

# Patient Information

# Cataract Surgery

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## Introduction

This leaflet has been written to help you understand more about surgery for a cataract. It explains what the operation involves, the benefits and risks of it and what you should do afterwards. The information is designed to help you decide whether you want this operation, and also to make you aware of what to expect.

## What is a cataract?

A cataract is cloudiness of the lens in the eye. The lens is the normally clear structure in your eye which focuses the light. The cloudiness can become worse over time, causing vision to become increasingly blurry, hazy or cloudy.

Cataracts can develop in one or both eyes and mostly develop with age.

## What are the benefits of cataract surgery?

Your eye surgeon has recommended cataract surgery because the lens in your eye has become cloudy, making it difficult for you to see well enough to carry out your usual daily activities. During the operation, the surgeon will remove the cloudy lens and replace it with an artificial one.

Artificial lenses available in the NHS focus at one distance (monofocal lens implant). A special corrective lens (toric lens implant) may be used if you have astigmatism (“rugby ball shaped eye”) that cannot be sufficiently corrected by other means in surgery. There is a small chance that this lens will rotate post-operatively, in which case you may need a second surgery to reposition the lens, but this is not usually needed.

Other lens types that focus at different distances (multifocal lens implants) are available, but not as an NHS patient. These lenses can be associated with different visual side-effects and are a compromise between the best vision and being able to see at different distances. They are usually not suitable if you have other eye conditions.

The vast majority of patients have improved eyesight after cataract surgery. The most obvious benefits are clearer vision and improved contrast and colour vision.

Most people (more than 90 per cent) will be within one strength of the lens implant power chosen at the time of surgery (as good as can be achieved by current measurements), and glasses may still be needed after surgery for distance in addition to those for reading.

If you have another eye condition such as amblyopia (lazy eye), diabetic eye disease, glaucoma or age-related macular degeneration, the quality of vision may be limited even after successful surgery.

### **What if I have had previous refractive surgery (LASIK / LASEK / SMILE / Radial Keratotomy)?**

The refractive (focusing power) outcome is less predictable and there is a chance of needing to exchange the lens implant in the case of a poor outcome. In order to calculate the implant strength, you need to inform the doctor of your previous surgery and provide pre and post-operative refractive surgery prescriptions and eye measurements from your refractive surgeon. This enables the best chance of a good refractive outcome.

### **What are the risks of cataract surgery?**

This is a very safe operation, but every operation and anaesthetic carries a small risk. According to The Royal College of Ophthalmologists' Cataract National Data Set, some of the risks of cataract surgery are:

- Tearing or breaking of the support of the lens capsule. This can disturb the jelly inside the eye and this may lead to a longer recovery time. About one to two people out of 100 may get this however, most patients achieve satisfactory vision eventually.

- Swelling of the retina. The medical name for this is post-operative cystoid macular oedema. It is due to fluid leaking from the retinal blood vessels and usually settles down with treatment (about one or two people out of 100 may get this).
- Loss of all or part of the cataract into the back of the eye. This would need another operation to remove it.
- One person out of 200 people may need further surgery.
- Infection in the eye, which can lead to loss of sight or even loss of the eye itself (one person out of 3,000 may get this).
- Bleeding in the back part of the eye which could lead to some loss of vision or, rarely, total loss of vision (one person out of 1,000 may get this).
- Temporary high pressure inside the eye (eight people out of 100 may get this).
- Clouding of the cornea. The risk is small in a normal eye. In certain conditions, the risk is higher and your surgeon will discuss this with you.
- Detached retina which can lead to loss of sight (one person out of 3,000 may get this).
- The lens implant may give a poor refractive (focussing) outcome. This can usually be corrected with glasses. Occasionally, this requires a lens exchange or implantation of an additional lens.
- Rarely, significant damage to the iris. This is more likely in complex surgery and if you are taking some tablet medications.
- The back part of the lens capsule that is left in the eye to support the implant may become thick and cloudy. The medical name for this is posterior capsular opacification. It may come on gradually after months or years. This can be cleared with laser treatment.
- Other rare complications e.g. optic neuropathy and blocked retinal blood vessels can occur after surgery and may lead to poor vision.
- The chance of a poor visual outcome, reading three lines less on the eye chart, (less than 6/24) after cataract surgery, is around one in 100 if the eye has no other problems affecting the vision.
- Serious complications are rare and in most cases, complications can be treated effectively.

- Very rarely, some complications can result in blindness (less than one person out of 1,000 may get this).

Some complications may be more common in an eye with additional problems or conditions which increase the surgical risk.

The risks of surgery do not change unless the cataract becomes very advanced.

### **What are the alternatives?**

Surgery is the only option to remove a cataract. However, it is your choice as to whether you have the operation.

### **What happens if I do not have this treatment?**

If the cataract is not removed, your vision may stay the same, but usually it gets gradually worse. Waiting for a longer period of time before having surgery may not increase the risk of complications significantly unless your eyesight becomes so poor that all you can see is light and dark.

### **What happens during the operation?**

The purpose of the operation is to replace the cloudy lens (cataract) with an artificial replacement lens inside your eye. The artificial lens is called an implant.

An experienced eye surgeon will carry out the operation or may supervise a doctor in training who also performs some operations. We will give you a local anaesthetic to numb your eye, so you will be awake during the operation. You can usually go home the same day.

You will not be able to see what is happening, but you will be aware of a bright light. Just before the operation, we will give you eye drops to enlarge the pupil. After this, we will inject an anaesthetic solution into the tissue surrounding the eye. To do this, we will put numbing drops into your eye, and when your eye is numb, we will inject the anaesthetic into the tissue around your eye. There may be a sensation of pressure with this, but it is not usually painful.

Alternatively, if the surgeon and you decide you are appropriate for topical anaesthesia, only numbing eye drops will be used prior to surgery.

During the operation, we will ask you to lie as flat as possible and to keep your head still. Most cataracts are removed by a technique called phacoemulsification. The surgeon makes a very small cut in the eye, softens the lens with ultrasound waves and removes it through a small tube. The outer layer of the lens (the lens capsule) is left behind.

The lens implant is then inserted into the lens capsule to replace the cataract. Sometimes, a small stitch is placed in the eye. At the end of the operation, the surgeon will put a pad or clear shield over your eye to protect it. You will need to wear the clear shield at night for one week after the surgery.

### **How long does the operation take?**

The operation normally takes 15 to 30 minutes, but may take up to 45 minutes.

### **Who will perform the operation?**

There is no guarantee that the doctor who sees you in the clinic will perform the procedure. The Dudley Group NHS Foundation Trust is a teaching Trust, and we have a responsibility to train surgical trainees. If a trainee undertakes the surgery, they will be supervised by an experienced senior doctor.

However, if you do not want surgical trainees to be involved in your care, please make this known to the nursing staff, administrators or doctor on arrival. If you refuse to have surgical trainees present during your treatment, this will not affect the quality of your care in any way.

### **What happens after the operation?**

If you have discomfort, we suggest that you take a painkiller such as paracetamol (always read the label; do not exceed the recommended dose).

It is normal for your eye to feel irritated and uncomfortable after cataract surgery. However, after one to two days, even mild discomfort should disappear. It is common to have some fluid discharge from your eye.

You will be given eye drops to reduce inflammation. **Do not stop** the drops until you are seen by a doctor or nurse for a follow up appointment after the surgery. The hospital staff will explain how and when to use them. Please do not rub your eye.

After the operation, you can read or watch TV almost straight away, but your vision may be blurred. The healing eye needs time to adjust so that it can focus properly. In most cases, healing will take about four to six weeks. You will be ready for new glasses (distance and reading) six weeks after an uncomplicated cataract operation.

Please understand that although we try to take accurate measurements of your eye so that you will not need strong glasses after the operation, you may still need a distance prescription to 'fine tune' your vision. You will definitely need a reading prescription as the lens implant is usually set for distance.

### **What do I need to look out for?**

Certain symptoms could mean that you need prompt treatment. Please contact the hospital immediately if you have any of the following symptoms:

- A lot of pain
- Loss of vision
- Increasing redness in the eye

**Russells Hall Hospital Eye Clinic: 01384 456111 ext. 3633**

**(9am to 4.30pm, Monday to Friday)**

Or in an emergency, visit your nearest emergency department.

## Follow up

**First eye** - If this is the first eye you have had cataract surgery on we will give you a follow up appointment in the outpatient eye clinic for a doctor or specialist nurse to check your eye. The doctor or nurse will tell you when you will need to see your optician.

**Second eye** - If this is the second eye you have had cataract surgery on we will give you a follow-up appointment which may be in the outpatient eye clinic for a doctor or specialist nurse to see you **or** you may be seen by an optician in their practice.

You will be advised where your follow-up appointment is after your surgery.

## What if I have any problems or questions after reading this leaflet?

Please contact the **Urgent Referral Clinic** team at Russells Hall Hospital Eye Clinic on **01384 456111 ext. 3633** (9am to 4.30pm, Monday to Friday).

## Eye emergency, out of hours

In case of an eye emergency after the closing hours of the Eye Clinic at Russells Hall Hospital (including weekends and bank holidays), please contact:

### **Birmingham Midland Eye Centre on 0121 507 4440**

The doctor on call is usually based at the Eye Centre, City Hospital, Dudley Road, Birmingham. They may need to call you back, and if necessary, they will arrange for you to visit them.

## Where can I find out more?

You can find out more from the following website:

<http://www.rnib.org.uk/eye-health-eye-conditions-z-i-conditions/cataract>

**Note:** the information in this booklet is provided for information only. The information found is **not** a substitute for professional medical advice or care by a qualified doctor or other health care professional. **Always** check with your doctor if you have any concerns about your condition or treatment.

