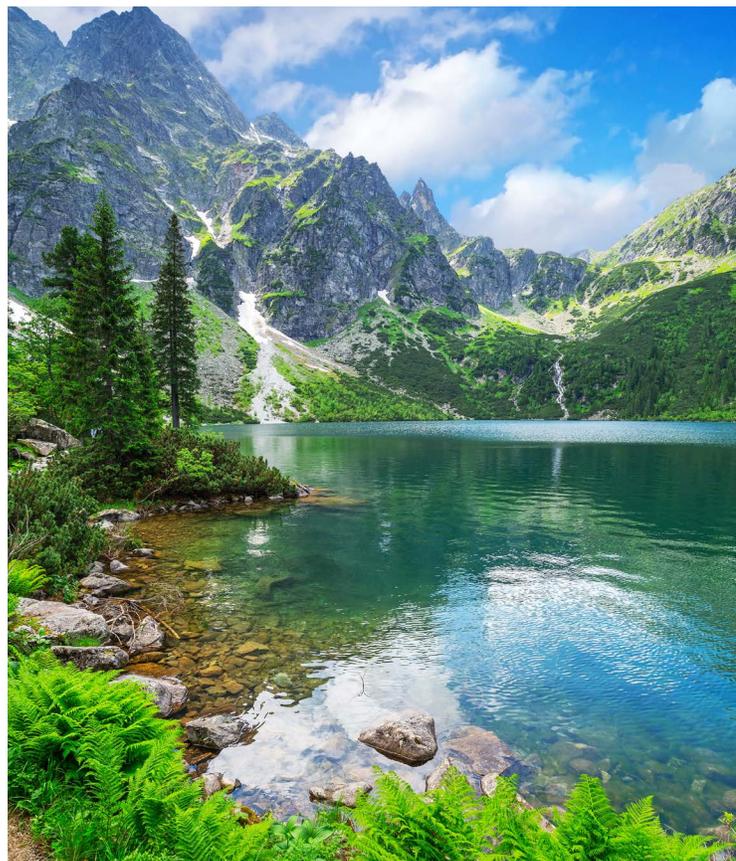
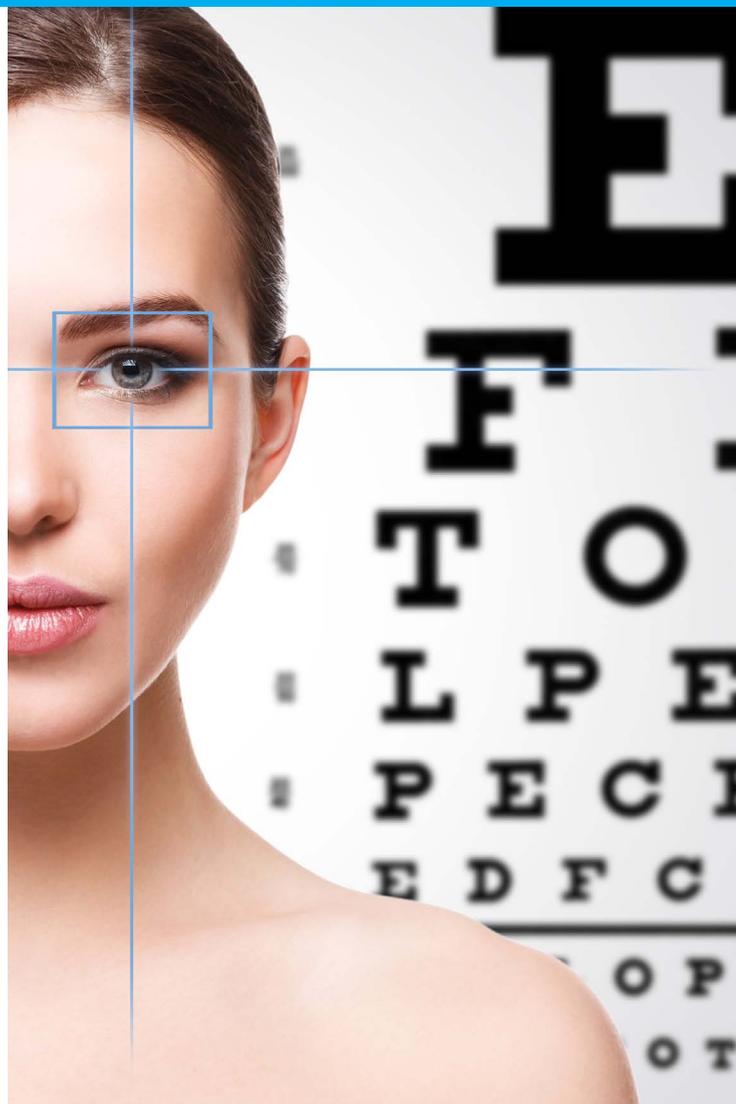
Medical Director and Chief of Surgery at Anaheim Eye Institute

Dr. Neal has been the lead surgeon at Anaheim Eye since joining the practice in 2005. With advanced training in laser refractive surgery, Dr. Neal is able to offer patients the most advanced surgical techniques.

EDUCATION & TRAINING

- Undergraduate - University of Pennsylvania
- Medical School- Wayne State University School of Medicine
- Residency- Vanderbilt University
- Fellowship- New York Eye & Ear Infirmary
- Fellow American Academy of Ophthalmology
- American Society of Cataract & Refractive Surgery

Dr. Neal's work has been published in multiple peer reviewed medical journals, including the American Journal of Ophthalmology and the Journal of Cataract & Refractive Surgery.





Focusing On Clear Vision

At **Anaheim Eye Institute**, we know how important it is to wake up each morning to clear vision. Because improved eyesight means more than just seeing your best, it really means being your best!

With a highly experienced staff, **Anaheim Eye Institute uses only the most advanced technology in achieving your best vision!** We have since 1958 set the standard for surgical techniques used all over the globe for vision correction! If you're considering treatment for cataract, we encourage you to look over the following information and become thoroughly knowledgeable about the treatment process. We'll be here to answer all of your questions and help in the entire process.

What's the most important part of your eye surgery?

Quite simply, your surgeon and the technology he or she uses. In vision correction, experience and expertise are the key factors in yielding excellent results. The team at **Anaheim Eye Institute** takes pride in being world leaders in quality vision correction and setting global standards of care. In addition to our precise techniques, training and distinctions we lead the way in the field of laser and implant vision correction through extensive research and a commitment to using only the best and most advanced technology available in the world.

We have prepared this booklet to help you understand cataracts— what they are and how we treat them.

At **Anaheim Eye Institute**, our goal is to treat you as a special guest and provide you with exceptional care and attention. Our kind, friendly staff makes your surgery a pleasant experience with minimal stress and no discomfort. As you consider surgery, we encourage you to ask questions and share your concerns. We want you to be completely knowledgeable about cataracts— how we treat them and what you can expect with surgery.

When you entrust us with the care of your eyes, our highly experienced team concentrates on achieving the most successful surgical outcome using the most advanced surgical options available anywhere in the world. With thousands of procedures and decades of surgical experience, the team at **Anaheim Eye Institute** has set the standard in quality vision correction since its inception in 1958. This experience, met with the most advanced technology and a thorough menu of surgical options, makes **Anaheim Eye Institute** your clear choice for the most advanced eye surgery available.

What exactly is a cataract and how is it treated?

A cataract is the clouding of the normally clear lens inside your eye. It is not a covering over the eye and it does not change the outward appearance of the eye, as is often mistakenly thought. It also does not cause any symptoms such as irritation or tearing; however, it does significantly decrease the quality of vision!

Though painless, a clouding of your lens alters your vision by restricting the amount of light that goes through your eye. When the natural lens inside your eye becomes cloudy, it is called a cataract.

In addition to hazy vision, symptoms of a cloudy lens include increasing night-time glare and a change in how your eyes perceive contrast and color. Once the clouding of your natural lens begins to diminish the quality of vision, your surgeon will recommend Lens Replacement Surgery to remove your clouded lens and replace it with a clear artificial lens to help restore your vision and prevent it from diminishing further.

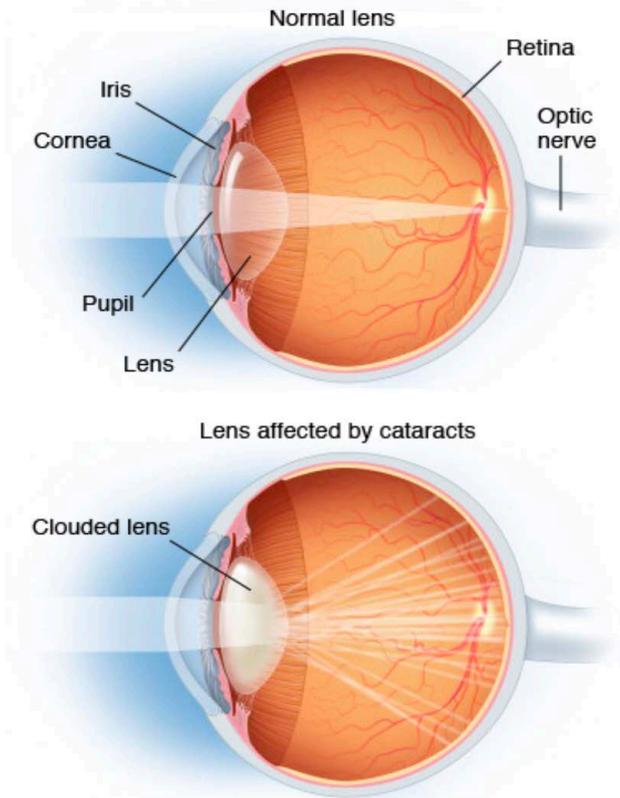
In a healthy eye, the iris (the colored part of the eye) regulates the amount of light that enters the eye through the pupil. The light then passes through the lens, where it is focused onto the retina at the back of the eye. Signals are then sent from the retina to the brain via the optic nerve, where they are translated into the images you see. In an eye with cataract, the lens has grown cloudy. Light enters the eye as usual, but the clouded lens disperses the light, producing a blurred image onto the retina. Therefore, because the light that the retina receives is patchy, the retina's transmissions to the brain are also affected, resulting in hazy poor quality vision.

Everyone's lens naturally becomes cloudy with age. This clouding of the lens may be exacerbated by diabetes, smoking, exposure to the UV light of the sun, and the use of any medications containing steroids- breathing inhalers, joint injections, skin creams, and steroid eye drops. Because the clouding of the the natural lens often develop slowly, it can go unnoticed by many patients, therefore regular dilated eye exams are critical in appropriate diagnosis and treatment. When the clouding of the lens starts to hinder vision in, Lens Replacement Surgery will be the best solution!

How do you know if you have clouding of your natural lens (cataract)?

The most important step is to visit us so that we can appropriately evaluate your vision. This evaluation will generally include tests

of your acuity, intraocular pressure, advanced macular scans, 3D retinal and anterior segment exams, and tear film analysis. We are confident that you won't find a clinic that takes greater care in measuring every detail of your eyes than we do. If you are found to have a clouding of your natural lens, our team at **Anaheim Eye Institute** offers the world's most advanced LenSx Laser Refractive Surgery combined with the most exhaustive list of implant options you will find anywhere in the United States. This will help ensure the most successful possible outcome!



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LenSx Lens Replacement Surgery

In order to remove the clouded lens inside your eye, certain incisions need to be made. First, corneal incisions are made to allow access inside of your eye, following which a circular cut is made to open the lens capsule which holds your lens in place, and then the lens material is divided into segments before being removed from the eye piece by piece. For many years all of these incisions were being performed using hand held metal blades.

However, the surgeons at **Anaheim Eye Institute** introduced the world's first FDA approved femtosecond laser system to North Orange County helping to add a new level of precision and safety to the procedure.

The LenSx Laser allows us to precisely and accurately make all of the incisions necessary to perform the best possible surgery for you. Most importantly the laser performs precise arcuate incisions in your cornea to reduce corneal astigmatism allowing



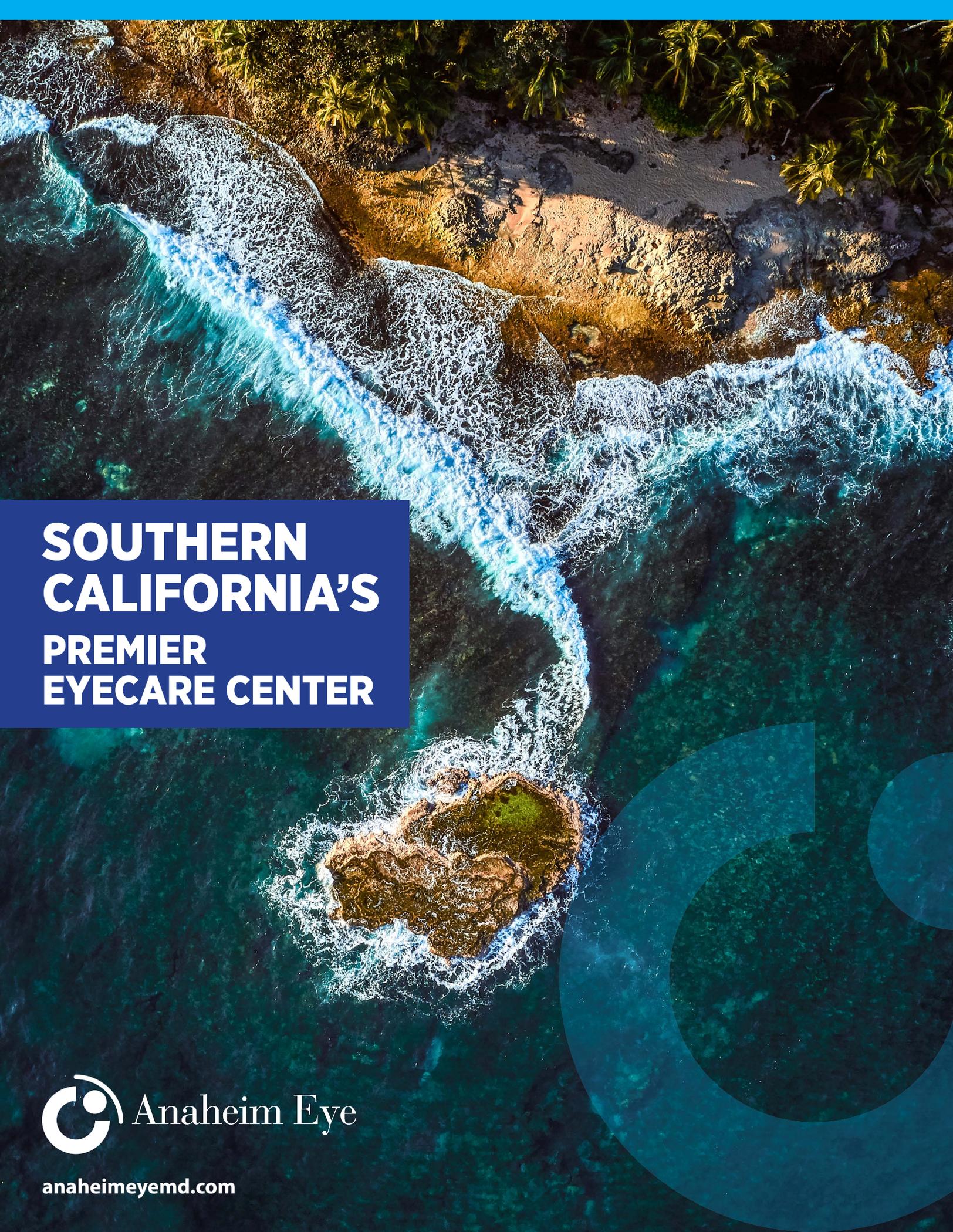
you to see more clearly! We believe that using only the most advanced laser assisted surgical methods allows for less risk, faster healing, and better outcomes.

Following the removal of the cloudy lens, a new clear artificial lens implant will be placed inside of the eye to provide you with the best vision you have ever had!

The exact prescription power of each lens implant is measured specifically for your eye and your visual needs.

In performing laser refractive cataract surgery, the ORA Intraoperative System is used to measure the anatomy of your eye after your natural lens has been removed and while you are laying under the operating microscope to provide us with the most accurate lens power required to provide you with the best vision possible. Lens implants are permanent and intended to last a lifetime and are made of acrylic that will not irritate your eye. Again, **Anaheim Eye** was the first practice in the area to incorporate ORA!

Traditional Blade Cataract Surgery	OR	SeeClear Laser Cataract surgery
 <p>Blade Corneal Incisions ✓ Surgical incisions with a blade</p>		 <p>Laser Corneal Incisions ✓ FDA approved LenSx® laser - no metal blade</p>
 <p>Astigmatism Correction ✓ No astigmatism correction</p>		 <p>Astigmatism Correction ✓ Toric Lens (Astigmatism Correcting Lens Implant) or Monofocal Lens with Laser Guided Astigmatism Correction</p>
 <p>Manual Capsulorhexis ✓ Manually create circular lens capsule opening</p>		 <p>Laser Capsulorhexis ✓ Create circular lens capsule opening with laser precision and accuracy ✓ Laser capsulorhexis allows for more accurate lens placement</p>
 <p>Manual Lens Division ✓ Manually divide lens using a blade</p>		 <p>Laser Lens Division ✓ Divide lens with laser efficiency & flexibility ✓ Lens energy is used to remove the cataract, causing less postoperative inflammation and faster recovery</p>
 <p>Single Focus Lens Insertion ✓ Good distance vision, depending on amount of uncorrected astigmatism</p>		 <p>Lifestyle Lens Insertion ✓ Good distance vision ✓ Good close up vision ✓ Good intermediate vision</p>
<ul style="list-style-type: none"> ✓ Traditional method ✓ Blade incisions ✓ Longer recovery 	<ul style="list-style-type: none"> ✓ Glasses still needed 	<ul style="list-style-type: none"> ✓ Increased precision ✓ Blade free incisions ✓ Lifestyle lens options ✓ Faster recovery time ✓ Astigmatism correction ✓ May not need glasses or contacts



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Your Options

Read Carefully!!! This choice will determine how you see for the rest of your life!

1. Manual Surgery

In manual lens replacement surgery, the procedure is performed by hand held blades and only a basic single focus IOL is utilized. This method is the “older” method of performing cataract surgery and unfortunately does not use any of the advanced technology that is now available to make your surgery safer, better, and more successful. **However, it still the only method available at most other practices!**

By having surgery performed in this manner:

- 1.) A laser will **NOT** be used, and surgery will be performed entirely with hand held blades.
- 2.) An older generation basic monofocal lens is used.
- 3.) Measurements of the eye during the surgery are **NOT** performed to place the most accurate IOL.
- 4.) The astigmatism of the eye is **NOT** treated.

Having surgery this way dramatically increases the chances that you will need to wear glasses for ALL visual activities at ALL times.

The only advantage of having surgery this way, the only reason why some patients still select this method, and the reason why surgeons still perform surgery this way is that it is the only method fully covered by medical insurances!

Although this method is decades old and does not take advantage of any of the many advancements that we have made to make lens replacement surgery better, safer, and obtain more accurate results.

At Anaheim Eye Institute, we do not believe that your insurance plan should limit your ability to obtain the best surgery and the clearest vision possible!

That’s why we offer ALL of the advancements that have been developed for lens replacement surgery.

Because this surgery can only be done once, every effort has been made to provide you with the best vision and the best experience possible.

Your vision is the most precious gift you possess, and although financial considerations are always important, they should NOT limit your ability to see clearly!

To make these advancements more accessible, special interest free monthly payment programs through Care Credit are available.

2. Distance or Near Vision Correction

To clear your distance vision with cataract surgery, we not only

have to treat the cataract in your eye, but also the “prescription” of your eye. For you to see clearly, we have to eliminate any myopia (nearsightedness), hyperopia (farsightedness), or astigmatism of your eyes.

These visual disturbances are called refractive errors and correcting them is called *Refractive Surgery*.

To provide you with clear distance vision certain special elements need to be done:

- 1.) *Preoperatively*- Detailed measurements of your eye including corneal topography, wavefront analysis, and macular scans are performed to allow us to predict the correct power and type of IOL to place in the eye.
- 2.) The surgery has to be performed expertly with the most advanced and precise technology available- The LenSx Laser.
- 3.) *Intraoperative* measurements using ORA are made to confirm the correct IOL type and power.
- 4.) *Postoperatively*- eye drops will be used to allow the eye to heal properly. YAG laser capsulotomy may be performed to remove any capsular opacification.

Not all eyes are made the same. Some eyes suffer from a condition referred to as “astigmatism.” This means that the shape of the cornea is more oval than round. This oval nature of the cornea prevents the eye from correctly focusing light and results in blurred vision if not appropriately treated. Depending on the amount of astigmatism, this corneal shape can be treated through laser made astigmatic keratotomy incisions or by specially designed artificial lenses called Toric IOLs.

3. Extended Range of Vision- Ideal Vision

While seeing at distance is great, a lot of what we use our vision for is to see at different distances. Today, many of our daily tasks involve not only being able to see to drive a car or watch TV but also to use the computer, a cellphone, or to read the items on a menu. In a young healthy eye, the lens inside is not only clear, but it can zoom in and out allowing us to see clearly over a wide range of distances- seamlessly from near to far. As we age, not only does the lens lose its clarity but it also loses its flexibility and so it is unable to zoom in and out over different distances.

However, with advanced cataract surgery we are now able to implant a better class of intraocular lenses which allow us to regain the ability to see at different distances! Referred to as “multifocal” IOLs these implants are able to greatly reduce the need glasses- so that patients can not only see the road signs when they drive but also the dashboard of the car to change the radio station.

Multifocal implants allow focusing to occur at multiple distances instead of just one distance like the monofocal lens. These advanced intraocular lenses can reduce or eliminate your need for corrective lenses altogether.

Multifocal lenses are made up of concentric circles, which vary to allow the eye to focus at different distances. The center of the lens provides distance power, with each surrounding ring being used to provide vision at intermediate and close range.

Frequently Asked Questions

1.) What happens if I don't have cataract surgery?

Ultimately as the cataract grows, it will lead to blindness. In the world, cataract is the leading cause of blindness. Thankfully in the United States we have great technology making this surgery safe and highly successful. Unfortunately however, if surgery is delayed and the cataract keeps growing, it will not only keep worsening your vision but will increase the risks of a surgical complication.

2.) What are the risks of cataract surgery?

Because cataract surgery involves entering the eye, it has certain risks. These include bleeding, infection, and damage to the other structures inside of the eye. Such complications could mean delayed recovery, the need for multiple eye surgeries, and loss of vision. Unfortunately, the longer the surgery is delayed, the older the patient is, and the larger the cataract gets, the higher the risks.

3.) How long is the recovery?

With advanced LenSx laser refractive surgery, the recovery is very quick. Surgery is performed at our private outpatient surgical center, following which a protective shield is placed over the eye and you may go home to rest. Later that SAME afternoon (or the next morning, if you prefer) you are seen in our office to have the eye patch removed! At this point, eye drops will be used to help your vision recover quickly. The majority of your visual recovery will occur in the first 24 hours! The next day you can drive, watch TV, and return to work. Your major restrictions will be to not swim or wear eye makeup for two weeks. You will be ok to shower the day after surgery. At bedtime we will provide you with a protective shield to wear so that you do not rub your eyes. During the day you will not need to patch the eye. You also don't have to worry about bending or lifting- those are no longer restrictions!

4.) What's the difference between LASIK and Cataract Surgery?

LASIK is a procedure performed for patients without cataract where a laser is used to reshape the surface layer of the eye (the cornea) so that it is able to focus the light directly onto the retina thereby eliminating the need for glasses or contact lenses. In patient's with cataract, the problem is the lens inside of the eye and not the cornea, therefore LASIK surgery does not treat cataracts.

5.) Do I need a driver on the day of the surgery?

Yes. To help you relax, during surgery our anesthesiologist will be administering a small amount of sedative medication in your IV. This medicine will make it unsafe for your to drive for 24 hours. Our new surgery center does however provide transportation free of charge if needed.

6.) Am I asleep for this procedure?

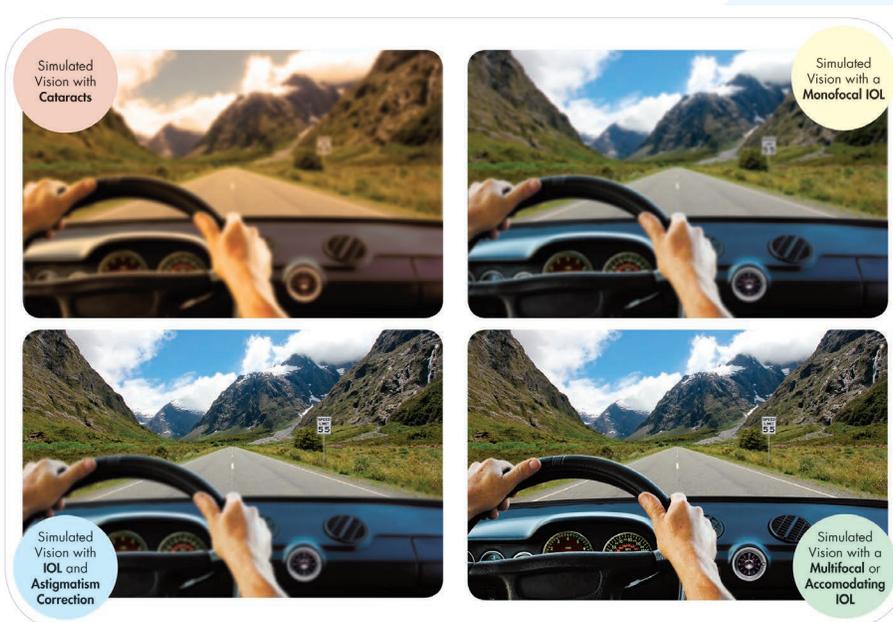
No. This procedure is performed under local anesthesia. Your eye will be numb so that you will not feel any pain and you will be sedated so you are comfortable. You will not see any instruments coming toward you and an eyelid holder will help keep your eye open the whole time so that you can blink whenever you like.

7.) Which is the best IOL for me?

This depends entirely on the measurements of your eye which will be obtained approximately 2 weeks prior to the surgery. Based on these measurements we can guide you which IOLs you are a candidate for and you can determine which IOL type you prefer based on your lifestyle and your visual needs. Unfortunately, not everyone is a candidate for every lens. The decision for your IOL is however very important because it will ultimately determine how you see your world and it cannot be changed later without significant risks.

8.) How long will the IOL last?

The IOL will last forever. It is permanent and will not be need to be changed or replaced. That is why your choice is so important, because it is forever!





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