



Combined Cataract and Minimally Invasive Glaucoma surgery

Mr Ratnarajan has designed this leaflet to help you and your family or carers understand the operation and to help answer any questions you may have. Having a cataract removed should not disrupt your life greatly, but some extra care is required for approximately two weeks after your operation.

What is a cataract?

The human eye is like a camera and one of the essential parts is the lens. The lens is a clear tissue found behind the coloured part of the eye (the iris). The lens helps to focus light on the back of the eye (the retina) forming an image. Usually the lens of the eye is clear so that light passes through it easily.

If any cloudiness develops in the lens then it starts to block the light passing through and this causes blurring of your vision. This clouding of the lens is called a **cataract**.

Cataracts can develop as you get older and can occur because of diabetes, glaucoma, exposure to UV light or an eye injury. They can also occur in younger people for a number of reasons. Your sight will gradually become misty and you may be bothered by glare in bright light. If symptoms of the cataract affect your day-to-day activities, it is better to have the cloudy lens removed.

What is glaucoma?

Glaucoma is the leading cause of irreversible blindness in the world. It is caused by high pressure inside the eye, which leads to damage of the optic nerve that connects your eye to the visual centre in the brain.

Glaucoma affects your field of vision, normally in the periphery but central vision can also be affected. If untreated more and more vision is lost which can lead to irreversible blindness. Glaucoma can run in families so it is important to get checked if someone in your family has glaucoma.

How will the cataract be removed?

You will need to have an operation to remove the cataract and, usually, a replacement lens (implant) is put in its place. This will take up to 30 minutes.

Mr Ratnarajan will discuss with you your requirements for your vision and select a lens implant that best suits your needs.

What is an implant?

When the cataract lens has been removed, it is replaced with a man-made focusing lens. This is implanted into the space that has been occupied by your own natural lens. The replacement lens is permanently fixed inside your eye. Implants, like glasses, come in different strengths.

Each patient needs to have their eye measured by an ultra sound scan (A-scan) or a laser (IOL Master) machine to find the strength of the implant most suitable to them. A Pentacam machine will take very detailed measurements of your cornea so that the correct type of lens can be chosen.

Choosing the correct implant is an important decision, and Mr Ratnarajan will let you know all the options available to you and help guide you to choose the best lens for your visual requirements and lifestyle.

Before the operation

You will be seen by a nurse when you attend your appointment who will carry out all the necessary tests before you see Mr Ratnarajan. If you are booked for surgery a pre-operative assessment will be carried out either in person or over the phone, where more questions about your general health will be asked.

Contact lenses – If you wear contact lenses, you will need to stop wearing your lenses before any tests are carried out, as follows:

- soft lenses - two weeks
- hard lenses – four weeks

Consent

You will be asked to sign a consent form for the operation. It is important that you understand the procedure, what the risks and benefits are to you and what the treatment involves. It is important you ask Mr Ratnarajan any questions that you may have before signing the consent form. Mr Ratnarajan will of course answer any other questions that may arise at anytime before your operation.

What are the benefits?

The benefits of surgery include:

- greater clarity of vision
- improved colour vision
- less dependency on glasses
- better control of eye pressure

What are the risks?

All operations and anaesthetics carry some risk, albeit small. The potential risks associated with cataract surgery are as follows:

- haemorrhage
- infection
- worsening of glaucoma
- retinal detachment
- capsular tear and vitreous loss
- wound dehiscence and iris prolapse
- cystoid macular oedema
- deterioration in diabetic retinopathy
- intraocular lens power miscalculation
- further surgery (some patients may require an additional operation following cataract surgery)
- blindness

Mr Ratnarajan uses the latest and most modern methods and techniques, and cataract surgery is very safe. In the vast majority of cases the vision is improved. This does not occur immediately after the operation and the time it takes can vary widely between patients.

Possible risks during the operation

- tearing of the back part of the lens capsule with disturbance inside the eye that may sometimes result in reduced vision
- loss of all or part of the cataract, into the back of the eye, requiring a further operation
- bleeding inside the eye

Possible risks after the operation

- bruising of the eye or eyelids
- high pressure inside the eye
- infection in the eye
- allergy to the medication used
- clouding of the cornea
- swelling of the retina
- detached retina, which can lead to loss of sight (this is very rare)

Patients rarely develop problems during eye surgery or shortly afterwards that can impair the results. Mr Ratnarajan and his nursing staff will do everything possible to reduce any risks. You may discuss any concerns with the nurse at your pre-assessment appointment or with Mr Ratnarajan before surgery.

Minor complications occur more commonly but do not always affect the final results; Mr Ratnarajan will discuss these with you. In order to reduce the risks Mr Ratnarajan usually operates on one eye initially, and if you need or want the second eye done, when you have recovered this will be arranged on request.

Glaucoma Surgery

Your cataract surgery is going to be combined with a minimally invasive glaucoma surgery (MIGS) to help reduce your eye pressure to try and prevent your glaucoma from getting worse. You may also need less glaucoma drops than before your surgery but Mr Ratnarajan will advise you about glaucoma drop usage after your surgery.

Your visual recovery may be slightly slower with combined surgery although this will vary from person to person as well as the severity of your glaucoma.

Will I feel any pain during the procedure?

Most cataract operations are carried out under a local anaesthetic. With this method only the eye is made numb and you will be awake. You will not see what is going on and you will not feel anything. The anaesthetic is given either by anaesthetic eye drops and / or a blunt injection around your eye before the operation. Like any injection, this may be uncomfortable for a few seconds.

If a general anaesthetic is required, you will be given further relevant information.

Day case surgery

Combined cataract and glaucoma surgery is usually a day case procedure, which means that you will go home on the day of your operation.

Arrange for someone to:

- stay overnight with you on the day of operation
- put in your eye drops after the operation, if you are unable to do this yourself

On the day of operation

- please arrive on time (check your letter which will tell you where to attend)
- follow advice given on not eating and drinking if having sedation or a general anaesthetic
- bring all your medications with you
- remove all make-up and nail varnish
- do not wear any jewellery other than a wedding ring
- wear loose comfortable clothing, as you will be asked to put on an operating gown

The procedure

A nurse will help you to prepare for your operation and a drop will be put in your eye to enlarge the pupil.

You will then be taken to the operating room, transferred onto the theatre bed and you will be asked to lie down flat. Your other eye will be covered and all you will see is bright light. During the procedure you may hear some noise from the cataract machine. You may also see lots of different colours. You may feel water on your skin; it is normal and linked to the procedure. Mr Ratnarajan will explain to you what is happening as the operation goes along, unless you wish not to know.

A very small incision (cut) is made on the eye. A hole is made in the lens capsule covering the front surface of the cataract. The cataract is broken into very small pieces, which are then removed.

Once the cloudy lens is removed, a small plastic lens is inserted into the eye through the small incision, to replace the cloudy lens. The plastic lens is folded and inserted inside the lens capsule through the cut in the front of the eye.

After your surgery, your eye will be covered with an eye pad or shield, which may be removed when you get home and then you will start your post-operative eye drops. Further instructions will be given to you concerning your eye drops and aftercare.

Some frequently asked questions

When is my first clinic appointment after surgery?

Usually 1 week after your operation, but a member of Mr Ratnarajan's team will call you the day after the surgery to check how you are.

Please do not drive yourself to your follow-up visits as you will have drops put in your eyes which will blur your vision.

Will I need new glasses?

Possibly, however, the eye is a delicate structure and it takes time to settle down. You must wait at least four weeks before attending your opticians for new glasses.

Looking after your eye at home

Eye drops

You will be given eye drops to take home along with information about how and when to use them. If you are unable to manage them yourself please discuss this with the nurse at the Pre-assessment appointment.

It is important that the drops are used correctly as instructed on the day.

Hair care - for one week after the operation

Backwash only, this will avoid getting any shampoo in the eye. Do not use hairspray, perms or tints as this could cause irritation and inflammation. Avoid hood dryers.

Housework or gardening

No heavy lifting/digging, for the first six weeks after your operation, as this could cause a rise of pressure within the eye and could limit the success of your operation. Sprays and dusty environments could inflame the eye and increase the risk of infection.

When can I go back to work and when can I drive?

Mr Ratnarajan will advise you as this will depend on your job.

How soon can I fly after surgery?

You are safe to fly after the operation unless Mr Ratnarajan advises otherwise, but it is important to attend your post operation checks.

Could a cataract return?

No, a cataract cannot return because the cloudy lens has been removed. However in less than 10% of eyes, the capsule can become cloudy a few months or years later and causes the same problems as a cataract. This is easily treated by a Yag laser, which makes a small opening through which you will be able to see. It is a very short procedure and is performed sitting at a machine.

Important points to remember after you are discharged

- use your eye drops as instructed
- use your eye shield at night
- avoid constipation
- wear sunglasses in sunny weather
- keep out of the wind
- wear watertight goggles when swimming, keeping your face well above the surface of the water

Things you must avoid:

- rubbing your eye
- a smoky or dusty environment
- heavy lifting
- contact sports (ask Mr Ratnarajan's advice before recommencing sport)
- swimming without advice from the surgeon

Storage of eye drops and ointments

- never share your eye drops with anyone else
- store drops and ointments in a cool place out of reach of children (only store drops in the fridge if requested to do so)
- dispose of all opened eye drops and ointments after one month

How to apply your eye-drops or ointment

1. Wash your hands to prevent infection, tilt your head back and support it on the back of a chair, or a pillow for comfort and safety. Look up at the ceiling.
2. Gently pull down the lower lid to create a pocket for ease of access.
3. Squeeze a drop or a half-inch ribbon of ointment into the pocket of the lower lid.
4. Close your eyes for a timed five minutes
5. Remove any excess ointment gently with a clean tissue and wash your hands again.

Further questions

Mr Ratnarajan hopes this information is sufficient to help you decide whether to go ahead with the surgery. If you have any further questions please do not hesitate to contact Mr Ratnarajan's team.

If you have any further questions or concerns please contact Mr Ratnarajan on:

Tel: 0800 005 3335

Email: info@innovationeyeclinic.co.uk

Further information

More information about cataracts may be found on www.innovationeyeclinic.co.uk or the Royal College of Ophthalmologists:

<https://www.rcophth.ac.uk/patients/cataract/>