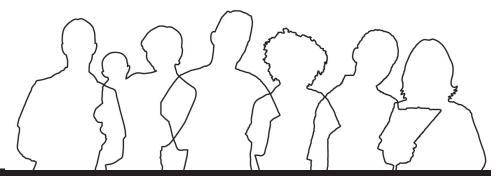


# What is a Cataract?

GHPI0100\_06\_10 Contact: Ophthalmology Review due: June 2013



### **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** 

www.rnib.org

**Royal College of Ophthalmologists** 

www.rcophth.ac.uk.

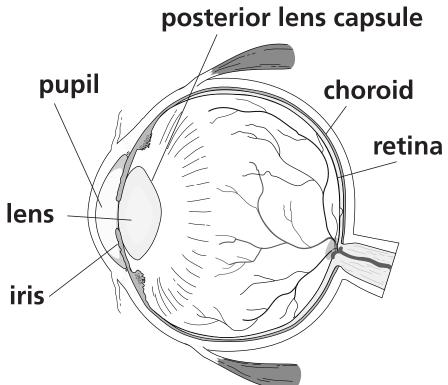
**NHS Direct** 

www.nhsdirect.nhs.uk

www.cgeye.org Links on this site will take you through operation details and the cataract eye library will show you an animated version of the operation. This website is easy to use, so try it.

### Introduction

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



It is held in place by tiny suspensory ligaments. The lens is responsible for focusing light onto the retina, which is the equivalent of the film in a camera. A cataract will therefore prevent a clear picture being formed on the retina. A cataract operation involves removing the lens with the cataract and replacing it 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 remains 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.

# What are the symptoms?

Early changes in the lens may not disturb vision, but as the cataract develops people experience the gradual onset of several symptoms:

- Blurred vision and difficulty reading
- Glare and sensitivity to bright light making it hard to drive at night
- Halos around bright lights such as street lights
- Increased short-sightedness requiring a more frequent change to spectacle or contact lens prescription
- Colours appearing 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 cause cataracts to disappear and they cannot be removed by laser treatment.

occur contact us immediately.

### **Retinal detachments & retinal tears**

A retinal detachment occurs 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 they occur contact us immediately.

## **Cystoid Macular Oedema**

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

After cataract surgery inflammation may cause swelling in this area of the retina, which is referred to as 'cystoid macular oedema'. It may cause reduced vision but usually resolves with appropriate treatment.

## **Posterior Capsule Opacification**

Thickening of the posterior lens capsule occurs in approximately 1 in 4 patients following cataract surgery and can happen at any point.

If you notice a gradual decline in vision 1-2 years after cataract surgery this is the most common cause. It is easily treated with a laser in the outpatient department.

It should be emphasised that all these complications are rare and that more than 98 out of 100 patients who have cataract surgery have a successful outcome.

## Tears of the posterior lens capsule

Tears of the posterior lens capsule may occur during cataract surgery (in approximately 2-3% of 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. Tears in the posterior capsule do increase the risk of sight problems and retinal detachment slightly, but the vast majority of patients will have as good vision as if the complication had not occurred.

## **Choroidal Haemorrhage**

Bleeding within the layer of blood vessels that nourish 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 approximately only 1 in 3,000 eyes develops this serious sight-threatening complication.

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

The operation has a very high success rate in reversing the visual problems from cataract but will not reverse any vision changes resulting from any other conditions that may be present.

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

### **Pre-assessment clinic**

You will be asked to attend a clinic appointment to ensure that you are fit for surgery where some tests and measurements will be performed.

## Please bring:

- Your current distance glasses and current prescription where possible.
- A urine sample in a clean bottle for routine testing.
- A list of all your current medications or a repeat prescription from your GP.

# Your blood pressure will be checked and your vision tested.

If you take warfarin or clopidogrel, please be sure to let us know. If you take warfarin an additional blood test may be required prior to your operation.

All patients need to have the length and curvature of the eye measured to calculate the power of lens

implant that is most suitable for their eye. These tests are sometimes done when you are put on the waiting list for surgery, and sometimes done at the preassessment clinic. Very occasionally, a second visit to the hospital is necessary for further measurements.

# Who will do the operation?

The surgeon who performs the operation may not be the same doctor you saw in clinic, but the operation will be performed, or supervised by a highly trained ophthalmic surgeon.

# Day of surgery

Cataract surgery is usually performed as a day case procedure under local anaesthetic.

- Please arrive on time at the day unit where your surgery will take place
- You can eat and drink as normal before you come in
- Take all of your medication as usual unless specifically 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 recheck your blood pressure and vision
- They will put dilating drops and an anaesthetic drop in the eye to be operated on

# Side effects of the operation

You can expect your eye to feel slightly uncomfortable, gritty and watery for a few weeks. The vision should improve gradually during this time and your eye should feel more comfortable by 7 to 10 days after the operation. You should contact us urgently however if you notice:

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

The telephone number is: 08454 223578.

A nurse will be able to speak to you for advice between 09:00 – 17:30 Monday to Thursday and 09:00 – 13:00 on Fridays.

At any other time calls will be diverted to the operator, in this event, please ask to speak to the Eye Doctor on call.

At evenings and weekends call 08454 222222 and ask to speak to the eye doctor on call.

# 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 overleaf.

up visit through the post. Routine appointments are usually between 4-6 weeks after your operation.

## Do's and don'ts after the operation:

#### 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 1-2 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 resuming driving after your operation. This is the standard required by the Drivers and Vehicle Licensing Authority.

#### **DO NOT**

- Rub or press on your eye.
- Perform strenuous activities such as heavy lifting for about a fortnight.

Most people will require a change in either their near or distance glasses prescription (or sometimes both) after their operation in order to achieve the full benefit of the operation. An eye test will be performed either by a hospital optometrist or your own optometrist 5 or 6 weeks after your operation. You will be advised about your eye test before you are discharged from the day unit.

A surgeon will visit you to answer any last minute questions and to ask you to sign a consent form that gives us your permission to proceed with the operation. Before you sign the consent form you should:

- Discuss any concerns with the doctor or nurse
- Be aware of the potential complications of cataract surgery.
- Be happy to go ahead with the operation.
- Expect to be in hospital for 3-4 hours.

# How is the surgery done?

The actual operation takes on average 15-30 minutes. However you will be asked to lie as flat as you can for up to an hour in order for the anaesthetist to prepare you for your operation and the surgeon to perform the procedure.

### In the anaesthetic room

- lodine (antiseptic) eye drops will be put into your eye along with further anaesthetic drops if necessary
- A local anaesthetic injection is usually given close to the eye – this stings a little for a few seconds
- A pad or small balloon is placed over the eye for 5-10 minutes. Once the local anaesthetic has taken effect you will not be able to move the eye, nor blink, and it usually stops you seeing much out of the eye.

 The local anaesthetic will prevent you feeling any discomfort during surgery although you will be aware of the surgeon touching your face as he/she operates.

# 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 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 discuss this with the nurse at your pre-assessment visit.
- Under an operating microscope a 3.5mm incision is made into the eye. Microsurgical instruments are used to fragment and 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 bag that holds your own natural lens (the cataract) is called the capsule. Most of the capsule is left in place and is used to support the intraocular

- lens implant, which replaces the natural lens.
- The incision is usually self-sealing and rarely requires any stitches.
- At the end of the operation a shield is placed over the eye.
- Please indicate by raising your hand 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 satisfactory before you go home.

He/she will give you a bottle of eye drops and instruction on how to instil the eye drops. It is a good idea to have some help at home, especially if you find it difficult to put your eye drops in.

If you currently use eye drops for the treatment of glaucoma you should continue to use these following your operation unless your surgeon specifically asks you to stop them. We recommend you use a fresh bottle of glaucoma eye drops immediately after your operation.

We recommend that someone takes you home from the hospital. You should not drive yourself or use public transport. If the operation was performed under local anaesthetic it is not necessary for a relative or friend to stay with you overnight.

You will be sent an appointment for your follow-