

Cataract Surgery Information

What is a cataract?

A cataract is a clouding of the eye's naturally clear lens. The lens focuses light rays on the retina, the layer of light-sensing cells lining the back of the eye to produce a sharp image of what we see. When the lens becomes cloudy, light rays cannot pass through it easily, and vision is blurred.

What causes cataracts?

Cataract development is a normal process of aging, but cataracts also develop from eye injuries, certain diseases or medications. Your genes may also play a role in cataract development.

How can a cataract be treated?

A cataract may not need to be treated if your vision is only slightly blurry. Simply changing your eyeglass prescription may help to improve your vision for a while. There are no medications, eye drops, exercises or glasses that will cause cataracts to disappear once they have formed. Surgery is the only way to remove a cataract. When you are no longer able to see well enough to do the things you like to do, cataract surgery should be considered.

In cataract surgery, the cloudy lens is removed from the eye through a surgical incision. In most cases, the natural lens is replaced with a permanent intraocular lens (IOL) implant.

Cataract surgery has evolved tremendously over the past two decades to become the most safe and effective surgical procedure worldwide. Advances in intraocular lens (IOL) technology have now provided an array of options for patients undergoing this procedure.

There are, however, pros and cons for each option.

Traditionally, cataract surgery involves the replacement of the natural lens of the eye with a clear, monofocal (fixed distance) intraocular lens. Usually patients prefer clear 'distance' vision, meaning that they need help with near work using reading glasses. In patients with astigmatism (where the eye is shaped like a rugby ball) a 'toric' IOL can be offered, which can correct the irregularity. However, this again requires the use of glasses for near work. The benefits of such lenses mean that there is often 100% light transmission and excellent contrast sensitivity (assuming there is no other eye condition present). However, glasses are needed for near work nearly all of the time, which of course can be a nuisance.

So what are the options for spectacle free vision post cataract surgery?

A number of IOL's are available which can permit very good near, intermediate and distance vision. This may be a particularly worthwhile option for patients with certain occupations, with a variety of visual needs, or for those who simply do not like the need for reading glasses. With these so-called 'premium' IOL's, there is however a trade-off, in the sense that whilst such technology is getting better and better, it does not quite replicate the quality of vision we had when, for example, we were 21.

This is due in part to the creation of a lens that has different powers in different segments of it. Some lens platforms therefore trade off this additional functionality, at the expense of a small reduction in light transmission, and contrast sensitivity. In certain light conditions, some patients may experience glare, haloes around lights or starbursts. These are usually infrequent, and in general most patients are delighted with the spectacle independence that multifocal lenses give them.

In recent years Extended Depth of Focus (EdOF) lenses have also become available, allowing patients to receive excellent distance and intermediate vision, across a better range of distances. In general these lenses have slightly more light transmission compared to Multifocal, but near vision may require additional spectacle use.

With an array of options available to patients, it's important to determine what the best options are to suit your needs. One option does not work for all.

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What can I expect if I decide to have cataract surgery?

Before Surgery

To determine if your cataract should be removed, your ophthalmologist (Eye Doctor) will perform a thorough eye examination. Before surgery, your eye will be measured to determine the proper power of the intraocular lens that will be placed in your eye. Ask your ophthalmologist if you should continue taking your usual medications before surgery. You should make arrangements to have someone drive you home after surgery.

The Day of Surgery

Surgery is usually done on a day case basis in a hospital. You may be asked to skip breakfast, depending on the time of your surgery. When you arrive for surgery, you will be given eye drops and perhaps a mild sedative to help you relax. A local anaesthetic will numb your eye. The skin around your eye will be thoroughly cleansed, and sterile coverings will be placed around your head. Your eye will be kept open by an eyelid speculum. You may see light and movement, but you will not be able to see the surgery while it is happening. Under an operating microscope, a small incision is made in the eye. In most cataract surgeries, tiny surgical instruments are used to break apart and remove the cloudy lens from the eye. The back membrane of the lens (called the posterior capsule) is left in place. During cataract surgery, tiny instruments are used to break apart and remove the cloudy lens from the eye. In cataract surgery, the intraocular lens replaces the eye's natural lens. After surgery is completed, your doctor may place a shield over your eye. After a short stay in the recovery area, you will be ready to go home.

Following Surgery

You will need to:

- _ Use the eye drops as prescribed
- _ Be careful not to rub or press on your eye
- _ Avoid strenuous activities until your ophthalmologist tells you to resume them
- _ Ask your doctor when you can begin driving
- _ Wear eye glasses or an eye shield, as advised by your doctor

You can continue most normal daily activities. Over-the-counter pain medicine may be used, if necessary.

Need for Glasses: After cataract surgery you should be able to see much better but in order to do so you may need glasses for reading, distance or both depending on your pre-existing astigmatism and refractive error.

Is a laser used during cataract surgery?

Laser surgery is not used in cataract removal surgery. However, the lens capsule (the part of the eye that holds the lens in place) sometimes becomes cloudy several months or years after the original cataract operation. If the cloudy capsule blurs your vision, your ophthalmologist can perform a second surgery using a laser. During the second procedure, called a posterior capsulotomy, a laser is used to make an opening in the cloudy lens capsule, restoring normal vision.

Will cataract surgery improve my vision?

The success rate of cataract surgery is excellent. Improved vision is achieved in the majority of patients. In order to achieve the best vision you may need glasses for reading, distance or both. Only a small number of patients continue to have problems following cataract surgery.

Complications after Cataract Surgery

Though they rarely occur, serious complications of cataract surgery are:

- _ Infection
- _ Bleeding

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- _ Swelling of Cornea
- Swelling of Macula
- _ Detachment of the retina
- Epiretinal membrane
- Posterior Capsule rupture 4%
- Need for further Surgery due to operative complications 0.5%
- _ Loss of vision 1: 1000

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Call your ophthalmologist team immediately if you have any of the following after surgery:

- _ Pain not relieved by non-prescription pain medication
- _ Nausea, vomiting, or excessive coughing
- _ Injury to the eye

Even if cataract surgery is successful, some patients may not see as well as they would like to. Other eye problems such as macular degeneration (aging of the retina), glaucoma or diabetic retinopathy may limit vision after surgery. Even with these problems, cataract surgery may still be worthwhile.

I have watched the video covering the above benefits and risks.

By signing below, I acknowledge that I have read and that I understand this information

Signature:

Date: