



Eye Removal

Eye removal - advice to patients

When patients are told that they need to have an eye removed (enucleated/eviscerated), they are often nervous about the operation. They may also worry about how their appearance will be affected and may wonder whether it will be difficult to insert and remove any artificial replacement eyes that may be fitted. Initially they are often shocked and afraid about what the operation involves.

We hope that this booklet can shed light on these matters and answer some of your doubts, anxieties and questions.

Reasons for removing an eye

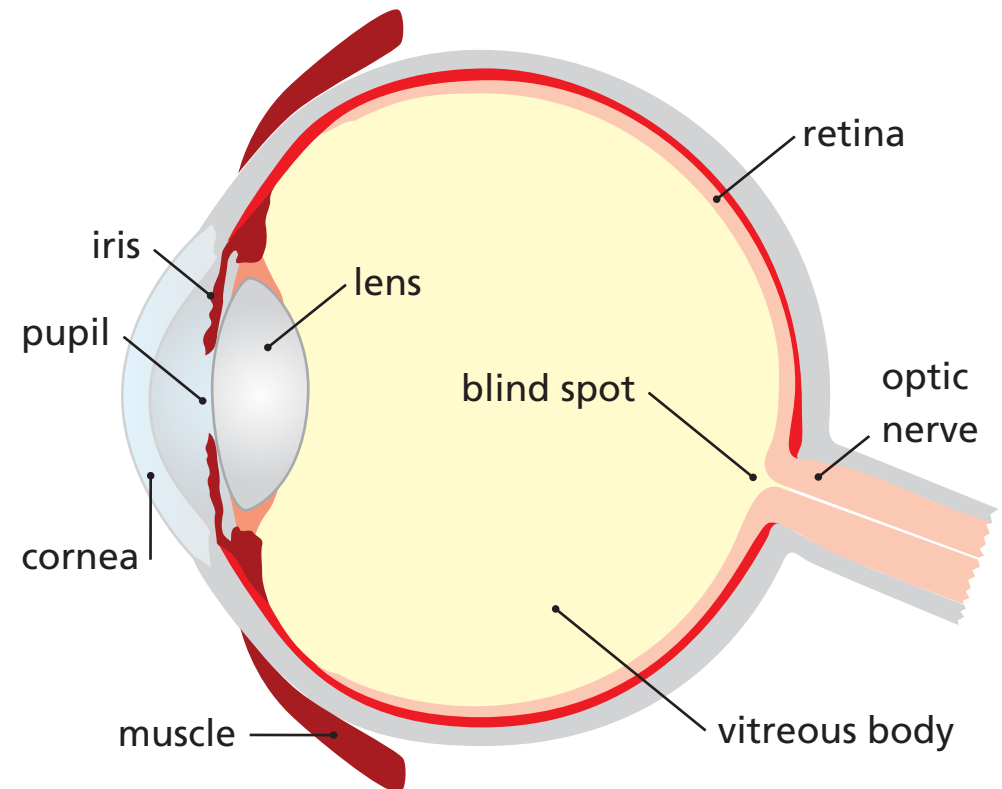
An eye is usually removed to treat:

- a painful blind eye;
- a malignant tumour; and
- some types of severe injuries.

This operation is only undertaken when all other eye treatments are ineffective, inappropriate or undesirable. It is the final measure taken by your eye doctor (ophthalmologist) after a great deal of consideration and consultation with you, the patient, and, when necessary, with other eye doctors.

Structure of the eye

Your eyeball is protected by a bony 'socket', and, of course, by the eyelids when they are closed. A transparent membrane called the 'conjunctiva' covers the front of the eye and the inside of the lid. Underneath this are the eye muscles, which are attached to the outer surface of the eyeball and move the eyeball as needed. The lens at the front of the eyeball focuses the image on to the light-sensitive part of the back of the eye called the retina. The optical images from this are transmitted to the brain by the optical nerve.



Anatomy of the normal eye

Some technical terms

'Enucleation' means surgical removal of the eye only: the eyelids, lashes, brow and surrounding skin are all left intact.

'Evisceration' means complete removal of the contents of the eye, leaving the white part of the eye (the scleral sack) which has the eye muscles still attached.

A 'phthisical eye' is a damaged eye that has become shrunken.

A 'prosthesis' is an artificial body part used to replace one that is absent, perhaps because it has been surgically removed. Your prosthesis will be a conformer shell, a temporary artificial eye or a definitive artificial eye.

The eye removal operation

You will usually be admitted to a ward the day before the operation. This is to undergo tests to check your health because the operation involves having a general anaesthetic.

Before the operation your eye doctor will ask you to sign a surgery consent form. A mark will be placed on your forehead to indicate the eye to be removed.

You will be asleep during the operation, which takes about one hour.

After the removal of the eye, an 'implant' is inserted into

the socket. This partly fills the socket and means that a smaller lighter prosthesis (artificial eye) can be used.

This implant may be made from plastic but is more often made from a porous material such as 'hydroxyapatite' which allows the eye tissue to grow into it. This type of implant is said to be 'bio-compatible'; it will be more easily accepted by the eye socket tissues and may enable freer movement of the artificial eye.

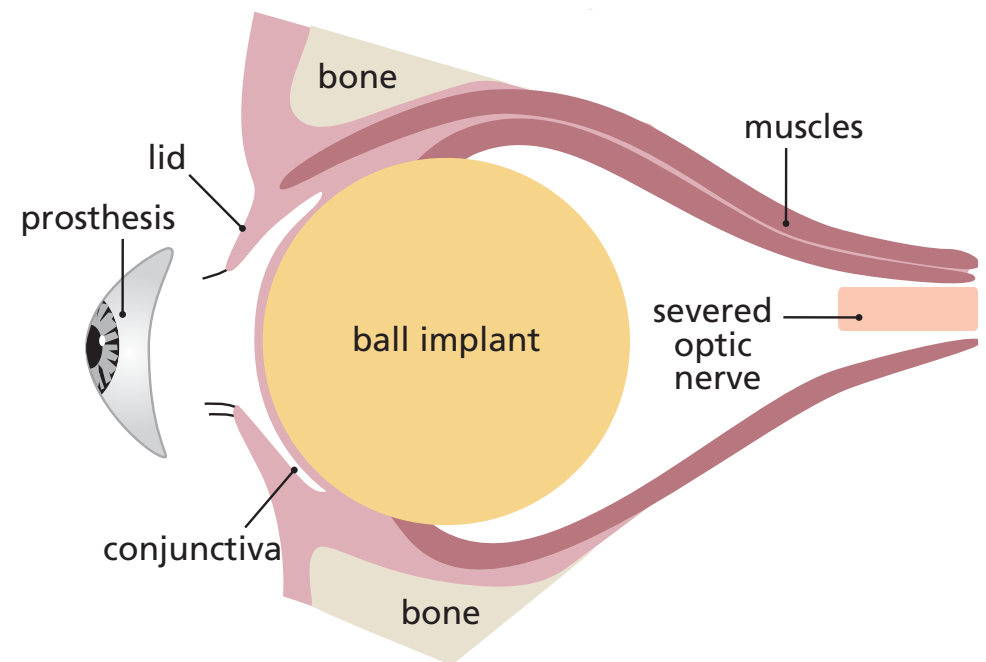


Diagram of implant in socket and showing prosthesis before insertion

Conformer shell

For the first few weeks following your operation you will be wearing a 'conformer shell', made of clear acrylic resin, in the empty socket. The shell will maintain the shape the eye socket and will offer a smooth curved surface over which the eyelids blink. It will have a small hole to allow drainage. The shell may be marked with a letter to indicate its size.

Pressure pad

For 12-48 hours after your operation, your empty socket will be covered with a pressure pad and dressing. The pad will reduce the swelling of the tissues in the socket.

During this time you may find it hard to open the lids of the unoperated eye. This can be frightening and unpleasant, as you may not be able to see at all, but it only lasts while the pad is in place.

As the anaesthetic wears off, you may feel some pain or have some sickness. This can be relieved with medicine - please ask your nurse if you need any tablets. Normal activities can be resumed as soon as you feel fit.

When the pad is removed, the nurse will clean your lids and examine the socket with a torch. Your eye doctor will also examine you and prescribe drops or ointment.

As the eyelids may be swollen and bruised for a few days, you may be offered dark glasses until the swelling reduces.

Aftercare: how to look after your eye

IMPORTANT: Always wash your hands before touching the eye area and try not to touch the socket!

To clean the eye lids, wash off any mucus with water that has been boiled and cooled. See your eye doctor if mucus becomes excessive or discoloured.

You can wash the rest of your face normally.

To clean the shell, remove it by the method explained below. Wash it with soapy water and rinse well. Then replace it, as explained below.

If the shell falls out, wash and replace it. This rarely happens, however.

Eye drops

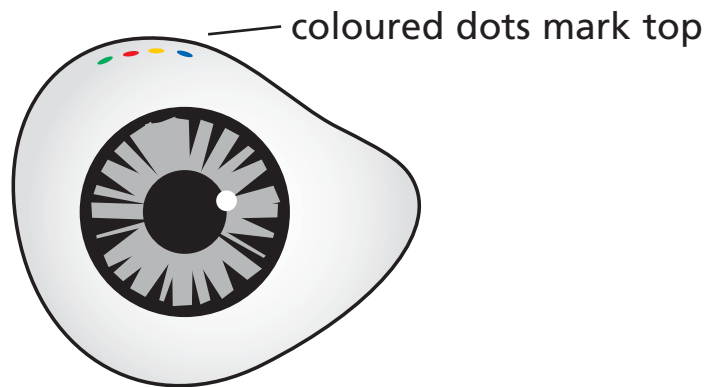
To prevent infection, you will have to put in eye drops for the first few weeks. You do not need to remove any prosthesis to put in drops or ointment.

Temporary artificial eye

When the socket is completely healed (usually after a few weeks), your eye doctor will refer you to the ocularist. The ocularist will measure your socket and replace the shell with a temporary artificial eye. This will be taken from stock and will approximately match your other (companion) eye.

Definitive artificial eye

The ocularist will decide when to fit your final artificial eye. This will involve making a mould of your socket. It is a painless procedure that takes about two hours. This fitting will ensure that the shape, size and colour of the artificial eye match your other eye and that the artificial eye will have an adequate range of movement. The ocularist will manufacture your artificial eye and will then arrange an appointment to carry out any final adjustments and supply it to you.



Typical artificial eye

Inserting and removing the artificial eye

You will be shown how to insert and remove the prosthesis at your final fitting. These instructions are to remind you how to do this correctly.

Fitting the prosthesis

The instructions are the same for whichever type of prosthesis you have had fitted. They are usually marked or shaped to help you tell which way round the prosthesis should be fitted:

- Conformer shells are pear-shaped and are fitted with the narrow end pointing towards the nose.
- Temporary artificial eyes normally have a single black spot on the top edge
- Artificial eyes and cosmetic scleral lenses and shells normally have four coloured dots along the top edge.

First wash your hands!

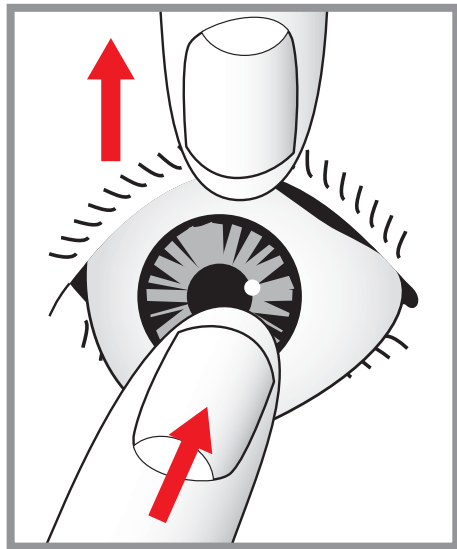
Wash your prosthesis with running warm water and liquid soap, washing up liquid or simple shampoo and rinse thoroughly.

Holding the prosthesis between the thumb and second finger of your right hand (or left hand if you are left-

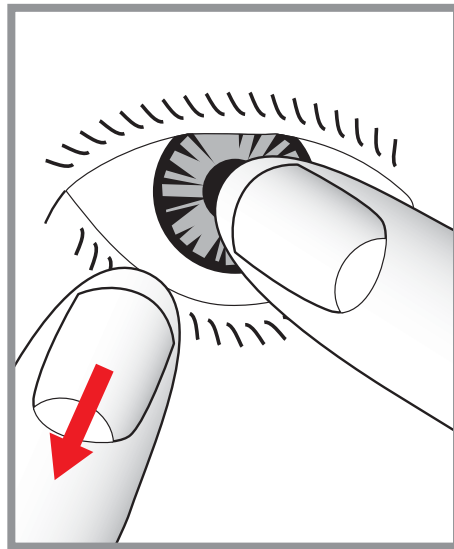
handed), rest your index finger on the centre of the prosthesis, making sure the dots are visible. Put the second finger of your other hand on the centre of the eyelash and lift the upper eyelid.

Look down and insert the dotted edge of the shell under the lid. When the prosthesis is half way in, let go of the lid, but still hold the prosthesis in position with the index finger of your right hand.

Look up and gently pull down your lower lid with the other hand until the prosthesis slips under its edge. The prosthesis is now in place. If it feels uncomfortable, look in a mirror and gently correct its position by stroking and rotating it.



look down

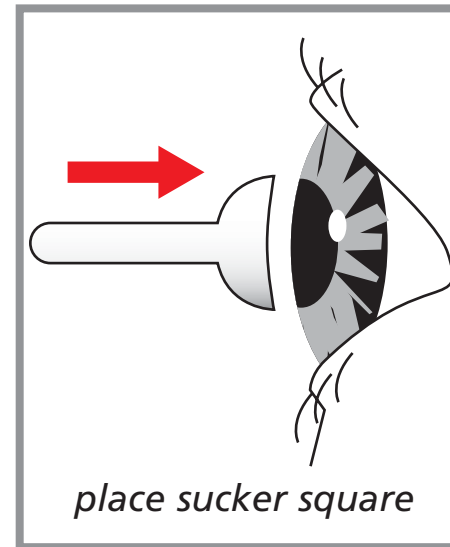


look up

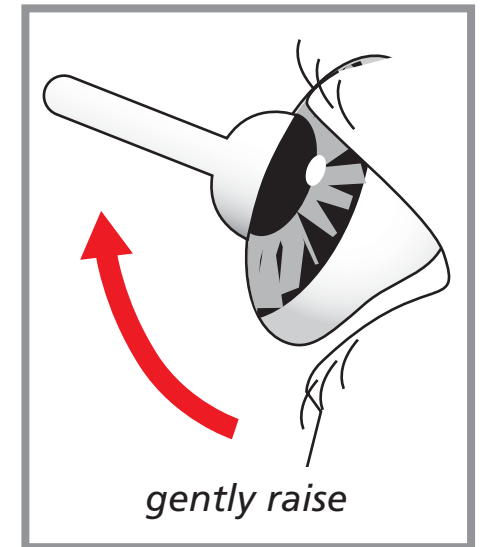
Removing the prosthesis

There are three main ways to remove your prosthesis, described below. Your ocularist will demonstrate the best way.

Using a PVC sucker device



place sucker square

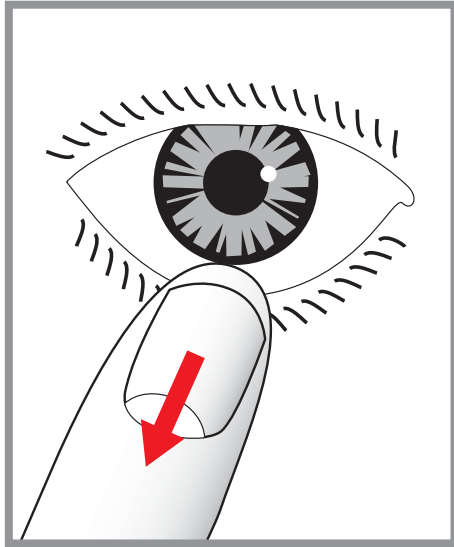


gently raise

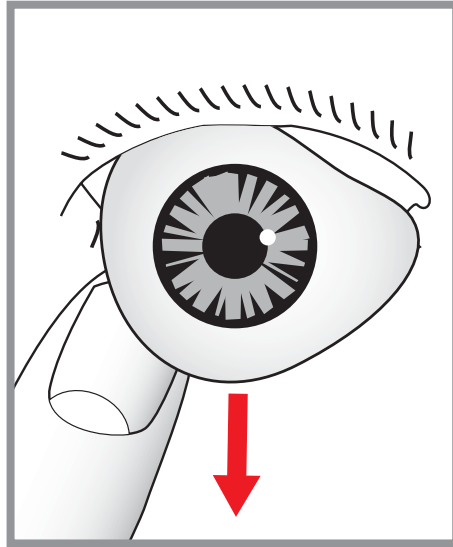
First wash your hands!

Remove the sucker from its container and wash and moisten the cup end. Gently push the cup end onto the centre of the prosthesis. Check that it has stuck to the surface. If it has not, moisten it again and ensure that the cup is placed squarely on the prosthesis. Gently raise the lower edge of the prosthesis from behind the lower lid, pull out the sucker and prosthesis, and separate them. Wash the prosthesis and sucker and put them in their correct container.

Removing an artificial eye.



look up



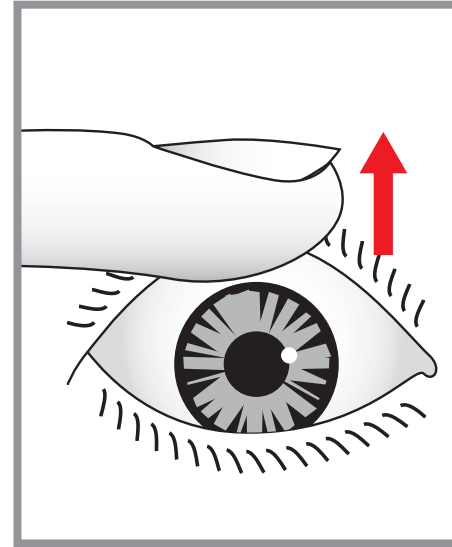
look down

First wash your hands!

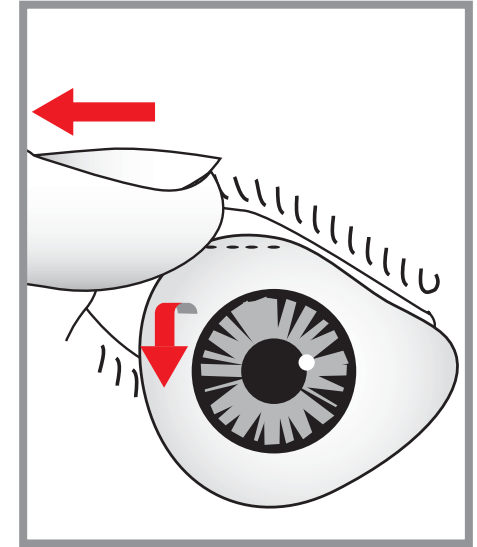
Do not look in a mirror. Look up. Gently push the lower lid down with your index finger until the lower ledge of the prosthesis emerges. Then look down. The prosthesis will slide down over your index finger - make sure you catch it with your spare hand.

Wash both your hands and the prosthesis, and either re-insert it or place in its container.

Removing a cosmetic scleral lens or cosmetic shell



push up



pull to ear

First wash your hands!

Gently place the side of your index finger along the upper eyelash. Do not look in a mirror. Look down. Push your upper lid up until it reaches the top edge of the shell. Now gently pull the eyelash towards your ear so it tightens. The shell will lift off the eye - make sure you catch it with your spare hand.

Wash both your hands and the prosthesis, and either re-insert it or dry it and replace it in its box.

General Questions

Can I have a spare artificial eye?

Spares are not supplied. It is very unusual for people to lose their artificial eye, but if you do, it would generally require further fitting work.

Can I sleep with the artificial eye in?

Yes you can. Your ocularist will encourage this.

Can I sleep with the cosmetic shell in?

No - if you wear a cosmetic shell over a damaged (phthisical) eye it must be removed at night to allow the eye to rest and recover. You will be advised by your ocularist.

Can I still wear eye make-up?

Yes, once the socket has healed.

Can I continue with my normal way of life?

Yes. You are advised to wear goggles if swimming. If you dive or water-ski you should remove the eye while undertaking these activities to avoid losing it in the water.

Should I wear glasses for protection?

You need to wear protective goggles only if you are doing anything like DIY that could cause injury to your remaining eye.

Can I continue to drive?

The law requires you to inform the Driver and Vehicle Licensing Authority (DVLA) and your insurance company of any change in health or eyesight likely to affect the safety of your driving. You must be able to read a number plate at 20.3 metres (25 yards) in good daylight and with glasses if you wear them. You must also have an adequate field of vision.

To drive when unable to meet these requirements is a criminal act and invalidates insurance. Inability to meet these standards requires you to notify the DVLA.

You must not start to drive again until you have had confirmation that your vision meets the standards.

A report may be requested from your eye doctor. The requirements are more stringent for professional drivers.

Drivers must remember that with only one eye the field of vision – the range of vision you have on each side of the object on which your eye is fixed – is more restricted.

Compensate by turning your head to check more frequently.

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.

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Two centuries of vision