

Patient
 Information

What is a cataract?

Introduction

A cataract is a clouding in the lens of the eye. The lens is normally clear and sits behind the iris, which is the coloured part of the eye and the pupil, which is the dark centre of the eye.

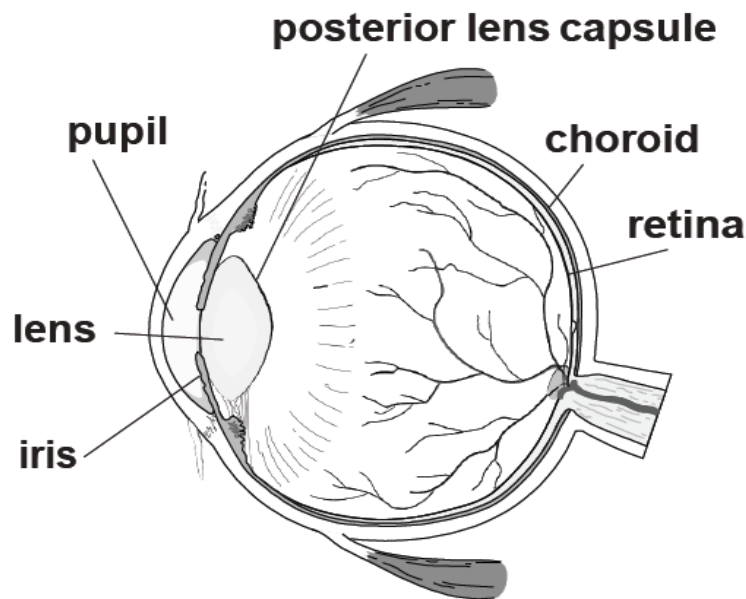


Figure 1: Diagram of an eye

The lens is held in place by tiny fibres called ligaments. The role of the lens is to focus light onto the retina, which is at the back of the eye, a process similar to film in a camera. A cataract, being cloudy, stops a clear picture from being formed on the retina. During a cataract operation the lens with the cataract is taken out and replaced with a clear plastic lens, so that the eye can see clearly after the operation. This plastic lens is called an intraocular lens implant and stays permanently inside the eye.

What causes cataracts?

Cataracts most commonly occur as a natural part of the ageing process. In younger people they may result from injuries, certain drugs, inflammation in the eye or conditions such as diabetes.

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What are the symptoms?

Early changes in the lens may not disturb your sight, but as the cataract develops you will gradually experience the following symptoms:

- Blurred vision and difficulty reading
- Sensitivity to bright light and glare, making it hard to drive at night
- Halos around bright lights such as street lights
- Increased short-sightedness meaning that you need to change your glasses or contact lens prescription more often
- Seeing colours that look faded or with a yellowish tinge
- Double vision in one eye

Cataracts **do not** cause pain, itching or redness.

How and when should a cataract be treated?

An operation is the only way to treat a cataract. There are no eye drops or medicines that will make cataracts disappear and they cannot be removed by laser treatment.

Cataract surgery should be considered when you are having difficulty seeing well enough to do the things you enjoy such as reading or driving.

The operation has a very high success rate in reversing the visual problems from cataract, but it will not reverse any vision changes caused by any other eye conditions that you may have.

Once your name has been put on the waiting list, there will be a wait of only a few months until your operation.

Before the Pre-assessment Biometry Clinic

Please remove any contact lenses that you may use as follows:

- Soft lenses – to be removed 1 week before your Pre-assessment Biometry Clinic appointment
- Hard lenses/gas permeable lenses must be removed 2 weeks before your Pre-assessment Biometry Clinic appointment

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Pre-assessment Biometry Clinic

You will be asked to come in for a clinic appointment for a biometry. This involves a quick scan using a special machine which measures the length and the curvature of the eye and helps the surgeon to determine the size and the power of the lens which will be placed into your eye during the surgery.

Please bring with you:

- Your current glasses and prescription where possible

Pre assessment for patients having a local anaesthetic is carried out as a telephone appointment. An appointment date will be sent through the post for a telephone consultation with a nurse. During this appointment the nurse will ask you about your past medical history and ensure that you are fit for surgery. Please have a list of all of your current medications or a repeat prescription from your GP as this information will be requested by the nurse during the telephone appointment.

Patients requiring surgery under a general anaesthetic will need a face-to-face pre assessment appointment.

If you take the medication warfarin or clopidogrel, please inform the nurse during your pre-assessment appointment.

If you take warfarin, an extra blood test may be needed before your operation.

All patients need to have the length and curve of their eye measured to work out which type of lens implant is best for their eye. These tests are carried out either when your name is added to the waiting list for surgery or when you come into the Pre-assessment Clinic.

You may be asked to come into the hospital for more measurements, but this is rare.

Who will carry out the operation?

The person who carries out the operation may not be the same doctor you see in the clinic, but you can be confident that the operation will be carried out, or supervised by a highly trained ophthalmic surgeon.

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The day of surgery

Cataract surgery is usually carried out as a day case operation under local anaesthetic, meaning that patients normally go home the same day.

- Please arrive in good time, at the day unit where your surgery is taking place
- You can eat and drink as normal before the procedure
- Take all of your normal medication as usual, unless you are advised not to
- Wear comfortable and loose fitting clothing. You will not need to get undressed for the operation
- Do not wear make-up, face creams or hairspray
- Do not bring any valuables
- The nurses will admit you to the day unit and re-check your blood pressure and vision
- The nurse will put dilating drops and an anaesthetic drop in the eye to be operated on

A surgeon will visit you to answer any last minute questions you may have and to ask you to sign a consent form that gives us your permission to go ahead with the operation.

Before you sign the consent form you should:

- Talk about any concerns that you may have with the doctor or nurse
- Be aware of the things that can go wrong with cataract surgery
- Be happy to go ahead with the operation
- Expect to be in hospital for 3 to 4 hours

About the surgery

You will be asked to lie as flat as you can during the operation. This is so that the anaesthetist can prepare you for surgery and the surgeon can carry out the procedure.

The operation itself only takes about 15 to 30 minutes.

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- Iodine (antiseptic) eye drops will be put into your eye along with some anaesthetic drops if necessary
- A local anaesthetic injection is usually given close to the eye, this will sting a little for a few seconds before the area goes numb
- A pad or small balloon is placed over the eye for 5 to 10 minutes. Once the local anaesthetic has taken effect you will not be able to move the eye, or blink and it usually stops you seeing much out of the eye
- The local anaesthetic will stop you feeling any discomfort during surgery, but you will still be aware of the surgeon touching your face as they carry out the procedure

In the operating theatre

- The eye will be cleaned again with iodine solution
- A light, clear plastic sheet called a drape will be placed over your face. This drape will be stuck around your eye but lifted up slightly so that it is not touching your mouth or nose. A tube gently blowing oxygen on your face will be placed under the drape to make you feel more comfortable. Some people worry that they may feel claustrophobic. Please talk to the nurse about this at your pre-assessment visit if you are concerned
- Under an operating microscope a small 3.5 mm cut is made into the eye. Microsurgical instruments are used to carefully suck the contents of the cloudy lens from the eye. This technique is called phacoemulsification
- The machines make a variety of noises and you may be aware of water running down the side of your face. If you wear a hearing aid on the same side as the eye being operated on you will be advised to take it out in the anaesthetic room as it may get damaged with the water
- The small pouch that holds your own natural lens, where the cataract is found, is called the capsule. Most of the capsule is left in place and is used to support the intraocular lens implant, which replaces your natural lens
- The small cut usually heals itself and rarely needs stitches
- At the end of the operation a shield is placed over the eye

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- Please raise your hand to let us know if you feel any discomfort at any point during the procedure

After the operation

When you return to the day unit you will be offered a drink and something to eat. After 45 minutes a nurse will examine your eye to check that everything is alright before you go home.

The nurse will give you a bottle of eye drops and instructions on how to use them. It is a good idea to have some help at home, especially if you find it difficult to put your eye drops in by yourself.

If you currently use eye drops for the treatment of glaucoma you should continue to use these after your operation unless your surgeon asks you to stop.

We recommend you use a fresh bottle of glaucoma eye drops immediately after your operation.

You will need to arrange for someone to take you home from the hospital. You should not drive or use public transport.

If the operation was carried out under local anaesthetic it is not necessary for a relative or friend to stay with you overnight.

Caring for yourself after surgery

Do

- Remember to use your eye drops as instructed
- Continue normal daily activities and moderate exercise, such as walking
- Lean backwards when washing your hair to avoid getting soap and water in your eye
- Expect to be off work for 1 to 2 weeks
- If you are a driver you must be able to read a standard size number plate (with glasses or corrective lenses if necessary) from 20.5 metres (67 feet) before driving again after your operation. This is the standard required by the Driver and Vehicle Licensing Agency

Do not

- Rub or press on your eye
- Perform strenuous activities such as heavy lifting for about 2 weeks

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Most people need a change in either their near or distance glasses prescription (or sometimes both) after their operation, to feel the full benefit. An eye test will be carried out either by a hospital optometrist or your own optometrist 5 or 6 weeks after your operation. Your follow up appointment will be discussed before you are discharged from the day unit.

What to expect after the operation

You can expect your eye to feel slightly uncomfortable, gritty and watery for a few weeks. Your vision should slowly improve during this time and your eye should feel more comfortable by 7 to 10 days after the operation.

You should contact the Eye Triage Line urgently (the number is at the end of this leaflet) if you notice any of the following:

- An increase in pain
- Rapid loss of vision
- Increased redness, or discharge
- Flashes of light, new floaters (black spots) or a curtain across your vision

What are the risks of cataract surgery?

All eye operations involve some element of risk to your vision. Details of the important complications are listed on the following pages.

It must be stressed that all these complications are rare and that more than 98 out of 100 patients who have cataract surgery are pleased with the result.

Tears of the posterior lens capsule

Tears of the posterior lens capsule can happen during cataract surgery in 2 to 3 of every 100 cases. It is usually still possible to place an intraocular lens as normal and you will not be aware of any problems.

Very occasionally a small piece of lens material may fall back into the vitreous cavity. If this happens a second operation may be necessary to remove the lens material.

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Tears in the posterior capsule slightly increase the risk of sight problems and retinal detachment, but the vast majority of patients will have the same quality of vision as if the complication had not happened.

Choroidal haemorrhage

Bleeding within the layer of blood vessels that feed the retina is a very rare and unpredictable complication of cataract surgery.

If the bleeding is localised, the eye may recover but in more severe cases permanent, severe loss of vision may occur.

Endophthalmitis (infection inside the eye)

Recent surveys have shown that in Gloucestershire, only 1 in every 3,000 individual eyes develop this serious sight-threatening complication.

The first signs and symptoms include increasing pain, redness and deteriorating vision.

If you have these symptoms, you must contact the eye department straight away.

Retinal detachments and retinal tears

A retinal detachment happens when fluid from the vitreous cavity passes through a tear in the retina and separates the retina from the back wall of the eye.

Cataract surgery slightly increases the risk of retinal detachments and this risk increases in short-sighted eyes. Flashes of light or new floating spots in your field of vision are warning signs. If you notice either of these symptoms, please contact us straight away.

Cystoid macular oedema

The centre of the retina that gives us detailed central vision is called the macula.

After cataract surgery inflammation may cause swelling in this area of the retina, which is known as 'cystoid macular oedema'. This may cause reduced vision but normal sight is usually restored with treatment.

**Patient
Information****Posterior capsule opacification**

Thickening of the posterior lens capsule can happen for 1 in 4 patients after cataract surgery and can happen at any point.

If you notice that your eyesight slowly gets worse 1 to 2 years after cataract surgery, posterior capsule opacification is the most likely cause. It is easily treated with a laser in the outpatient department.

Follow up

You will be sent an appointment for your follow up visit through the post. Routine appointments are usually arranged for between 4 to 6 weeks after your operation.

Contact information**Eye Triage Line**

Gloucestershire Royal Hospital
Tel: 0300 422 3578

Monday to Thursday, 9:00am to 5:30pm
Fridays, 9:00am to 6:00pm
Saturday 9:00am to 1:00pm

Outside of these hours, calls will be diverted to the operator, in this event, please ask to speak to the 'On call' eye doctor.

At evenings and weekends please contact the switchboard at:

Gloucestershire Hospitals NHS Foundation Trust
Tel: 0300 422 2222.

When prompted please ask for the operator and then for the 'On call' eye doctor.

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Further information

If you or a relative have access to the internet, you can use the following websites for further information:

Royal National Institute for the Blind

Website: www.rnib.org

Royal College of Ophthalmologists

Website: www.rcophth.ac.uk

NHS Direct

Website: www.nhsdirect.nhs.uk

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