

# Patient Information Brochure

## Cataract

### Q: What is cataract?

A: A cataract is an opacity (or cloudiness) in the lens of the eye. This cloudiness develops inside the lens and restricts light passing through the eye and reaching the retina. When this occurs, vision is affected.

An opacity can be quite minor or it can become so marked that it prevents adequate vision.

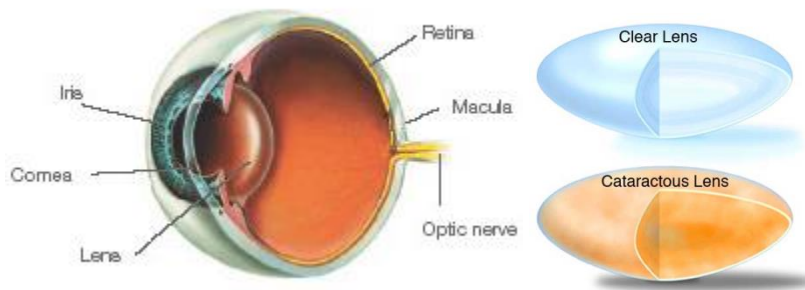


Fig 1 Cataractous Lens vs Clear Lens

### Q: What causes a cataract?

A: The most common cause of cataracts is aging. Others include:

- Inherited or developmental problems
- Health problems such as diabetes
- Medications such as steroids
- Trauma to the eye

### Q: How will I know if I have a cataract?

A: People with cataract generally complain of the following-

- Cloudy or blurry vision
- Light sensitivity from car headlights that seem too bright at night; glare from lamps or very bright sunlight; or the appearance of a halo around lights
- Poor or reduced night vision
- Double or multiple vision (this symptom often goes away as the cataract progresses)
- “Second sight” where near vision becomes possible without glasses again because of the cataract developing in the lens. This state is usually temporary, and followed by progressive loss of distance vision
- A need for frequent changes of glasses or contact lenses

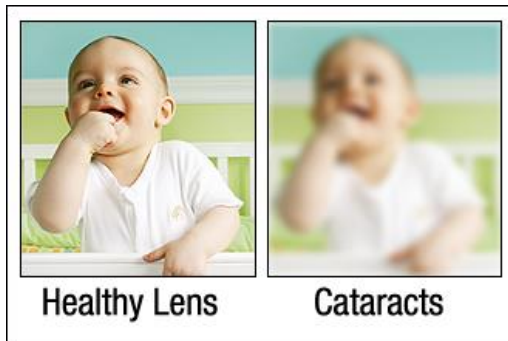


Fig 2 Blurred vision with cataract

However only a doctor can tell you whether the above complaints are due to cataract only or something else. Other eye conditions, for example glaucoma, age related macular degeneration, injury and previous eye operations can also affect your eyesight.

**Q: What is the treatment of cataract?**

**A:** When a cataract is not fully formed, it may be possible to improve your eyesight with glasses. Your ophthalmologist will advise you if glasses are suitable.

When the cataract grows too dense, glasses will not be effective and cataract surgery is necessary. This involves removing the cloudy lens from inside the eye through a small incision, and replacing it with a new artificial lens, also called the Intraocular Lens (**IOL**) made from acrylic materials.

**Q: What is an intraocular lens (IOL)?**

**A:** It is an artificial lens, made from **acrylic materials** used to replace the natural lens and is implanted inside the eye during surgery.

They are broadly of two types.

- **Monofocal lenses**

They are the commonest types of lenses implanted in the eye since last 20-30 years. They can correct only distance vision. Glasses are required for near vision. However vision quality is very good.

Monofocal lenses with **Aspheric Optics** (Premium Lens) results in clearer, brighter, better quality vision with enhanced contrast, most noticeable in low light conditions such as driving at dusk, in fog or drizzle, and with restaurant lighting.



**Fig 3a. Vision with normal monofocal IOL**

**Fig 3b. Vision with Ashperic monofocal IOL**

- **Multifocal lenses**

They are newer generation of lenses. They can give you both distance and near vision without glasses. However some patients may require glasses for both in spite of multifocal lenses due to variable healing response of the eye.

They **might** give rise to glare at night especially for driving. Also vision quality in low light conditions can be affected. However with the newer lenses available, these problems occur rarely.

**Also not everyone can opt for multifocal lenses.** There are some strict guidelines for using these lenses, which if not followed can give rise to the above problems and even more. Your doctor can clarify these details with you if you need them.

There are other special lenses like TORIC lenses which can be used in selected cases of high astigmatism. They require high level of expertise and generally give good results. However glasses may still be required after implanting them as well.

Ultimately let your doctor decide what is best for you and which lens will suit your eye.

**Q: When can one undergo cataract surgery?**

**A:** In earlier times, cataract surgery was only done when the eyesight was very bad. Advances in technology mean that modern surgery is less traumatic to the eye. The results are more predictable, there are few side effects and the eye usually recovers quickly. Modern cataract surgery is done when people find their failing eyesight does not let them do their day to day activities.

**Q: Will I recover complete vision after cataract surgery?**

**A:** Other eye conditions, for example glaucoma, age related macular degeneration, injury and previous eye operations can also affect your eyesight. Your ophthalmologist will examine your eye and advise you on the possible effects of other eye disease on the cataract surgery. In some cases eye conditions can affect the timing of surgery e.g. it may be better to delay surgery if active diabetic retinopathy is present and pre pone it if corneal problems or glaucoma are present.

**Q: How does one fix up cataract surgery?**

**A:** At the consultation with your ophthalmologist, your operation can be booked within a few days. You will be checked about your medications, general health and drug allergies. Your ophthalmologist will discuss what focus you want after surgery. For example it may be possible to have your eyesight sharp for distant objects (sharp driving vision without glasses) or for near objects (sharp vision for reading without glasses). It may also be possible to have astigmatism corrected.

A laser or ultrasound machine is used to measure your eye. This gives data on the shape of the eye. From these figures, your ophthalmologist will choose appropriate lens implant to be used in your operation.

Your ophthalmologist's staff will advise you the exact time & date of your operation.

**Q: Is the surgery painful? Will I be made unconscious?**

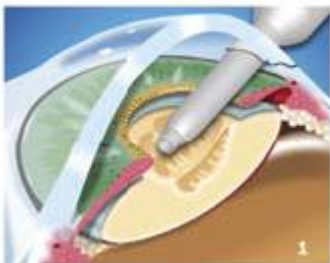
**A:** You will be asked to report one hour before the scheduled operation time. Drops will be put into the eye to dilate the pupil. Local anaesthetic is used to numb the eye. The local anaesthetic is given as an injection. In the operating theatre you will be awake under a sheet. An instrument holds your eye open so you do not have to worry about blinking. The operation takes about 10-30 minutes. After the operation you may have a pad on your eye overnight. More detailed instructions will be given to you after your operation.

**Q: What are the risks of surgery?**

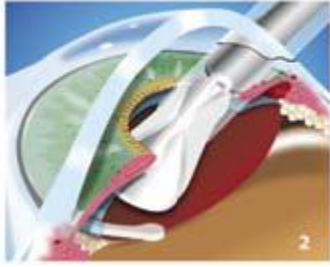
**A:** All surgery, no matter how technologically advanced, carries risk. Minor complications can lead to extra appointments or medications after the operation. In some cases, extra operations are needed. Complications can delay the recovery of your eyesight after surgery. Minor complications usually do not cause loss of eyesight. Serious complications such as infection and bleeding in the eye can cause loss of eyesight. Fortunately, serious complications are rare. Your surgeon will discuss with you the potential benefits versus the potential risks of cataract surgery.

**Q: What surgical technique is used?**

**A:** All surgeries are done with the latest "Phacoemulsification" technique through a very small 3 mm incision. It uses ultrasound power (misunderstood as LASER by general public). The steps are illustrated below.

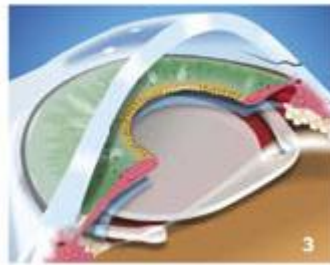


1. The cataract is broken up with an ultrasound probe.



cataract used to be.

2. An acrylic replacement lens is injected into the space where the



3. The artificial lens replaces the cataract and restores good vision.

**Q: What are the precautions one has to take after surgery?**

**A:** Surprisingly, there are no major restrictions nowadays after cataract surgery. Only one restriction is no head bath for a week after cataract surgery. Also one has to wear dark protective glasses to prevent discomfort from bright light and dust, but that also when one goes out of the house in the sun. At home, no such glasses are required. Also eye drops have to be applied for 3-4 weeks as necessary.

One can watch TV, do computer work, read papers or books, go for a walk from the same day of surgery. Ladies can do cooking etc also. No restrictions while sleeping also. For reading one can use the old glasses to read with the other eye. Any other doubts, feel free to ask your doctor.

**Q: Will I require glasses after surgery?**

**A:** Most of the times you will be able to most of your work without glasses. However, for fine distance and near work, glasses may be required. This differs from patient to patient. This is because the doctor is only human and cannot replicate nature's precision.

**Q: Is cataract surgery permanent?**

**A:** Yes. It is not possible to get another cataract once it has been removed. However, approximately 10% of patients may become aware of a gradual blurring of vision some months or even years after the surgery due to thickening of the lens capsule that supports your artificial lens. If this occurs, clear vision is usually restored by a simple laser treatment, called a **capsulotomy**, which can be performed during a short visit to the clinic.