CATARACT SURGERY

A CLOSER LOOK:

CATARACT SURGERY





Cataract Surgery

Cataract surgery is a surgical procedure used to treat cataracts that are affecting your vision. It is the most common surgery performed at the Singapore National Eye Centre (SNEC).

What is cataract?

Cataract is a condition where your natural lens in your eye becomes progressively cloudy. Aging is the commonest cause of cataract.

How is cataract surgery done?

In cataract surgery, the cloudy cataractous lens is removed and then replaced with an artificial intraocular lens. The most common technique used in cataract surgery is phacoemulsification.

In phacoemulsification:

- A small keyhole incision is first created in the cornea.
- An ultrasonic instrument is then introduced through a small incision.
 This device emulsifies the cloudy lens and removes it from the eye.

- After the cataract lens is completely removed, an artificial intraocular lens implant is inserted into the eye.
- The wound created is usually self-sealing and most of the time does not require any stitching.
- The duration of cataract surgery usually takes about 30 minutes to complete in routine cases.
- This is a day surgery procedure and you will not be required to stay in hospital.
- You are required to come back for a follow up visit the next day.
- An anaesthetist will be with you during surgery to provide sedation to make you feel as comfortable and relaxed as possible during the surgery. Depending on the individual, you may not be totally asleep during surgery, however you will remain comfortable and will not be able to witness the ongoing surgery. Anaesthetic eye drops and/or injections will be given to help minimise the discomfort. It is important to cooperate by not talking or moving your head and body during

the surgery.

Which type of intraocular lens is right for me?

When you are considering cataract surgery, your ophthalmologist will discuss with you to determine on the type of intraocular lens that works best for you. Your intraocular lens will determine how well you can see after cataract surgery, which can dramatically impact your quality of life.

Types of intraocular lenses (IOLs):

1. Monofocal Lenses

- Suitable for most people.
- Have one focal point to help you see far OR near.
- Provide good overall vision at a specific distance.
- Reading glasses are required for near work. Patients going for this option should be comfortable wearing them.



Monofocal lens

- **2. Toric lenses** Reduces astigmatism and improves quality of distance vision for people with certain types of high astigmatism.
- Toric lenses include monofocal toric lenses as well as multifocal toric lenses.

However, there is a risk of lens rotation after surgery requiring additional surgery cost.







Aspheric lens

3. Multifocal Lenses

- Provide distance and near vision reducing the need for glasses.
- For patients who desire some near and intermediate distance vision.

- However, some people might find it difficult to read fine print, especially in dim lighting conditions and they may experience glare and haloes at night.
- Glasses may still be required under certain conditions.
- Patients whose occupations involve driving at night and working in dim conditions will not be suitable for these lenses.
- For best results, these lenses should be used in both eyes.



Multifocal Lens



Vision impaired by halos

Intraocular Lenses (Properties & Benefits)

	Monofocal IOL	Multifocal IOL
Distance vision	Excellent (if refractive error is fully corrected)	• Good
Intermediate vision	Poor without glasses	Good under bright lighting
Near vision	Poor without reading glasses	Good under bright lighting
Benefits	Excellent quality distance vision	 Good distance and near vision Less spectacle dependence
Who may be suitable	 All Spectacle independence is not a high priority Do not mind wearing reading glasses 	 Spectacle independence for distance and reading is important Quality of vision for night driving is less a priority

Cataract Surgery

What are the risks of cataract surgery?

As with any surgery, cataract surgery poses risks such as infection and bleeding.

Before cataract surgery, your ophthalmologist may ask you to temporarily stop taking certain medications that increase the risk of bleeding during surgery.

A possible complication that can occur during surgery is the rupture of the lens capsule ("bag") that supports the lens. As a result of this complication, the artificial lens implant may have to be placed in a suitable alternative position, different from the original intended position. This may be performed during the same surgery or arranged as a separate operation.

Possible complications that may arise after cataract surgery include:

- Infection (Endophthalmitis)
- Inflammation
- Retinal detachment

- · High eye pressure for a few days
- Leaking wound which may require stitching
- Cloudiness of the cornea
- Swelling of the retina
- Sensitivity to eye drops
- Displacement of the lens implant
- Droopy eyelids

There is a small possibility of needing another surgery if the above complications occur.

What happens after my cataract surgery?

After the operation, you will need to:

- Apply eye drops in your operated eye.
- Clean your eye for the first one (1) week.
- Keep your eye covered with an eye shield on the day of surgery and every night while sleeping for about two (2) weeks.
- Prevent contaminated water from entering the eye.

After surgery, you must keep your eye clean, wash your hands before touching your eye, and use the prescribed medications to

help minimise the risk of infection. Serious infection can result in loss of vision.

After cataract surgery, depending on the choice of lens implant:

- You may need eyeglasses for reading only.
- You may need to wear eyeglasses for seeing far and for reading, or you may not need eyeglasses at all.

You will take two to four weeks to recover.

Any eyeglasses needed should be prescribed between three and six weeks after surgery.

Good vision with or without glasses can usually be achieved after cataract surgery. However, if there are other eye conditions that are present, your visual outcome may be dependent on the severity of these conditions.

What eye drops do I need after cataract surgery?

You will need antibiotic and steroid drops after surgery for several weeks. It is common to have an occasional itch, foreign body sensation, and/or tearing for a few days

or weeks after your cataract surgery. Artificial tears can be used to relieve this sensation.

Can a cataract come back after surgery?

After cataract surgery, it is not possible for a cataract to come back because the lens has been entirely removed. The new lens implant will last a lifetime and will not need maintenance or replacement. It is possible, however, for a cloudy film to grow on the lens capsule ("bag") that is located behind the lens implant. This occurs usually some months or years after surgery. If the cloudiness of the lens capsule ("bag") affects your vision, it can be cleared with a 5-minute, painless laser treatment. The cost of the laser treatment is not included in the cost of cataract surgery.

Why should I have my cataract surgery done in SNEC?

We emphasise Quality

 SNEC handles the most number of cataract surgeries in Singapore each year.

- Our ophthalmologists are well-trained and have gone through strict and lengthy guided training.
- We also handle complicated cataract surgery encountered in children, after trauma and in a variety of congenital and medical conditions.
- We have experienced paramedical staff to perform eye measurements which are crucial in obtaining good outcomes after cataract surgery.

We emphasise Safety

- We ensure safety through strict training of ophthalmologists.
- We keep ourselves updated by constantly carrying out research and trials to evaluate what is suitable for our patients.
- We are strict and diligent in preventing infection.
- We audit our surgical outcomes and results.

LOCATION MAP



This patient information leaflet is a general guide to help patients understand specific eye conditions, treatment or tests. The information does not replace the need for individual advice from an ophthalmologist. Please consult with your ophthalmologist about your specific eye condition and/or concerns.

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