

Refractive Lens Exchange & Refractive Cataract Surgery

Regain youthful vision.

As we age, the lens inside our eyes loses its ability to focus both near and far. Most vision correction procedures attempt to change the focusing power of the cornea. Refractive Lens Exchange on the other hand corrects nearsightedness or farsightedness by replacing the eye's natural lens, which has the wrong power, with an artificial intraocular lens implant that has the correct power for the eye.

Elective Procedure for age > 45 years.

"I'm over 50 years old and I can't stand wearing any glasses, do you have a solution for me?" is a frequently asked question. The answer has been, "I can help you achieve a good distance vision with LASIK, but you will require reading glasses following surgery." That has all changed! Refractive Lens Exchange or RLE is the answer.

Unlike LASIK and other refractive surgery techniques that correct vision by changing the shape of the cornea, RLE corrects your vision by changing the focusing power of the eye's lens. This is done by replacing your natural lens with a new intraocular lens (IOL). This is essentially the same surgical technique that is used in cataract surgery, but in this instance there is no cataract. These lenses are surgically implanted during a short procedure. The natural lens is removed and the artificial lens is introduced. With RLE you have the high possibility to achieve freedom of vision: both distance and near without eye glasses.

No "too old for visual freedom"...

With an RLE procedure, the age of the eye is no longer a limitation for older people who are interested in corrective surgery. Because of the different optical principles used compared to other refractive surgery techniques, good candidates for RLE ranged from 45 to 70 years of age.



See both near and far

With advanced intraocular lens (IOL) technology, RLE not only provides correction for both nearsightedness or farsightedness, but restores vision across the entire range from near through far. Patients will enjoy freedom of doing a wide variety of tasks without dependence on eyeglasses: golf, swimming, driving, computer use, reading your favorite books, cooking, checking price tags while shopping... the list is virtually endless.

Stable vision throughout your life.

With an RLE procedure, the resulting improvement in visual acuity will be something you will most probably enjoy for the rest of your life. This is unlike Laser-corneal based procedure, including Lasik, where refraction tends to change over time.

Near Far and in between!

SEE IT ALL. FREEDOM FROM EYE GLASSES

How the surgery works

Although RLE is a sophisticated microsurgical process, it is relatively simple for those undergoing treatment. Patients relax in a surgical bed. They are not put to sleep, but can be sedated with oral medication if necessary. Only the tissue around the eye is numbed for surgery.

The procedure is performed under high power microscope and involves two stages:

First, the eye's natural lens is removed. Second, an artificial lens is inserted to correct the eye's focusing power.

The lens implant is positioned inside the thin membrane capsule, where the original lens used to be. Now, the treatment is complete. The opening into the eye is so small that it usually heals without any stitches.

Surgery Results

Patients who undergo RLE have a very high chance of either achieving complete independence from eyeglasses for both near and far vision, or decreasing dependence on eyeglasses to a bare minimum.

The majority of post-operative patients can perform about 90% of daily tasks without glasses, including activities from which both near and far vision are needed. Such activities include reading, computer use, playing cards or taking part in sport.

Visual Recovery

In most cases, visual recovery from RLE is fast and produces dramatic improvement. A few minutes after the eye is uncovered, patients are usually able to see well enough to engage in regular activities with increased visual freedom. Side effects are minimal. Patients typically experience some temporary blurring for a few days or slight fluid retention in the cornea. Patients can also expect increased light sensitivity for a few weeks, so sunglasses need to be worn more often than usual during this time. Stable vision is generally achieved after 4 to 6 weeks, and remain stable for the rest of the patient's life. In the event that the stable visual result is less than ideal, additional laser surgery to improve focus is also possible after four or five months.

Operative schedule and follow-up time in Phuket

The operation is performed on an out-patient basis, so patients don't need to stay overnight in hospital. The surgery is generally scheduled as a "two-day surgery", with surgery done on one eye the first day, and the other eye, the following day. Patients need to stay in Phuket for a total of about two weeks for the entire process from initial consultation until follow-up period is complete, enjoying the island and their new found freedom from glasses at the same time.

Candidates

- At least 45 years of age
- Healthy eyes with no disease or abnormality
- Nearsighted or farsighted within the appropriate range of correction
- Willing to accept the risk of possible complications

Advantages

- Very high rate of independence from glasses for most activities
- Good reading and intermediate vision in good light environment
- Good distance vision day and night
- Most people function well and are happy with their vision

Limitations

- Can experience Halos or slight glare around lights at night (improved with time)
- Can take weeks or months to adapt to vision
- Glasses may still be needed for some tasks
- More exams and doctor visits are required
- Extra services involve additional costs

Refractive Lens Exchange & Refractive Cataract Surgery

Multifocal Lens Implants

FOR AN ACTIVE LIFE STYLE

Innovative multifocal lens implant technology makes it possible to regain more youthful vision with less dependence on glasses or contact lenses.

Visual Freedom

With both cataract surgery and refractive lens exchange the eye's natural lens is removed and replaced with a high technology lens implant. Previously, single-focus lens implants were the only option available. Although single-focus implants provide excellent vision, they are not able to focus both near and far. Before surgery, patients and their doctors choose a particular single distance they want for best focus and a lens implant power is selected to try to match this goal. Glasses are usually required for other distances. Multifocal lens implants have changed this. They are designed to allow you to see near, far and in between. Multifocals are more expensive than single-focus implants, but they provide freedom to enjoy an active lifestyle by reducing or eliminating the need for glasses.



How Multifocals Work

Unlike bifocal glasses, where focus changes depending on the area of the lens you look through, multifocal lens implants provide several zones of focus simultaneously. The brain then selects the focus needed for the task at hand and disregards everything else. This is similar to the ability to ignore background noise during a conversation. In most cases, improved vision is noticed almost immediately after surgery. However, there may be an adjustment period of several weeks as you get used to your new vision. Some patients say their ability to function without glasses gets even better during the first year.

Need for Glasses

Multifocals allow the vast majority of people to function well without glasses. However, there may be situations where print or images are too small or too far away to see without glasses. The amount of light and quality of print will also make a difference. While you may want to wear glasses for prolonged reading, multifocals should provide the freedom to read a menu, look at a cell phone, see the details of a boarding pass, write a note or read a price tag.

Multifocal lens implants are engineered with several concentric zones that provide different ranges of focus.

Dr. Captain Wiriyaluppa, MD.

- RLE (Refractive Lens Exchange)
- Refractive Cataract Surgery

Visual solution for seniors.

SEE IT ALL! FREEDOM FROM EYE GLASSES



Bright Light and Halos

Depending on the size of your pupils, you may see halos or a slight glare around bright lights at night. This is the result of light being seen by the near and distance focusing zones of the lens implant. Fortunately, the brain usually learns to ignore these halos and they become less noticeable over time. Although the adjustment time varies, most people do not notice the glow after a few months. Compared to earlier models, the newest multifocal lenses have been successfully designed to significantly reduce the halo effect.

Extra Cost

If you have cataracts, medical insurance may cover the costs for surgery with standard single-focus lens implants. But multifocal lens implants involve additional tests, services and fees. These extra fees are not generally covered by insurance and must be paid out of pocket. If you do not have cataracts but are considering refractive lens exchange to improve your vision, insurance will not usually cover any of the costs for surgery or lens implants.

Enhancement Treatment

Enhancement surgery is sometimes required to help

patients achieve optimal levels of visual function. When needed, our surgeons have several procedures they can use to fine tune vision. (cost was not included in procedure package)

Laser Capsulotomy

In the months and years after lens implant surgery, some patients experience a reduction in vision as cells grow behind their new lens. Clear vision can be quickly and easily restored with painless bursts of light in a procedure called YAG laser capsulotomy. If the initial lens implant surgery was done because of cataracts, medical insurance usually covers this treatment.

Your Decision

Selecting multifocal lens implants is a personal decision. A good place to start is to consider your lifestyle and how strong your desire is to reduce dependence on glasses. While multifocal lens implants carry no guarantees, they should greatly improve the odds that you will be able to read and see better overall without glasses. Collectively, our surgeons have performed hundreds of thousands of lens implant operations. So whichever lens you choose, you will be in excellent hands.

Candidates

Measurements taken by your eye doctor will indicate whether your eyes are well suited for multifocal lens implants.

Advantages

- Greater independence from glasses for most activities
- Good reading vision in most situations
- Good intermediate vision
- Good distance vision day and night
- Most people function well and are happy with their vision

Limitations

- Can experience Halos or slight glare around lights at night (improved with time)
- Can take weeks or months to adapt to vision
- Glasses may still be needed for some tasks such as prolonged reading
- May require fine-tuning with laser vision correction
- More exams and doctor visits are required
- Extra services involve additional costs