

Ophthalmology – Cataract Surgery

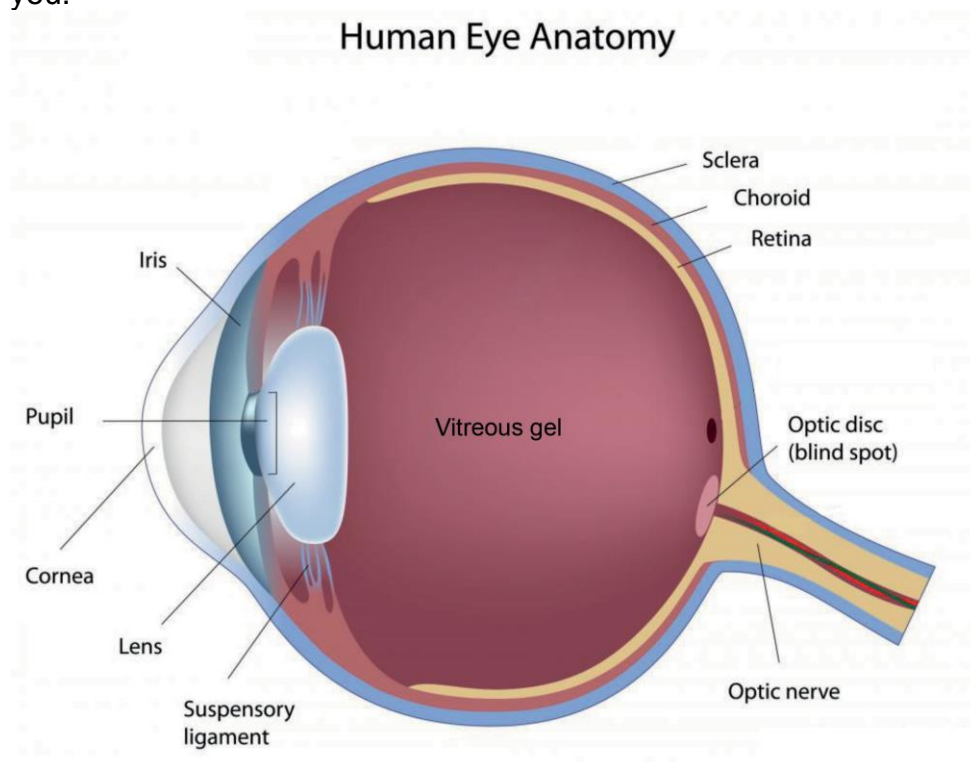
Introduction

The Covid pandemic has had a significant impact on the NHS ability to provide routine elective services. We recognise that patients are waiting longer than we would all like and it is not always possible to identify when treatment will take place. This document provides you with information on how you can support yourself while waiting to attend the hospital.

What is a Cataract?

It is the term used for the clouding of the natural lens of the eye. In a young eye, the lens is usually clear. As a cataract develops, the lens becomes opaque and it blocks light rays passing through the lens to the retina. This is why the vision gradually worsens.

As the cataract matures, you may find it difficult to see. You could experience problems with blurred vision, difficulty in reading and glare when driving or in bright sunlight. This eventually affects how you live your life. An operation to remove the cataract aims to change this and restore your sight. At the assessment your doctor will discuss cataract surgery with you in detail and whether this is the right option for you.



What are the causes of cataract?

Most people develop cataracts as they age. However some conditions, such as diabetes, certain medications or a significant injury to the eye can contribute to earlier development of cataracts.

What tests do I need to determine whether I require cataract surgery?

- If you think you have a cataract, you should see your Optician who will conduct several tests to determine if you need to be referred to the Hospital Eye Service:

Test	Description
1) Visual acuity test	A visual acuity test uses an eye chart to measure how well you can read a series of letters. Your eyes are tested one at a time, while the other eye is covered. Using a chart or a viewing device with progressively smaller letters, your eye doctor determines if you have 20/20 vision or if your vision shows signs of impairment.
2) Slit-lamp examination	<p>A slit lamp allows examination of the structures at the front of your eye under magnification.</p> <p>The microscope is called a slit lamp because it uses an intense line of light, a slit, to illuminate your cornea, iris, lens, and the space between your iris and cornea. The slit allows your doctor to view these structures in small sections, which makes it easier to detect any abnormalities.</p>
3) Retinal examination	<p>To prepare for a retinal examination, drops are put in your eyes to open your pupils wide (dilate). This makes it easier to examine the back of your eyes (retina).</p> <p>Using a slit lamp or a special device called an ophthalmoscope, your eyes can be examined for signs of a cataract.</p>
4) Applanation tonometry	This test measures fluid pressure in your eye.

- It is important that your Optician sends in **ALL** diagnostic test results that have been performed to ensure that your referral is managed appropriately and in a timely manner.

How is a cataract treated?

Surgery to remove the cloudy lens is the only treatment that is currently available to treat cataracts. The natural lens is replaced with a new acrylic implant.

When do you need a cataract operation?

In many cases cataracts are harmless and it is usually safe not to have treatment, particularly if you feel you do not have a problem with your vision or do not wish to have an operation. You may wish to consider cataract surgery when poor vision (due to a cloudy lens) starts to affect your daily activities, such as driving, reading, shopping or watching television. The purpose of the operation is to replace the cloudy lens with a plastic lens (lens implant) inside your eye.

What are the benefits of surgery?

The most obvious benefits are **greater clarity of vision and improved colour vision**. Because lens implants are selected to compensate for existing focusing problems, most people find that their eyesight improves considerably. The lens that is implanted in your eye is usually designed to improve distance vision and may give you clear distance vision without needing glasses.

Sometimes this is not quite achieved and you'll need a pair of distance glasses to fine-tune the focus and to get the best possible distance vision. Because the lens implant isn't able to provide in-focus near vision, almost everyone needs to wear reading glasses after the operation. There are some situations where a lens implant is selected to allow for clear reading vision without glasses, and instead, glasses would usually be required for distance vision. If this is appropriate your surgeon will discuss this with you.

You may still find that you need both distance and up-close glasses afterwards, to give you the best possible vision. This is because the aim of cataract surgery is to remove the cloudy lens to give clear vision, rather than to remove your need for glasses.

If you have another pre-existing eye condition (age related macular degeneration, diabetes or glaucoma), then this may limit the outcome of the surgery. Your eye surgeon will discuss this with you.

Are there any alternatives to surgery?

Only surgery will remove the cataract.

What will happen if I decide not to have the operation?

If the cataract is not removed, your vision may stay the same, or it may get worse. Waiting for a longer period of time may make the operation more difficult, especially if your eyesight becomes so poor that all you can see is light and dark.

What happens before the operation?

Prior to the day of surgery, you will attend a pre-assessment appointment to measure your eye for the correct implant strength and check that all necessary investigations are carried out before admission. It is also to give you information related to surgery before admission and you will also be asked to provide a list of your regular medications and discuss your medical history.

You will see a trained eye nurse and, if necessary, an eye doctor. Measurements of your eye will be taken to help the surgeon decide the strength of lens implant to be used for you. To get accurate measurements, it is important if you wear contact lenses, to leave them out for the following times:

- Soft daily disposable – 24 hours
- Soft two weekly and monthly contact lenses – 48 hours
- Extended wear soft contact lenses – 1 week
- Rigid gas permeable contact lenses – 2 weeks

It is also important to not wear contact lenses for 48 hours before the cataract surgery. If you are having a second cataract operation soon after your first cataract operation and you are fit and well, you may be offered a telephone pre-assessment. A trained nurse will telephone you and ask you questions regarding your health and your recovery since your previous surgery, check your current medications and ask who will be taking you home from hospital on the day of surgery.

Previous Laser Treatment

It is very important to tell the doctor or nurse if you have had previous refractive laser surgery to reduce the need for glasses. This is because previous refractive laser treatment affects the calculations that are used to determine the strength of the replacement artificial lens implant that is used during surgery. This means that patients can become more long sighted or short sighted than planned following cataract surgery. This may require spectacles or contact lenses to be worn after surgery. Very rarely it may also involve further surgery. Laser refractive surgery is currently unavailable on the NHS.

Please ensure you have arranged:

- Transport for the day of surgery, to take you to and from hospital
- Someone to help put in your eye drops after the operation if you are unable to do this yourself.

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On the day:

- Please arrive on time, or your surgery may be cancelled
- Remove all make up and nail varnish
- Wear loose comfortable clothing
- Do not bring your mobile phone into theatre

When you arrive at the Eye ward on the day of surgery, nursing staff will check your details and admit you to the day ward. Drops, or a small pellet, will be put on the inside of your lower eyelid to enlarge your pupil in preparation for the operation. This may make your vision blurred. The surgeon will see you before the surgery and ask you to sign a consent form.

What happens during cataract surgery?

- Cataract surgery involves removing the cataract (cloudy lens) through a small incision and replaces it with an acrylic lens implant. It is not done using a laser, as many people think, and your eye is not taken out of the socket.
- A small incision (3mm or < 1/4") is made to remove the cataract. The cataract is removed by ultrasound, which fragments the lens, allowing it to be removed by suction.
- It is usual for the eye to feel gritty or feel like it has "something in it" for 2-3 weeks after the operation. Mild inflammation occurs after cataract surgery, which settles with eye drops but sometimes may last up to 6 weeks.
- For some people, other eye problems prohibit the use of an artificial lens. In these situations, once the cataract is removed, vision may be corrected with eyeglasses or contact lenses.
- Either an anaesthetist or the surgeon will perform the anaesthetic to numb the eye. There may be some discomfort or stinging sensation during your anaesthetic. Some anaesthetics involve local infiltration of anaesthetic around the eye using a blunt cannula (no sharp needle). Occasionally there may be some swelling and a small amount of bleeding which can lead to bruising around the eye. This swelling usually settles in a day or two. If bleeding is severe your operation may be postponed. Risks of this type of anaesthetic include damage to the eye, blood vessels or nerves, or spread of local anaesthetic to other areas. The anaesthetic wears off within 6 hours.
- The operation normally takes 15-20 minutes but can take up to 45 minutes. You will be lying comfortably during this time. You will be lying flat and your face will be covered with a thin drape, which is held away from your nose and mouth.

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- After the procedure, you'll have some discomfort for a few days. Healing generally occurs within a few weeks. If you need cataract surgery in both eyes, your doctor will schedule surgery to remove the cataract in the second eye after you've healed from the first surgery.
- Cataract surgery is generally done on an outpatient basis, which means you won't need to stay in a hospital after the surgery. During cataract surgery, your eye doctor uses a local anaesthetic to numb the area around your eye, but you usually stay awake during the procedure.
- During the procedure you may hear some noise from the machine that powers the ultrasound probe. You may also see lots of different colours. You may feel water on your skin; it is normal and linked to the procedure. The surgeon may explain to you what is happening as the operation goes along. At the end of the operation a small pad and shield will be put over your eye to protect it.

Note: Your operation may be recorded on video/DVD and used for training and educational purposes. Your consent will be sought before any identifiable images can be used for purposes of publication.

What complications can occur?

Complications are rare and in most cases can be treated effectively. In a small proportion of cases further surgery may be needed (1 in 200). Very rarely, some complications can result in blindness or loss of the eye. One of the commonest occurrences after surgery is posterior capsular opacification - thickening behind the lens implant. This causes similar symptoms to a cataract (cloudy or blurred vision) and is easily corrected with laser treatment in the clinic.

Specifically, complications can include:

Allergy to the eye drops	Bruising around the eye or eyelids	High pressure inside the eye
Clouding of the cornea	Dislocation or suboptimal strength of the artificial lens implant	Retinal detachment
Swelling of the retina (macular oedema).	Posterior capsule rupture and/or vitreous loss (a split in the thin membrane containing the cataract).	Refractive surprise (unexpected need for glasses)
Part or the entire cataract falling into the back of the eye (usually requires further surgery to remove it)		Endophthalmitis – severe infection of the eye.

What can I do to make the operation a success?

• Post-Operative Eye Drop Instructions:

On discharge it is important to follow the post operative advice for eye care and drop installation.

Use your Maxidex eye drops 4 times daily for six weeks and Chloramphenicol eye drops 4 times daily for 2 weeks. Further bottles of drops can be obtained from your GP if you run out before the end of six weeks.

- **Post-Operative Clinic Appointment**

You will be given the appointment date by the ward nurse on your discharge from the hospital after the operation. Please ensure you bring all your drops and your glasses to your clinic appointment after your operation. Complications following cataract surgery are rare, however if you experience a combination of 2 or more of the following please contact us:

➡ **Red eye** ➡ **Sticky eye** ➡ **Pain** ➡ **Deterioration in vision**

- **Post-Operative Cataract instructions**

Please note that the pupil may remain dilated for up to 24 hours following surgery. The vision may remain blurred for several days. It is normal to have a gritty, prickly sensation or a feeling that something is in the eye. The eye can water and appear red for a few weeks after surgery.

Dos:

- Wash your hands before and after instilling eye drops
- Shake the eye drops before using them
- Use clean tissues to wipe the eye, then discard the tissue
- Continue to use any prescribed glaucoma or dry eye medication as before the operation
- Bath, shower, wash your face and wash your hair as normal keeping your eyes closed so you do not get soap or water into them
- Do household chores as normal
- Read and watch television
- Have your eyes tested at the optician 4-6 weeks after surgery

Do not:

- Drive until you have checked with the doctor/nurse/optician that it is safe to do so
- Swim for two weeks, then use well-fitting goggles that do not allow water in
- Swim without goggles for 4 weeks
- Rub your eye
- Lift or move heavy objects for 1 month
- Dig the garden or mow the lawn for 1 month
- Wear eye make-up for 2 weeks
- Do not wear sunglasses any more frequently after the operation than you did before. Sunglasses should not be worn indoors.

Health and Wellbeing Guidance for Patients

Whilst you are waiting for any procedure, it is important to maintain a healthy lifestyle and be as medically fit as possible. If you have any long-standing conditions such as high blood pressure you should get this reviewed at your Doctor's surgery to make sure it remains well controlled. This will also help prevent any unnecessary delays when you come for your pre-operative assessment.

- Information on a range of **Ophthalmology** conditions including Cataracts can be found on the following websites:
 - Sight Research UK (**Cataracts | Sight Research UK**) provides general information including treatment options.
 - <http://www.rnib.org.uk/eyehealth/eyeconditions/conditionsac/pages/cataract.aspx>
 - <http://www.netdoctor.co.uk/diseases/facts/cataract.htm>

General **health and wellbeing information** to support our local residents to stop smoking or with weight management **Healthy Surrey** has been commissioned to provide free stop smoking and weight management support our community.

- **National Stop Smoking and weight management support is also available via:**
 - **Quit smoking - Better Health - NHS (www.nhs.uk)** The NHS stop smoking service provides a range of options to help you quit including support from an advisor, stop smoking medications, e-cigarettes and a digital offer for those who wish to quit by themselves. If you are not ready to quit smoking, but would like more information on how to protect your family, **Smoke free Homes**, advises on how to make your home and car smoke free.
 - **Live Well - NHS (www.nhs.uk)** are here to help you and offer different levels of support to maintain a healthy weight and to stop smoking, alcohol support and eating well etc.
- **Healthy eating and being active**
Information and advice on healthy eating and becoming more active is available from:
 - **Eat well - NHS (www.nhs.uk)** (website) - includes easy to prepare meals for healthy meals and the **NHS Food Scanner app - Healthier Families - NHS (www.nhs.uk)** to help reduce levels of sugar in your diet.
 - **Weight Management Service** The service supports adults aged 18 years or over who want to lose weight and have been identified as obese.
 - **Lose weight - Better Health - NHS (www.nhs.uk)** (website) - includes tips on getting active for all, including the downloadable active apps, as well as tailored advice for those living with a long-term conditions.

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- **Find out your BMI**

You can get help to lead a healthier lifestyle if you're an adult (18 years or over) and your body mass index (BMI) is above average. Use this tool to [BMI calculator | Check your BMI - NHS | Please fill in your details \(www.nhs.uk\)](#) if it's too high, sign up for a programme that will help you lose weight BMI of 30+

- **BMI of 28+**

You can get support from the 'Live Well' website, if your BMI is 28 or over if at least one of the following applies:

- you have Type 1 and 2 Diabetes or Metabolic Syndrome
- you have problems with your heart, circulation, hypertension or high blood pressure
- you have been diagnosed with anxiety/depression
- you need to lose weight before receiving another medical treatment or surgery
- you have a serious long-term health condition that is adversely affected by your weight such as muscular skeletal disorders (back pain, mobility issues) and asthma
- you're from a black or ethnic minority background.

- **BMI of 25+**

If you have a Body Mass Index of 25 or higher [Eat well - NHS \(www.nhs.uk\)](#) provides online support to help you lose weight and includes access to the NHS 12-week weight loss plan.

The NHS 12-week fitness plan will support your weight loss plan as well as improve your health. This is aimed at beginners and will help get you into the habit of regular exercise over the course of the programme. It is structured but flexible enough to allow you to fit the exercise sessions around your other weekly commitments.

What should I do if my health is deteriorating?

If you are experiencing any worsening signs or symptoms of eye problems, you should first consult your GP and or Optometrist.


a. Urgent Health Advice

For urgent health advice about physical or mental health, when it's not an emergency, please call 111 from any landline or mobile phone. You can also visit www.nhs.uk. The NHS 111 service is available 24 hours a day, seven days a week.

b. Life Threatening Emergencies

For something life threatening – severe bleeding, breathing difficulties or chest pains – please dial 999.

Contact Us:

Call: Royal Surrey County Hospital NHS Trust  01483 571 122	Email: rsc-tr.PALS@nhs.net For My Planned Care enquiries	Website: Home Royal Surrey NHS Foundation Trust
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