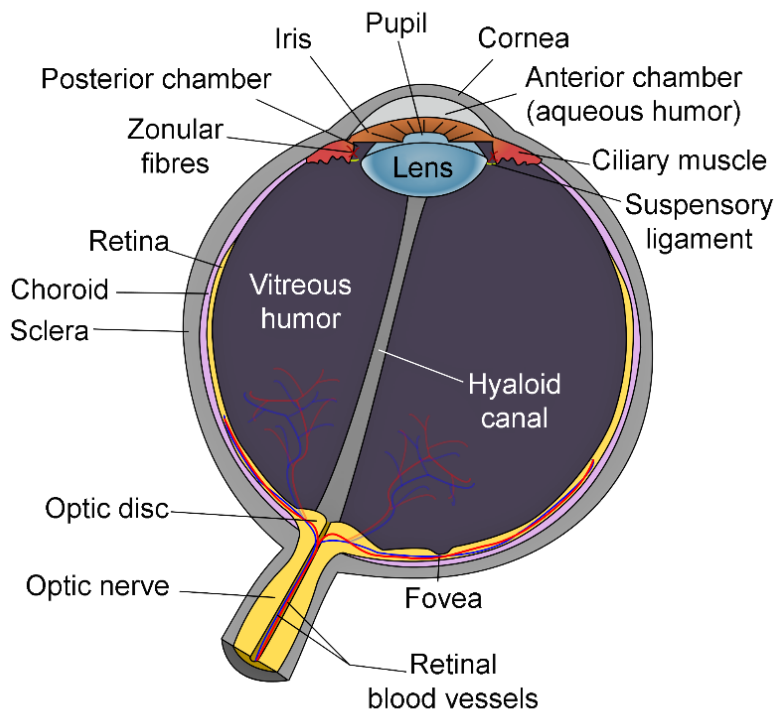


Patient information

Cataract

A cataract is clouding or opacity of the lens inside the eye. It is useful to learn about how the eye works in order to understand what a cataract is.

Inside the eye, behind the coloured part (the iris) with a black hole in the middle (the pupil), is the lens. In a normal eye, this lens is clear. It helps focus light rays on to the back of the eye (the retina), which sends messages to the brain allowing us to see. When cataract develops, the lens becomes cloudy and prevents the light rays from passing through.



What symptoms do cataracts cause?

Cataracts usually form slowly over years causing a gradual blurring of vision, which eventually is not correctable by glasses. In some people the vision can deteriorate relatively quickly. Developing cataract can also cause glare, difficulty with night-time driving and multiple images in one eye which can affect the quality of the vision.

Do cataracts spread from eye to eye?

No. But often they develop in both eyes either at the same time or one after the other with a gap between.

Is there a link between diabetes and cataracts?

Yes. Cataract is more common in people who have certain diseases such as diabetes.

Are cataracts just a part of getting old?

Most forms of cataract develop in later adult life. This is called age-related cataract, and can occur at any time after the age of 40. The normal process of ageing causes the lens to gradually become cloudy. Not all people who develop cataract require treatment.

TREATMENT

When do I have my cataract treated?

In many cases, cataract is harmless and may be left in your eye. It is usually safe not to have surgery if you feel that you do not have a problem with your vision or do not wish to have an operation. When the cataract progresses to the point that it is interfering with daily activities or lifestyle, even when using up-to-date glasses, then cataract surgery may be the next step. Modern surgery is highly successful for the majority of patients but, as with all surgery, there are risks. Cataract surgery is performed when you have a problem with your vision and you want to do something about it.

Can anything be done to stop my cataract worsening?

There is no known method of preventing cataract.

I have cataract developing in both eyes – are both operated at the same time?

It is common for cataract to develop more quickly in one eye than in the other. The timing of an operation is agreed after discussion between you and the cataract team.

Usually, your more seriously affected eye is operated on first. Sometimes it is advisable to have your second eye operated on even if it causes you few vision symptoms, to balance the spectacle prescription so that your eyes can be used comfortably together.

Whilst it is possible to operate on both eyes at the same time this is not routinely done. Simultaneous bilateral (both eyes at the same time) cataract surgery is only performed on a specific needs basis and the team in charge of

your treatment will be able to advise on the suitability, as well as the risks and benefits of having surgery on both eyes at the same time.

[I have had previous laser treatment to my eyes. Does it matter?](#)

Excimer lasers (e.g. LASIK and PRK) are used to reduce the need for glasses, most commonly in short-sighted younger people.

If you have had laser treatment, it is very important that you tell the doctors and nurses during your assessment.

Excimer laser treatment affects the calculations that are used to determine the strength of lens implant that is inserted. Even though allowance is made for the laser treatment, it is more difficult to select the power of the lens implant and patients are at higher risk of being more or less long/short-sighted than planned following the cataract surgery. This may require spectacles or contact lenses to be worn or may be correctable with further excimer laser surgery or further intraocular surgery.

[What does the cataract operation involve?](#)

Mr Flynn is a safe and experienced eye surgeon and will carry out your operation himself. Your eye is never removed and replaced when operations are carried out.

The most common form of cataract surgery is performed by surgeons using a small incision (wound) and a process called “phacoemulsification”, often shortened to “phaco”. This technique uses ultrasound to soften the lens, which is then broken up and flushed out using fine instruments and special fluids. A clear artificial lens (intraocular lens implant or IOL), made of a plastic-like material, is placed inside the eye. The back membrane of the lens (capsule) is left behind and this holds the artificial lens in place.

The wound is very small and most patients do not require stitches, although very fine stitches are sometimes needed to close the wound safely. This can occasionally cause some temporary post-operative irritation. Depending on the type of stitch used, these may need to be removed. The removal of the stitches is usually done in the clinic and is a quick and painless procedure.

[Are cataracts removed by laser?](#)

New technology is available using a specially designed laser for part of the procedure. However, the surgeon still needs to operate to complete the surgery as it is currently not possible to remove cataract by laser alone.

Lasers are not in routine use for cataract surgery except as part of clinical trials. Evidence, to date, shows no benefit of using laser for cataract surgery.

What is it like during the operation?

The operation is performed while you are lying down on your back. Your face is partially covered by a sterile sheet. If you have difficulty lying flat or are claustrophobic, we will do our best to make sure that you are comfortable before the operation starts, but please tell the nurses during your pre-operative assessment.

During the operation, the surgeon uses a microscope and the bright light from the microscope and the covering sheet mean that you do not see the operation or the detail of the instruments but you may see moving shapes. Usually you will be awake during the operation and will be aware of a bright light, and often pretty coloured lights and shadows. You may feel the surgeon's hands resting gently on your cheek or forehead.

A lot of fluid is used during the operation. Sometimes, excess fluid may escape under the sheet and run down the side of your face, into your ear or on your neck, which can be uncomfortable.

You might hear conversations during the operation. These could be about the operation or for teaching or about other subjects. Please do not join in as it is important that you remain still during the procedure.

What kind of anaesthetic is necessary?

Most operations for cataract are performed under local anaesthetic, in which you are awake but your eye is numb. This is usually given by eye drops or an injection around your eye. A small number of patients require sedation or even a general anaesthetic, where you are asleep.

Will I have to stay in hospital?

Cataract surgery is performed on a day-care basis. This means you are admitted to hospital, have your operation and are discharged home all in the same day. You could spend several hours in hospital from arrival to discharge.

What are my choices for vision and glasses after the operation?

Standard monofocal lenses

Your lens, which helps you focus, is removed during the operation and is replaced with an artificial lens, the intraocular lens implant. There is a choice of different strengths (powers) of lenses which, just like different strengths of glasses lenses, affect how clearly you see when looking into the distance or when looking at near things such as reading a book.

During your initial assessment, the cataract team will discuss with you whether you want to have better focus for close vision or for distance vision. Most people choose to aim for good distance vision after the operation. If you choose this option, you will usually need reading glasses and you may still need glasses for fine focusing in the distance.

Some people choose to aim for good close vision, especially if they like to read without glasses or do a lot of detailed close work such as embroidery. If you choose this option, you will need glasses for distance.

Blended vision (aka Monovision)

Combining a clearer distance focus in one eye with a clearer focus at arms' length is a good option if you have no strong preferences and had good vision in both eyes, with or without glasses before the cataracts developed. Spreading the focus between the eyes in this way does not normally stop them working together or make you feel unbalanced, and it helps you to do more activities comfortably without glasses. You will probably still prefer to wear glasses for at least some activities after surgery and it may take you a few weeks to get used to your new vision.

This option requires careful consideration and may not be suitable for all patients.

Multifocal lenses

Multifocal lenses are lenses that aim to correct vision for both near and distance. The quality and biocompatibility of standard monofocal and multifocal is the same. Multifocal lenses do not work for all patients and may cause some visual quality problems. Insurance companies in Ireland do not cover the cost of multifocal lenses but patients with health insurance can avail of this technology by paying for the premium lens themselves. Multifocal lenses are not available to patients having surgery under the HSE or National Treatment Purchase Fund (NTPF) and cannot be purchased separately and implanted during your NTPF operation. If HSE/NTPF patients wish to explore them further, at present you will have to consult a consultant ophthalmic surgeon with expertise of multifocal lens surgery privately.

Toric lenses (astigmatism correcting lenses)

A toric lens is made of the same material as a standard non-toric lens, but also incorporates astigmatism correction as well. The aim is to improve your vision so that the need for distance glasses is minimised but, as with standard lenses, you will still need to wear glasses for close-up work.

Approximately 20% of people have more than 1.5 units of astigmatism and

can benefit from toric lenses. Toric lenses are not required if you do not have significant astigmatism or are happy wearing glasses for all distances. Toric lenses may not be suitable if you have other eye problems apart from cataract and high astigmatism. The surgery is the same as standard cataract surgery except, once the toric lens has been inserted, it is carefully rotated to the correct position for each patient. A standard lens does not need to be placed so precisely.

There are some potential issues with toric lenses:

- A toric lens may not fully correct the astigmatism and you may still need glasses for distance.
- If complications occur during cataract surgery, it may not be possible to insert a toric lens.
- The lens can rotate and a second operation may be needed to rotate the toric lens back into position for best vision, with the additional risk of further surgery.
- Some patients may require further surgery to remove the toric lens and replace it with a standard lens.

Health insurance companies in Ireland do not cover the cost of toric lenses but patients with health insurance can avail of this technology by paying for the premium lens themselves. Toric lenses are not available to patients having surgery under the HSE or National Treatment Purchase Fund (NTPF), and cannot be purchased separately and implanted during your NTPF operation. If HSE/NTPF patients wish to explore them further, at present you will have to consult a consultant ophthalmic surgeon with expertise of toric lens surgery privately.

The alternative options to using toric lenses for those with high astigmatism are glasses or contact lenses. Laser refractive procedures can correct astigmatism, but are not available on the HSE or NTPF.

[How accurate are the results of cataract surgery?](#)

The pre-operative measurements usually allow your surgeon to choose a lens implant which gives the desired near or distance vision, but individual patient responses vary and it is not possible to guarantee absolute accuracy. Sometimes, patients can have an unexpected need for moderately strong glasses following surgery despite correctly taken measurements and uncomplicated surgery.

Colour vision

Cataract in your eye scatters and absorbs blue light selectively. After surgery, your lens implant is very clear so a change in colour vision is common. This can be dramatic, especially in the early period after surgery, and can make colours look brighter or bluer than usual.

Most lens implants have ultra violet (UV) blocking built in, but you can use sunglasses when outdoors in bright sunlight to block excess UV light reaching the retina. If you have an occupation where colour vision is critical, you should seek specific advice.

Do cataract operations have any complications?

Yes. Serious complications are uncommon but, if they occur, they can permanently damage your eye and your vision. There is an extremely small risk to the other eye of vision loss.

- 1 in 1,000 risk of severe and permanent visual loss
- About 1 in 100 risk of requiring additional surgery to rectify a problem
- 1 in 20 operations have less serious complications, which may require further treatment at the time of surgery or following the operation
- 1 in 20 patients need laser treatment at some time in the future for opacity of the capsule behind the implant

Complications may include haemorrhage (bleeding), infection, retinal detachment, glaucoma, loss of corneal clarity, macular oedema (swelling at the back of the eye), inflammation of the eye, astigmatism, ptosis (dropped eyelid), refractive surprise (a greater dependence on glasses than expected), increase in floaters, and/or may result in pain, poor vision, total or partial loss of vision (loss of vision happens in 1/1000 cases) or even loss of the eye (1 in 10,000).

What to look out for after surgery

Increasing redness, pain, blurring of vision or yellow/green discharge:

This can indicate a serious infection or inflammation.

Blurring of the central vision: This may indicate macular oedema (water logging of the central part of the retina).

Red sore eye after stopping drops: This can be due to a recurrence of post-operative inflammation inside the eye.

Distorted vision: The implanted lens can move from its original position, causing distorted vision, though this is unusual. If this happens, you might need further surgery to reposition the displaced lens.

A shadow, lights or floaters in your field of vision: The most common cause of a shadow or lights in the peripheral vision is due to the different way that the light is focused on the retina through the new lens implant. Following the operation, you may become aware of a shadow to the side of your vision, often described as a 'half-moon' or 'crescent'. The effect is usually temporary

as your eye rapidly adapts to the new lens. Shadows can also be caused by the retina becoming separated from the inner wall of the eye. This is known as a retinal detachment. If you notice an enlarging shadow in your field of vision, especially with increasing floaters or flashing lights, please contact the hospital as soon as possible.

If you experience any of the above, or you are worried about your eye, you must contact Mr Flynn's Office on 083-4203472 or Bon Secours Hospital on 021-4542807 or present to your local eye A&E service.

[Does the cataract recur?](#)

No, but you can develop a thickening or clouding of the posterior capsule membrane behind your new lens implant in the months or years following your surgery, which occurs in approximately one in 10 cataract surgery patients. This is called posterior capsular opacification and causes blurring of vision.

This can be treated as an outpatient with a laser procedure, known as YAG laser capsulotomy. This involves one outpatient visit. It is usually very effective, painless and quick, but can very occasionally cause complications such as retinal detachment or waterlogging of the central part of the retina. The risks of YAG laser treatment are smaller than the risks of the original cataract procedure and will be detailed at your consultation.