Cataract SURGERY GUIDE



Effective | August 2010

Innovation, commitment and service are the fundamental elements behind the Adelaide Eye & Laser Centre (AE&LC). The quest for excellence in eye care is a constant one.

The development of new technology combined with innovative surgical techniques has seen vision restored to levels not thought possible a few years ago.

As a privately owned practice, AE&LC is committed to complement the expertise offered by your family doctor and optometrist, providing optimal care and advice on the health needs of your eyes.

The information contained in the following pages has been prepared to introduce you to aspects of cataract surgery including guidelines for surgery, the assessment, the operation and post-operative care.

If you have any further queries, please do not hesitate to ask our staff.

This way you can make a well informed decision about this highly specialised surgery and feel confident about taking the first step towards a clearer, brighter future.

Accreditation

In 1999, Adelaide Eye & Laser Centre achieved accreditation for outstanding patient care for both cataract surgery and excimer laser surgery through the ACHS Evaluation and Quality Improvement Program (EQuIP). The centre maintained these standards through a regular review process. In April 2008 accreditation was awarded through Global-Mark® using International Standards Organisation 9001 Quality Management Systems and the Core Standards for Safety and Quality in Healthcare.

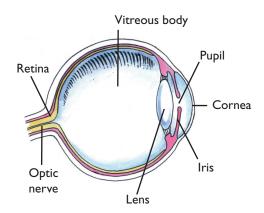
Accreditation ensures that an independent body continually reviews the centre. This ensures not only that national guidelines are met, but also that patients receive the best possible care in a facility committed to continuous improvements in all aspects of clinical care.

All of our procedures are carried out in a full theatre environment, ensuring that the highest standards are maintained at all times.

How does the eye function?

Very simply, the eye works like a camera. The iris (coloured part) acts as the aperture of the camera to regulate the amount of light reaching the inside of the eye.

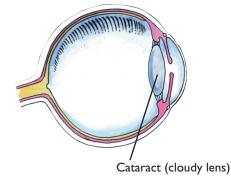
The cornea, together with the lens of the eye, bends the light rays and brings them to a point of focus on the retina. The retina acts like a photographic film, then transmits images to the brain via the optic nerve.



Cataracts

What is a cataract?

A cataract is a clouding of the natural lens of the eye. The clouding of the lens by the cataract scatters and reduces the amount of light passing through the lens of the eye to the retina resulting in poor vision.





This can manifest itself in a variety of ways and may include, but are not limited to:

- General blurring or glare
- Ghosting or multiple images
- Difficulty reading and writing
- Difficulty with night driving
- Rapid changes in spectacle prescription.

Cataracts can develop due to a variety of factors including:

- The natural ageing process
- Prolonged exposure to UV light
- Eye trauma
- Smoking
- Diseases such as diabetes
- Long-term use of some medications (particularly cortisone)
- Hereditary factors

Approximately 25 percent of people over 65 years of age will have some cataract formation.

Cataracts can develop in both eyes but the rate at which they develop in each eye often varies.

Guidelines for cataract surgery

Deteriorating vision is not only uncomfortable, irritating and restrictive, but also potentially dangerous. In the early stages cataracts may not be bothersome and therefore surgery is not required.

When symptoms interfere with the performance of daily activities, or when the cataract becomes so advanced that prescription spectacles no longer help, surgery should be considered.

Cataract surgery is now one of the most common surgical procedures in Australia. Cataracts can only be corrected by surgery.

Correcting cataracts

Cataract surgery has evolved from the practice of pushing a "ripe" cataract into the back of the eye as was practised in ancient India, to the current method of phacoemulsification and intraocular lens insertion.

The history surrounding the treatment of cataracts is extensive and has come to a point where today we are able to offer a very safe treatment with rapid recovery.

Cataract assessment

A detailed clinical assessment for cataracts is performed prior to surgery. This ensures that there is sufficient time for you to consider the procedure carefully. At this assessment, your eye is examined and measurements of the shape and length of the eye are taken with the "IOL Master" to determine the specifications of the intraocular lens to best suit your eye. AE&LC only use the most advanced technology available in determining the most suitable and most biocompatible intraocular lenses for each person.

If surgery is recommended, our staff will arrange a surgery date and advise you of all the necessary arrangements for the day of your procedure.

You will need someone to drive you after the assessment as your pupils will be dilated. You will also require a referral from your regular optometrist or GP for this appointment. Our staff will advise you of these details when you ring to arrange an assessment.

Cataract surgery

The phacoemulsification method is very safe and allows patients to regain vision and resume normal activities very quickly following surgery.

This method involves creating a tiny incision and removing the natural but clouded lens of the eye and placing an artificial lens where the natural lens is found. Contrary to popular belief this involves the use of ultrasound energy and not a laser.

The procedure is performed in AE&LC's day surgery facility by surgeons who have specific training in cataract surgery. Your visit may take up to 2 hours.

Small incision cataract surgery:

- Is performed as day surgery at AE&LC in Eastwood.
- Does not involve the use of injections or stitches around the eye (except in rare circumstances).
- Is performed under topical anaesthesia with a light intravenous sedative.
- The operation takes 15-20 minutes per eye although the total length of your stay at the centre will be approximately 2 hours.
- Generally patches are not required to cover the eye after surgery unless the surgeon advises otherwise.

Dr Peter Ingham has been performing cataract surgery since 1987 and routinely performs small incision cataract surgery (using the phacoemulsifier).

Only one eye is operated on at a time. The second eye may undergo treatment the following week if necessary.



Usually the most affected eye is treated first, however, the surgeon will advise on this.

Possible risks and complications

As with any surgery there are risks for cataract surgery albeit very low. Risks can be considered in two ways. Firstly, there are those risks that are serious and may permanently affect the vision. Secondly, there are less serious problems that may result in delayed onset of vision improvement or only partial improvement. Approximately 98-99% of eyes will have no complications following the surgery. However, there is a risk of serious visual loss, including the possibility that the eye may be blind. This risk is approximately 1 in every 2000–3000 operations. There are limited reasons for this, the most serious of which are infection and retinal detachment.

Other serious problems include uncontrolled eye pressure and failure of the cornea. (In approximately 1 in every million cases of cataract surgery there may be bilateral blindness from a complication in the operated eye resulting in uncontrolled inflammation in the other eye). One in 500 eyes will have a prolonged recovery sometimes requiring further surgery, but should recover well. Occasionally only partial improvement in vision may occur. Less serious complications occur in approximately 1 in every 100 cases and may include excessive inflammation, corneal swelling or medication side effects, but will generally recover rapidly.

Despite these risks, 98–99% of operations produce excellent results very quickly. The surgeon will inform you if there are any additional or specific risks for your eye.

After cataract surgery

The rate of recovery varies for each person but, as a general rule, vision improves over a 24 to 72 hour period.

Uncorrected vision should be significantly improved after cataract surgery, however, thin spectacles may be needed to correct any astigmatism or residual vision error.

Each intraocular lens is carefully calculated for the individual with an emphasis on quality distance vision. Reading spectacles are generally needed after surgery. Recently, new generation implants that can provide some correction of reading vision and astigmatism have become available. These implants are not suitable for everyone. The surgeon will be able to advise you about these implants. Another major advance in the treatment of cataracts has been the development of the YAG laser. The YAG laser creates a small opening in the lens capsule should it become cloudy following phacoemulsification. The lens capsule surrounds the implant and holds it firmly in position. The implant is not affected by the YAG laser. This restores vision to that seen soon after the initial cataract surgery, and is a fast and painless procedure with very low risk.

Approximately 15-20% of eyes will require a YAG laser treatment within the first 5 years after cataract surgery.

Post-operative guidelines

We require that you have a responsible adult with you for the first 4 and preferably 24 hours postoperatively. It is also recommended that at least 1-2 days is taken to recover from the surgery including:

- NO driving for at least 24 hours
- NO swimming for at least 3 days
- NO rubbing your eyes for 3-4 days.

You can return to normal activities when you feel comfortable to do so, including activities such as watching television, reading, writing and moderate exercise.

You may experience a variety of symptoms in the early stages that are not serious and should resolve over a matter of days.

These include:

- Shimmering
- Occasional floating spots
- Blue or pink tinge to colours
- Fluctuating vision
- Occasional light flashes
- Gritty sensation

Post-operative consultations are extremely important and are scheduled for the day after the procedure and one week following the procedure.

Long term care with your regular eye care practitioner

Post-operative information will be issued to your referring practitioner or optometrist by the surgeon to enable them to be involved in appropriate post-operative care management as required.

A visit to your regular optometrist at 4 weeks following the procedure is recommended, (unless otherwise advised), so that glasses may be prescribed.



It is also strongly recommended that you see your regular eye care practitioner on a yearly basis following your surgery. This ensures you receive comprehensive eye care throughout your lifetime.

Frequently asked questions

- Q. What is a cataract?
- A. A cataract is the clouding of the natural lens of the eye. Approximately 25 percent of people over 65 years of age will have some cataract formation. Cataracts can develop in both eyes but the rate at which they develop in each eye often varies.
- Q. What causes cataracts?
- A. There are a number of causes for cataract development including:
 - The natural ageing process
 - Prolonged exposure to UV light
 - Eye trauma
 - Disease
 - Long-term use of some medications (in particular cortisone)
 - Genetic susceptibility
- Q. How do I know if I have a cataract?
- A. Common cataract symptoms include glare, ghosting, multiple images, trouble with near and distance vision and frequent changes in spectacle prescription. Your regular eye care practitioner will be able to detect a cataract.
- Q. When should I have cataract surgery?
- A. Cataract surgery should be considered when the above-mentioned symptoms interfere with daily activities or when prescription spectacles no longer provide sufficient visual clarity.
- Q. Do I have to stay in hospital overnight for cataract surgery?
- A. No. Cataract surgery is a day procedure and you are only required to be at the centre for a couple of hours.
- Q. Do I have both eyes operated on at the same time?
- A. No. The second eye may be operated on one week following the first eye, if necessary, upon the surgeon's advice.
- Q. Will I need someone to care for me after cataract surgery?
- A. Yes. You will definitely need someone to take you to and collect you from Adelaide Eye & Laser Centre. You will require a companion/carer for the first 4 hours and preferably 24 hours after your procedure due to the sedation given to you prior to your operation.

- Q. Should I continue my regular medications before surgery?
- A. Yes. You should continue taking all regular medications before surgery, unless otherwise advised by the surgeon or nursing staff. Be sure to advise the surgeon or nursing staff of all the medications you are taking prior to your procedure. Also advise staff of any allergies.
- Q. Is small incision cataract surgery performed with a laser?
- A. Small incision cataract surgery is not performed with a laser, but with a phacoemulsifier that uses ultrasound to fragment the natural lens of the eye. The fragments are then vacuumed out via a small incision in the cornea and then replaced with an intraocular lens.
- Q. Is small incision cataract surgery painful?
- A. At Adelaide Eye & Laser Centre small incision cataract surgery is performed under intravenous sedation with anaesthetic eye drops, so no pain should be felt during the procedure.
- Q. When can I resume normal activities after cataract surgery?
- A. Vision improves over a 24 to 72 hour period, so you can return to normal activities when comfortable to do so. This includes watching TV, reading, writing and moderate exercise. However, you should not drive for at least 24 hours, or swim for at least 3 days after surgery.
- Q. Will I need to see the surgeon again after my procedure?
- A. Post-operative consultations with the surgeon are scheduled for the day after the procedure and one week after the procedure, with followup consultations by your regular eye care practitioner every 1-2 years unless otherwise advised.
- Q. Will I need spectacles after cataract surgery?
- A. Spectacles may be needed to correct any astigmatism or residual vision error, including reading glasses. New implants are available that can correct astigmatism and the need for reading glasses. These implants are not suitable for all eyes. When indicated they can reduce but do not eliminate the need for glasses. Your surgeon can advise of these implants.

Despite the use of appropriately matched implants, there frequently exists a need for glasses. We recommend you make an appointment with your optometrist at about 4 weeks following your cataract surgery.



Financial issues associated with cataract surgery

The procedure fee varies depending on the level of private health cover. AE&LC has agreements with all major health insurers.

Our finance department would be happy to assist with any queries.

How to proceed

Patients who find that cataract symptoms are interfering with daily activities may be referred to AE&LC for a cataract assessment.

To arrange an appointment please contact us on (08) 8274 7000 or Freecall 1800 809 991 (excluding Adelaide metro area).

- Advise the reception staff that you wish to be assessed for cataracts.
- A referral is required for this appointment so you will need to obtain one from your regular optometrist or GP.
- You will require a driver, as your pupils will be dilated.

AE&LC is equipped with undercover parking, wheelchair and lift access, and tea and coffee making facilities to make your time with us as comfortable as possible. The Centre is open from 9:00 am to 5:00 pm Monday to Friday.

We look forward to playing an integral part in helping to restore your vision... so you can start enjoying a clearer, brighter future.

CONTACT US ON (08) 8274 7000 OR FREECALL 1800 809 991

(EXCLUDING ADELAIDE METRO AREA).

