

PATIENT INFORMATION

Pterygium and Pterygium Surgery

Introduction

This booklet is to give you information about pterygium and to help you make a decision about surgery, if needed.

Some of the words used may seem confusing and scientific. At the end of this booklet you will find a list of explanations of commonly used medical words and phrases.

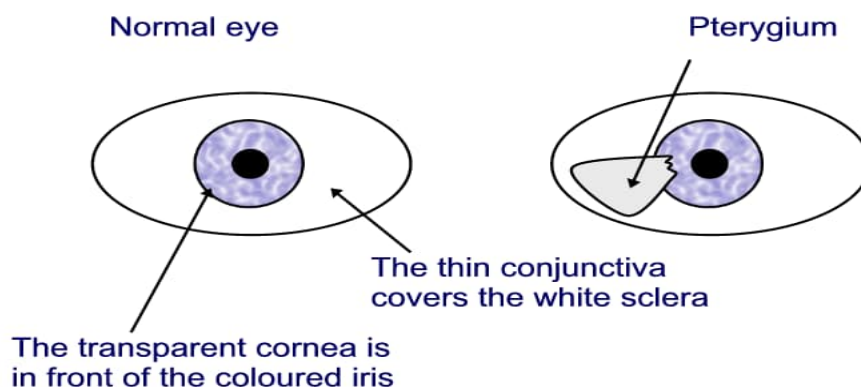
Please ask if there are any issues that concern you.

If you think that there is anything that this booklet does not explain well enough, please tell us.

1. PTERYGIUM AND PTERYGIUM SURGERY

WHAT IS A PTERYGIUM?

A pterygium is scar tissue on the surface of the white part of the eye that 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:

- Dissatisfaction with the cosmetic appearance of the eye
- Redness of the eye.
- Discomfort in the eye, which is usually a dry or gritty sensation, caused by drying of the normal tear film on the surface of the pterygium or adjacent to it.
- In extreme cases a pterygium can grow over the central part of the cornea and can cause blurred vision or the scarring may restrict the movement of the eye, causing double vision.

PTERYGIUM SURGERY

Pterygium surgery can be performed under local anaesthesia (awake) or general anaesthesia (asleep). The choice is based on the anticipated length and difficulty of the operation, your suitability for different sorts of anaesthesia, your own preferences and your surgeon's advice.

A routine pterygium operation would be expected to last about 45 minutes and can usually be performed comfortably under local anaesthetic.

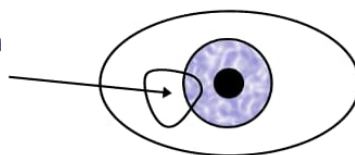
Under local anaesthetic, the anaesthetic is put into the soft fatty tissue around the eyeball. It not only anaesthetises the eye but also reduces what you can see and stops the eye moving around.

Conversely, a recurrent pterygium (that has re-grown after a previous operation) usually needs more extensive surgery and a general anaesthetic is recommended.

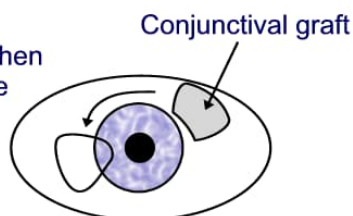
You will usually be able to go home on the day of your operation, but you may be asked to return for an eye check on the following day.

Routine pterygium surgery

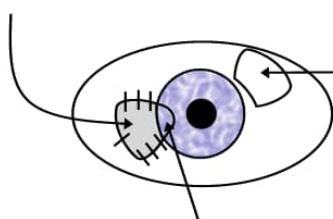
The pterygium is removed from the outer layers of the eye, leaving a bare surface



A graft of normal conjunctiva is then taken from the surface of the eye



The conjunctival graft is stitched into position to cover the bare area of the sclera



The bare corneal surface usually heals in 24 to 48 hours

Tisseel Glue

Tisseel glue can be used as a means of avoiding or reducing the number of stitches. This makes the operation faster and research suggests that it may also reduce the chance of a recurrence of the pterygium.

The use of the glue could carry a risk of a rare but serious condition called Creutzfeldt-Jakob Disease (vCJD). However Baxter Healthcare, the manufacturer, says that they are not aware of any reports of vCJD transmission in over 17 million applications of the glue.

If you would like the glue to be used in order to shorten the operation and reduce the number of stitches you will need to tell us in advance by returning the form at the end of the booklet.

Please note that we cannot guarantee that the glue will be used and sometimes stitches are still necessary.

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 drugs on the eye such as mitomycin C, 5-fluorouracil or may require radiation treatment to try to prevent another recurrence. The choice of techniques depends on the details of each individual case. However, in general the risks of surgery for a recurrent pterygium tend to be higher and success rates lower.

2. CONSENTING TO YOUR OPERATION

If you have decided that you wish to go ahead with surgery you will be asked to sign a consent form. You should only sign the form if you are satisfied with the explanations about the operation and you understand the anticipated benefits and risks.

BENEFITS

Chapter 1 described what the operation involves.

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, where the possible by more simple methods, such as the use of lubricant eye drops.

RISKS

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

COMPLICATIONS DURING THE OPERATION

Because the operation only involves the outer layers of the eye, pterygium surgery is relatively safe compared to many types of eye surgery.

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.

This particular complication is more of a concern when removing a pterygium that has re-grown after a previous operation, when there is much more scarring and the muscle may be difficult to identify.

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 by other eye diseases.

COMPLICATIONS AND SIDE-EFFECTS 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. If there are no medical reasons to the contrary, you may take simple painkillers such as paracetamol. The frequent use of eye lubricants may also help. Dissolving stitches may cause a gritty sensation for several weeks. The inflammation caused by surgery may take several weeks or sometimes months to settle fully, in which case the eye may still appear slightly red and the eye may feel mildly dry or gritty.

After corneal surgery the eye surface is often slightly bumpy. The tear film, which keeps the eye moist, tends to dry out on the surface of the bumps. If the drying is severe, the eye can be prone to infection or ulceration. Lubricant eye drops are often needed in the first few months after surgery and possibly long-term in some cases.

Cosmetic appearance

The cosmetic appearance following surgery is usually very good although not absolutely perfect. Very close inspection may show differences in the normal patterns of the red blood vessels between the eyes. Removal of the pterygium usually leaves a faint scar on the cornea that may be visible.

Poor eyesight

After the operation the corneal surface previously covered by the pterygium is often slightly bumpy and also 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.

Recurrence of the pterygium

The chance of a pterygium recurring in the first year after the first operation is approximately 1:20 or less.

Corneal ulceration or infection

Severe problems such as corneal ulceration or infection are rare but may require intensive treatment such as antibiotics and can lead to scarring and opacity of the cornea 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. These complications 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).

3. YOUR PRE-ASSESSMENT APPOINTMENT

Before your surgery is performed you will be asked to visit the pre-assessment clinic.

Please follow the appointment letter instructions carefully.

If you are unable to keep the date you have arranged with us, please let us know with as much notice as possible so another patient can use the appointment and yours can be rearranged. Our phone number can be found at the back of this booklet.

Your appointment may last up to two hours. During this time you will see a number of people including an ophthalmic nurse.

You will be asked questions about your eyesight, medical history and the drugs you are taking. We also need to know if you have any drug allergies. You will be asked about your personal circumstances to ensure that it is safe for you to have day case surgery, and ensure that you or somebody else will be able to put your drops in.

Please bring with you the following:

- The drugs which you currently take
- The completed medical questionnaire inserted in the centre of this booklet
- An up-to date sight test from your optician
- Your most recent spectacles for distance and reading (or bifocals/varifocals)
- This booklet

We may measure your weight and blood pressure and may also check your eyes.

Some patients need to take antibiotics as eye drops or ointment, before the operation. These will be given to you at this visit. The drops should be stored in the fridge until needed and any other treatment kept safe until the time of your operation.

We cannot give a guarantee that a particular surgeon will perform the operation. The surgeon will, however, have appropriate experience. Sometimes your surgeon will be assisted by a trainee who will do part or all of your operation under supervision.

You may, of course, ask questions during any stage of this visit. Please make sure that you have checked the following with us:

- Is any special treatment needed in the week before the operation?
- Will you be operated on as a day-case or will you be staying in hospital overnight?
- Do you have all the information that you need as regards admission to the hospital (if needed)?
- Do you have all the information that you need as regards the anaesthetic that will be used (e.g. when not to eat or drink)?

4. THE DAY OF YOUR OPERATION

DATE AGREED.....

If you cannot keep the date made please phone us immediately.

If you 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.

If we are given sufficient notice of a problem or a likely cancellation, it may be possible to give the operating time to someone else.

We will have given you information about the date of your operation and instructions about where to go and at what time. Please read the appointment information carefully. You must ensure you have transport arranged to bring you to the hospital and take you home again. The hospital car service is available if you have a specific medical need

If you are having day-case surgery you will be with us for part of the day only. When you arrive we will be able to advise any companion who has accompanied you of the time you are likely to be ready to go home. If you have to stay overnight, you will go to a bed on one of the wards after your operation.

- Please wear comfortable clean shoes and clothes that button down the front.
- You may eat and drink on this day unless you have been told not to.
- Take your normal tablets, inhalers and eye drops unless you have been told not to.

The nurse may put eye drops into your eye to prepare you for surgery.

The anaesthetist or surgeon will ask you some questions about your health and discuss the anaesthetic procedure.

We will then take you through to the anaesthetic room in the operating theatre suite. Here you will meet the theatre staff.

AFTER YOUR OPERATION

We may ask you to remove the eye pad yourself. Otherwise it should stay in place until you see us the following day. It is common to feel slightly unsteady on your feet at first while you get used to the eye pad so please take care when moving around.

We usually wish to check your eye 1 to 2 days after surgery and then again at 1 week after surgery.

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 24 to 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. Please either remember the names, or if you cannot remember the names, write them down or bring the drops with you to every appointment. This is 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.

In the first week, the eye treatment usually consists of an antibiotic such as chloramphenicol (drops or ointment) 4 times daily and an eye lubricant such as lacrilube or celluvisc to be used frequently, at least 4 times daily, in between the times when you use the antibiotic. This means that you will be using eye drops or ointment at least every 2 hours in the first week.

In the second week, provided that the eye surface is healing well, anti-inflammatory drops will be started and these will need to be continued, with the lubricants for at least 3 months, unless directed otherwise. The antibiotics are usually stopped 2 weeks after the operation.

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

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

Hygiene

Remember that your eye surface is vulnerable to infection until it has healed fully. This means that you must take every precaution to keep the eye clean. Grittiness or discomfort in bright light suggests that the eye has not fully healed. 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

Take care to avoid accidental injuries. This advice applies particularly to driving or doing any other dangerous activity such as operating machinery.

Avoid driving for at least 48 hours. If you still meet the legal requirements for driving, which include the eyesight requirements for driving and if your insurers are informed and are providing insurance cover, you can drive after 48 hours. Do not drive if you have double vision or if the eyes are uncomfortable or watering.

Other activities

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

If you are uncertain whether you can continue one of your normal activities please ask us.

Work

It is difficult to say exactly how much time you will need to take off work. This depends on individual eyes and individual jobs. Allow at least one week if you have a desk job. If you do a job that involves working in a dry, dusty or dirty environment you may need to take longer off work.

If you do a job where there is a safety risk to yourself or others please discuss with your employer and with your eye doctor.

Holidays

Remember to inform your insurers about any recent eye treatment and remember that insurance policies may not cover pre-existing eye problems or recent surgery.

Eye slightly 'sticky'

It is usual for the lids to be sticky after the operation; however the stickiness should improve in the first 2 weeks after the operation. Use a clean piece of cotton wool and cooled previously boiled water to clean your eyelids. Wipe gently from the nose outwards then discard the cotton wool and repeat as necessary. Use separate cotton wool for each eye. Do not attempt to clean inside the lids.

We hope you have found this booklet informative and useful and that it helps to make your experience of surgery as relaxed as possible.

We regularly update the information and if there is anything we have omitted or could have done better please let us know.

COMMONLY USED WORDS AND PHRASES

Cornea: The clear window at the front of the eye.

Conjunctiva: The thin semi-transparent tissue (membrane) that lines the inner surfaces of the eyelids and the outer surface of the sclera.

Sclera: The tough opaque white outer coat that together with the clear cornea makes up the eyeball.

CJD: Creutzfeldt-Jakob disease (CJD) is a rare neurological illness which is that is incurable and fatal. Most people had not heard of CJD before 1996, when it became the subject of media attention following discovery of a new form, now called variant CJD (vCJD). This is believed to come from meat from cattle infected with BSE (bovine spongiform encephalopathy / "mad cow disease").

Notes

PTERYGIUM SURGERY REQUEST

Name:

Date of birth:

I have read the information on pterygium surgery and would like to be placed on the waiting list.

Preferred anaesthetic:

Local (awake)	General (asleep)
---------------	------------------

I have read the information on Tisseel Glue

Please order Tisseel Glue

Yes	No
-----	----

Signed _____ Date _____

Tear out - Medical Questionnaire

Please complete this and bring to your first appointment

DO YOU OR HAVE YOU SUFFERED FROM	YES	NO
<u>Urinary tract infections?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Excessive bruising or bleeding?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Skin ulcers or infections?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Diabetes?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Chest pain on exercise or at night?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Asthma or bronchitis?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>High blood pressure?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Heart attack or angina?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Fainting easily?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Convulsions or fits?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Jaundice?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Arthritis?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Mobility problems?</u>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Claustrophobia ?</u>	<input type="checkbox"/>	<input type="checkbox"/>

What other serious illnesses have you suffered?

Can you lie flat with one pillow for 30 minutes?

What drugs are you taking?

What allergies do you have?

Thank you for completing this Form. Please remember to bring it to your appointment.

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