

PATIENT INFORMATION

Pteryguim and Pterygium Surgery

WHAT IS A PTERYGIUM?

A pterygium is scar tissue of the conjunctiva (skin lining the surface of the eyeball). It grows over the front of the cornea (the clear window at the front of the eye). A pterygium usually grows very slowly, over many years. It is more common in people who have been exposed to a lot of sunlight during their lifetime.

A pterygium may cause one or more of the following:

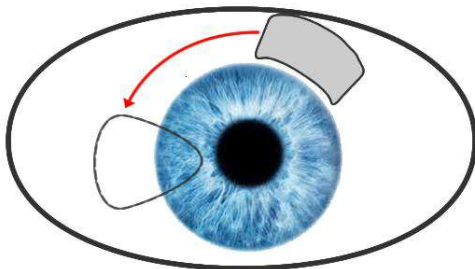
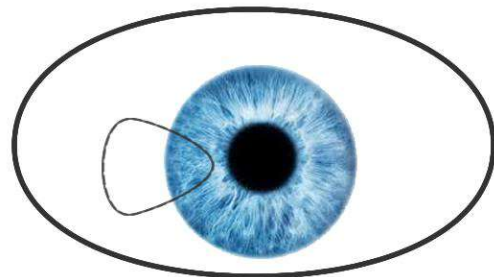
- No symptoms at all
- Discomfort in the eye, such as a dry or gritty sensation. This is usually relieved by using regular lubricating eye drops.
- Change in the shape of the cornea known as astigmatism. This may be a reason to consider surgery for a pterygium before having cataract surgery, even if it has been there for a long time and not caused any problems before.
- Dissatisfaction with the cosmetic appearance of the eye. Surgery is not recommended for this reason because of the potential for complications
- In severe cases a pterygium can grow over the central part of the cornea causing blurred vision. If your pterygium is growing towards the centre of your cornea we recommend surgery before it affects the vision.

PTERYGIUM SURGERY

- Pterygium surgery is usually performed under local anaesthetic (whilst you are awake). Drops will be used to numb your eye, and a small amount of local anaesthetic injected under the conjunctiva (surface 'skin' of the eye). You will be able to move your eye to assist the surgeon during the procedure, and the eye should feel completely comfortable.
- Sometimes people feel they will not cope well with being awake for the surgery and choose to have a general anaesthetic (when you are asleep).
- Please let us know ***in advance*** if you want a general anaesthetic so that this can be arranged for you.
- A routine pterygium operation would be expected to last about 45 minutes. You will be able to go home on the day of your operation.

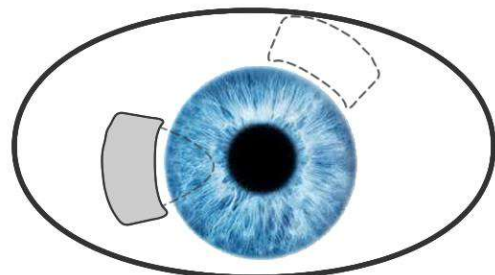
ROUTINE PTERYGIUM SURGERY

1. The pterygium is removed from the outer layers of the eye, leaving a bare surface.



2. A graft of normal conjunctiva is then taken from the surface of the eye. The donor site usually heals over several days without problems.

3. The conjunctival graft is glued into position to cover the bare area on the sclera (white of your eyeball). The bare corneal surface usually heals within 24- 48 hours.



Tisseel Glue

Tisseel glue is used during the surgery to position the conjunctival graft.

This makes the operation faster and more comfortable. Research suggests that it reduces the chance of a recurrence of the pterygium compared to stitching it in place.

The glue is made from human plasma (blood). It therefore may carry a risk transmitting infections such as viruses, or prion disease (CJD). However, Baxter Healthcare, the manufacturer, says that they are not aware of any reports of transmission in over 17 million applications of the glue.

If you have any concerns about the use of Tisseel glue please tell us **before** the day of your surgery.

Surgery for recurrent pterygium

A recurrent pterygium may require additional surgical techniques, which could include the use of other transplantation materials such as amniotic membrane or sclera, and may also require the use of anti-scarring drugs on the eye such as mitomycin C, or 5-fluorouracil try to prevent another recurrence. The risks of surgery for a recurrent pterygium tend to be higher and success rates lower. This will be discussed with you by your surgeon.

BENEFITS OF SURGERY

The main reason for removing a pterygium is to prevent future loss of eyesight by stopping the pterygium from growing over the central area of the cornea. Other symptoms such as redness or discomfort are not as easily treated by surgery and are best treated by using lubricant eye drops where possible.

RISKS OF SURGERY

As with every operation, pterygium surgery has risks and success cannot be guaranteed. All serious complications are rare.

POSSIBLE COMPLICATIONS DURING THE OPERATION

One of the eye muscles lies partly underneath the operation site. It is possible, though unlikely, that this muscle could be damaged during the operation, causing double vision and requiring further surgery.

The risk is higher during surgery for recurrent pterygium, when there is much more scarring.

Very rarely, the internal structures of the eye could be damaged, causing loss of eyesight. This is more of a concern when operating on an eye that has already had surgery or where the eye has been damaged by previous injury or other eye diseases.

POSSIBLE COMPLICATIONS AFTER THE OPERATION

Pain or discomfort

Some pain is very common in the first 24 to 48 hours after surgery. This is because the corneal surface previously covered by the pterygium is left bare (see surgical diagram) and takes 24 to 48 hours to heal. You may take simple painkillers such as paracetamol, and use the drops given to you after the surgery.

You will need to use steroid eye drops to control the inflammation caused by surgery. This may take several weeks or sometimes months to settle fully, and the eye may still appear slightly red and feel dry or gritty. Steroid eye drops can cause the pressure in your eye to go up and should not be used unsupervised. We will keep a check on this in clinic.

After corneal surgery the eye surface is often slightly bumpy, and the tear film tends to dry out on the surface of the bumps. If severe, the eye can be prone to infection or ulceration. Preservative-free lubricant eye drops (artificial tears) are recommended in the first few months after surgery and possibly long-term in some cases.

Poor eyesight

After the operation the corneal surface previously covered by the pterygium is often slightly irregular and scarred. This means that in cases where the pterygium has grown over the central cornea the vision may remain poor, even when the pterygium has been removed. This is why surgery is recommended before this stage where possible.

Recurrence of the pterygium

The chance of a pterygium recurring in the first year after the first operation is approximately 1 in 20 or less (5%). It is very important to use the eye drops given to you to keep the inflammation of surgery controlled and avoid excessive scarring, report any worsening redness or inflammation, and attend your follow-up appointments. Recurrent pterygium can be more difficult to treat, but early treatment may avoid the need for further surgery.

Corneal ulceration or infection

Severe problems such as corneal ulceration or infection are rare but may require intensive treatment and can lead to scarring that may affect your vision or, very rarely, perforation of the eye. If the ulceration is severe a corneal transplant may be needed, sometimes as an emergency.

Further surgery

Further surgery is unlikely, but patients who require further surgery, including surgery for recurrent pterygium may also have complications arising from the additional surgery or treatments required. This could include corneal or scleral thinning or ulceration, perforation of the eye, cataract, glaucoma, poor eyesight or complete loss of eyesight in the operated eye, loss of the operated eye or inflammation in the other eye (extremely rare).

DO NOT RUB THE EYE because it may disrupt or dislodge the graft tissue. Further surgery may be needed to reposition the graft, and the risk of recurrence may be increased.

Cosmetic appearance

The cosmetic appearance following surgery is usually good but close inspection may show differences in the normal patterns of the red blood vessels. Removal of the pterygium usually leaves a faint whitish scar on the cornea that may be visible.

THE DAY OF YOUR OPERATION

If you cannot keep the date made, or have any unexpected eye or general health problems in the week before your operation, please inform us ***immediately***. DO NOT WAIT UNTIL THE DAY OF YOUR OPERATION, because it may have to be cancelled due to the problem. With enough notice we can rearrange your surgery for another day.

AFTER YOUR OPERATION

We will ask you to remove the eye pad yourself the morning after your surgery and start using the eye drops you will be given.

We usually wish to check your eye one week after surgery, and you will have regular follow-up appointments in the months after.

IMPORTANT ADVICE

Although the eye can be painful initially, the pain and discomfort should rapidly improve in the first 24 to 48 hours after surgery. After the first 48 hours there is usually some mild remaining discomfort, which then improves slowly thereafter. The eyesight in the operated eye is often blurry initially but it improves steadily as the eye surface heals. If at any stage the eye discomfort or redness increases, or if the eyesight starts to become worse, please contact us.

Eye-drops and ointment

Make sure you know which eye drops or ointments you should be taking, which will be explained to you before you go home. Please bring the drops with you to every appointment so the doctor can discuss the treatment with you.

If you are using any eye treatment pre-operatively in the eye to be operated on, please check with your eye specialist whether it will need to be continued post-operatively. Drops for glaucoma should not be stopped.

You should continue to use any other regular medication (including any treatment to the other eye) as usual.

In the first week the eye treatment usually consists of an antibiotic drop (chloramphenicol) four times daily, a steroid eye drop (dexamethasone or prednisolone) four times a day, and a lubricant to be used frequently in between. This means that you will be using eye drops at least every 2 hours in the first week. The steroid drops are usually continued for 1 – 2 months, and the lubricating drops are continued as long as needed whilst the discomfort or dryness settles, often for several months.

If you run out of eye drops do not wait until your next appointment. Please obtain a repeat prescription from your GP.

Hygiene

Your eye surface is vulnerable to infection until it has healed fully. You must take every precaution to keep the eye clean. Do not do any activities that may introduce dirt or dirty water into the eye. Wash your hands before touching the eye. Do not swim until you have been cleared to do so. Keep the nozzles of your eye-drop bottles or ointment tubes clean by avoiding contact with the eye or fingers.

Driving and safety

Avoid driving for at least 48 hours. If you still meet the legal requirements for driving, which includes being able to read a number plate at 20 metres, you can drive after 48 hours. Do not drive if you have double vision or if the eyes are uncomfortable or watering.

Please do not take part in any activities that carry an extra risk of eye injury (such as contact sports) for a month. Avoid working with any chemicals that may irritate the eye until the eye surface has healed fully.

As always, wear eye protection for activities such as grinding, hammering or chiselling.

Eye slightly 'sticky'

It is usual for the lids to be sticky after the operation; the stickiness should improve in the first two weeks. Use a clean cotton wool pad and cooled boiled water to clean your eyelids. Wipe gently from the nose outwards then discard the cotton pad and repeat as necessary. Use separate cotton pad for each eye. Do not attempt to clean inside the lids.

USEFUL PHONE NUMBERS

Eye Surgery Unit	(Mon to Fri 08.30 – 17.00)	01803 655177
Eye Clinic	(Mon to Fri 08.30 – 17.00)	01803 655088
Hospital switchboard	24 hours	01803 614567

For further assistance or to receive this information in a different format, please contact the department which created this leaflet.