

Moorfields Eye Hospital NHS Foundation Trust



What is a cataract?

A cataract is the clouding or opacity of the lens inside the eye. People often describe cataract as 'looking through a chiffon scarf'.

It is useful to learn a little about how the eye works in order to understand what a cataract is.



Anatomy of the normal eye

Inside the eye, behind the coloured part of the eye (iris) with a black hole in the middle (pupil) is a 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 on to the retina. The picture the retina receives becomes dull and fuzzy. Cataract usually forms slowly and people experience a gradual blurring of vision.



Do cataracts spread from eye to eye?

No. But often they develop in both eyes at the same time.

Has my cataract been caused by overuse of my eyes?

No. Cataract is not caused by overuse of the eyes and using the eyes when the cataract starts will not make it get worse.

Are there different kinds of cataract?

Yes. Cataracts can be caused by injuries to the eye. A cut, blow or burn to the eye can cause damage to the lens inside the eye. This type of cataract is called a traumatic cataract.

Can children have a cataract?

Yes. Babies can be born with this condition. This is called congenital cataract.

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 adult life. The normal process of ageing causes the lens to harden and become cloudy. This is called age-related cataract and it is the most common type. It can occur at any time after the age of 40.

I didn't know that I had a cataract until my GP told me!

Some people may not be aware that cataract is developing. It can start at the edge of the lens and initially may not cause problems with vision. Generally, as cataract develops, people experience blurring or hazing of vision. Often they become more sensitive to light and glare.

I seemed to have to go to the optician more to get new glasses.

There may be a need to get new prescriptions for glasses more often when cataract is developing. When cataract worsens, stronger glasses no longer improve sight. Objects have to be held close to the eye to be seen. The hole in the iris, the pupil, may no longer look black. It may instead look white or yellow. The lens behind the pupil becomes thicker and cloudier as the cataract develops.

Coming in to hospital

When you are first referred to Moorfields, an eye doctor (ophthalmologist) will see you in the outpatient clinic. He or she will examine your eyes and you will have a sight test.

Instruments are used to help the doctor examine your eyes properly, including a hand-held ophthalmoscope and a slit lamp.

Often eye drops are put in your eyes to make the pupil bigger. This helps the doctor examine your eyes fully. The effect of these drops will wear off after a few hours, however your near vision will be blurry. For this reason you should not drive to appointments and you must be careful that you do not miss your footing and fall down steps.



Treatment

When do I have my cataract treated?

When the cataract progresses to the point that it is interfering with daily activities and normal lifestyle, cataract surgery is usually the next step.

Could anything have been done to stop me developing cataract?

There is no known prevention for cataract. Modern surgery is highly successful for the majority of patients.

Are cataracts removed by laser?

No. Surgery is the only effective way to remove a cloudy lens. It cannot be removed by laser.

I have cataract developing in both eyes - are both treated at the same time?

No. It is common for cataract to develop more quickly in one eye that in the other. The timing of an operation is decided by the ophthalmologist. Usually, the more seriously affected eye is operated on first.

Do I need any special tests before the operation?

Yes. Before you come to hospital for your operation you will attend a pre-admission assessment clinic. A nurse will carry out special tests to measure your eye. This helps decide the strength of the intraocular lens which replaces your natural lens. If you wear contact lenses you must leave them out before attending this clinic. The amount of time you have to leave them out varies depending on the type of lens you wear:

- soft contact lenses 2 weeks
- gas permeable contact lenses 4 weeks
- hard contact lenses 6 weeks

Please do not drive to your appointment at the pre-admission assessment clinic. We will have to put drops in your eye which will dilate the pupils and make vision blurry for 2-3 hours.

You may also have tests for your general health, such as blood tests and electrocardiogram (ECG).

What does the operation involve?

An experienced eye surgeon will carry out the operation or may supervise a doctor in training who also performs some operations. The doctor will use a microscope during the operation. The eye is never removed and replaced during cataract operations.

Most cataracts are removed by a technique called phacoemulsification. This technique uses sound waves to soften the lens, which is then removed through a small tube. The back layer of the lens is left behind.

Sometimes very fine nylon stitches are used to close the wound. Occasionally these are removed in the clinic at a later appointment. This is a painless procedure.

What kind of anaesthetic is necessary?

Most operations for cataract are performed under local anaesthetic. This is a method of pain prevention usually given by eye drops or an injection around the eye. You will be awake during the operation and will be aware of a bright light, but you will not be able to see what is happening.

How will I be able to see after the removal of the lens?

Your lens, which helps you focus, is removed during the operation and is usually replaced with a clear plastic lens. This is called the intraocular lens (IOL). It corrects the vision after a cataract operation, although many people still require reading glasses with an intraocular lens implant.

Will I have to stay in hospital?

No. Most operations for cataract are 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 do not stay overnight at hospital, though for a small minority of patients an



Do cataract operations have any complications?

There are some possible complications during the operation:

- tearing of the back part of the lens capsule with disturbance of the lens inside the eye that may sometimes result in reduced vision;
- loss of all or part of the cataract into the back of the eye requiring a further operation which may require a general anaesthetic; and
- bleeding inside the eye.

Serious complications are uncommon following cataract surgery, however, like most operations, problems can occur. If you experience any of the following you must attend Accident & Emergency here at Moorfields or, if that is not possible, see your GP.

Infection following cataract surgery

This is very uncommon but can be serious. If the eye becomes red or sore in the days following surgery, you must contact us or come to our Accident & Emergency.

Inflammation of the eye

The eye may become red and aching. This is a condition called uveitis and can be treated with drops.

Blurring of the central vision

An accumulation of fluid in the back of the eye (retina) may occur, causing blurring of the central vision. This is known as cystoid macular oedema. This usually resolves itself within a couple of weeks using drops.

Distorted vision

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

A shadow, lights or floaters in your field of vision

The retina can become separated from the inner wall of the eye, referred to as a detached retina. If you notice a shadow in your field of vision or experience floaters or flashing lights, please come into our Accident & Emergency.

Blurring of general vision

A thickening of the membrane behind the new lens can occur in the months following surgery, called capsular opacity. This can be treated with laser.

If you are concerned that you may be experiencing any of these complications, please come to Moorfields Accident and Emergency at Moorfields Eye Hospital, City Road, London EC1V 2PD. You can contact the department on 020 7566 2083.

Aftercare

Will my eyes be covered after the operation?

Your operated eye will be covered with a protective plastic eye shield. Some patients may also have an eye pad. Day care patients will have the shield (and pad if used) removed, the eyes cleaned and the eye examined before you go home. If another pad is put on for the first night at home, you will be asked to remove this yourself the next day and start to put in your eye drops. All patients are advised to wear the protective plastic eye shield in bed for two weeks following the operation.

Will I feel any pain after the operation?

As the anaesthetic wears off, there can be a dull ache felt in and around the eye. You can ask the nurse for tablets for pain relief.

How do I put in eye drops?

A nurse will teach you how to look after your eye before you go home. You will be shown how to clean your eye and put in the eye drops correctly. In some circumstances, family and friends will be taught how to do this so they can help you. Eye drop treatment prevents infection and helps reduce inflammation after surgery and may be necessary for about two months.

Is there anything else I have to do to care for my eye?

You should avoid rubbing or touching your eye. You may find you are sensitive to light, so it is useful to have a pair of plain dark glasses in case you need them. You can buy these at any chemists or at the Friend's shop in City Road.

The medical and nursing staff will advise you if there are any activities you should avoid. The majority of patients can resume normal physical activity within a day or two. You should be able to return to work the day following your operation, depending on your occupation and the operation you have had. The doctors and nurses in clinic will advise you. The eye takes a few weeks to settle and best vision to be determined. You will be advised about tests for spectacles to improve vision (refraction) at your clinic appointment after the operation.

Useful contacts:

Moorfields Eye Hospital NHS Foundation Trust

City Road, London EC1V 2PD Ph: 020 7253 3411 www.moorfields.nhs.uk

Moorfields Direct Telephone Helpline

Ph: 020 7566 2345

Monday to Friday 09.00 to 17.00 for further information and advice.

Produced by Moorfields Eye Hospital NHS Foundation Trust December 2005



Two centuries of vision