

## Eye Care Centre

### Pterygium Removal Surgery

#### Important information for patients

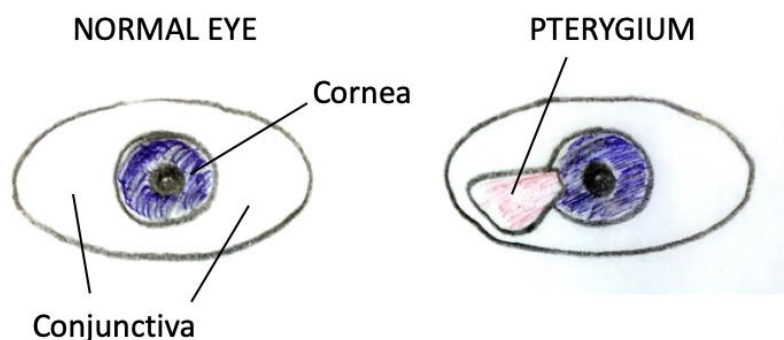
This information leaflet has been given to you to help answer some of the questions you may have about pterygium surgery. It aims to explain the risks and benefits of the procedure, what to expect during the procedure and the instructions to follow after surgery. Should you have any more questions, please do not hesitate to ask.

#### Anatomy

The conjunctiva and the cornea are the two structures involved. The conjunctiva is the loose and relatively mobile transparent tissue overlying the sclera (the white part of the eye). It is essential for a healthy eye and plays a role in the production of the tear film. The cornea is the transparent window to the eye. It is clear to allow light to enter the eye and it also helps to focus the light for vision.

#### What is a pterygium?

The formation of a pterygium is a relatively frequent condition. It is a benign growth of conjunctival tissue. It is more common in males and usually arises in the nasal (close to the nose) area where the cornea meets the conjunctiva. It is attached to underlying tissues for the whole length of the affected area and may either stop growing entirely or may grow very slowly across the cornea. It occurs in between 1-15% of people, this may vary depending on the geographical location.



### **What causes a pterygium?**

The main risk factors for pterygium formation are prolonged exposure to ultra-violet (UV) light and age. Hot, dry or windy environments may exacerbate the growth. It may be preceded by a related non-cancerous condition called a pinguecula, which is a yellowish patch or bump on the conjunctiva near the cornea.

### **What symptoms may be caused by a pterygium?**

Common eye symptoms include:

- Irritation
- Grittiness
- Itching
- Redness
- Watering
- Blurred or distorted vision

### **What are the complications associated with pterygium?**

- Astigmatism: The pterygium is attached to the underlying surface and can result in astigmatism - where the cornea becomes an abnormal shape. This can cause blurring.
- Visual field issues: The pterygium may grow over the pupil and into the line of vision, causing blurring.
- Cosmetic issues: The pterygium can cause a white area over the normally clear cornea which may be unsightly.

### **What are the signs that the pterygium is growing or inflamed?**

- Observed rapid growth
- Engorged (large and dilated) blood vessels
- Red, sore eye

### **How can it be treated?**

Treatment depends on the symptoms. For mild sore eyes and grittiness using eye drops (artificial tears) may be enough. For more severe cases then a short course of steroid drops may be suggested. Definitive treatment involves surgery to remove the pterygium.

## **When to operate?**

We suggest considering surgery if:

- There is a high level of eye irritation.
- It is causing problems with your vision.
- You are very unhappy with the appearance.

Whether or not you go ahead with surgery is a decision for each person to weigh up for themselves.

## **What happens if I do not get treatment?**

The pterygium may remain stable, or it may enlarge with time. There is no concern that it may spread elsewhere in the body.

## **What are the benefits of surgery?**

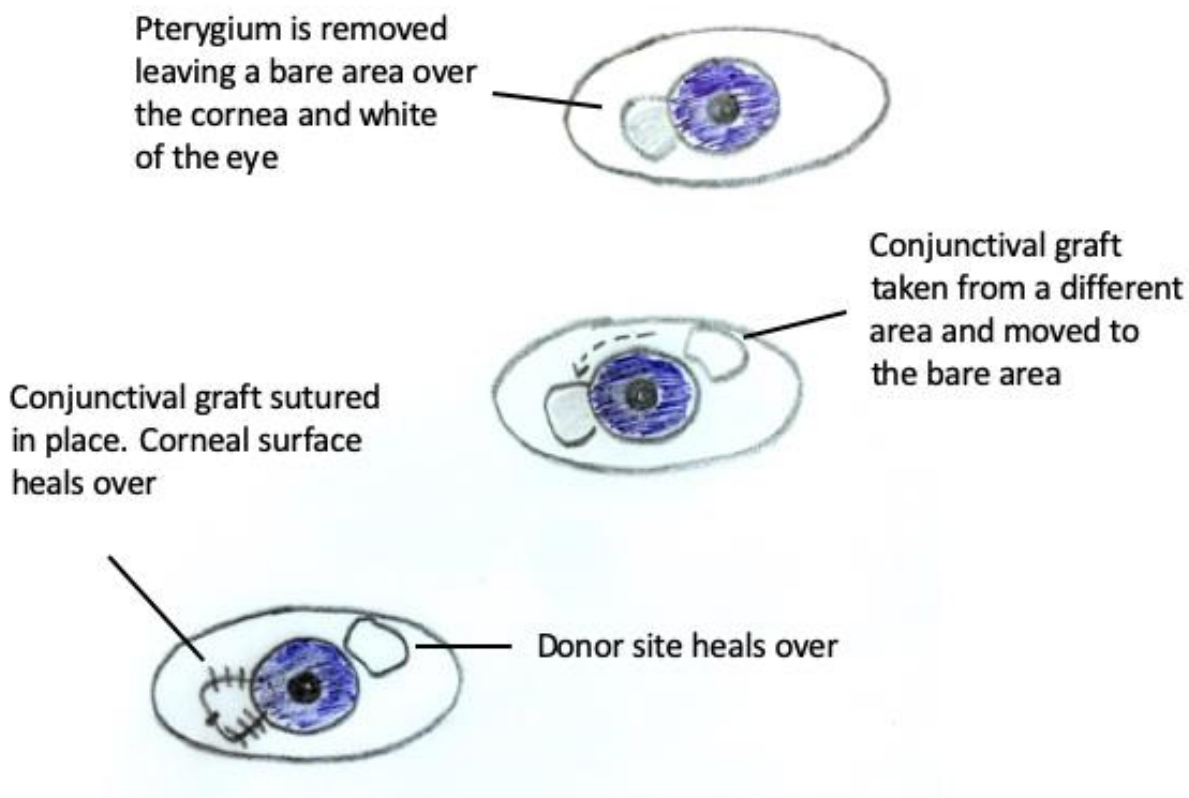
Removal of the lesion is intended to improve vision, reduce irritation and improve the appearance of the eye.

## **How is the operation performed?**

Surgery is usually performed with the patient awake, an injection of local anaesthetic is given around the eye. A general anaesthetic can be considered if necessary. The pterygium is surgically removed. In order to reduce the risk of the pterygium recurring a conjunctival autograft is performed. This involves taking a very thin layer of healthy conjunctiva (the lining of the eye) from an area away from the pterygium and placing this over the area previously occupied by the pterygium. The graft is attached with dissolvable sutures or a special glue.

Sometimes an amniotic membrane graft is used instead of a conjunctival graft (e.g. there is more than one pterygium over the pterygium or the pterygium is very large). Amniotic membranes are part of the placenta and are commonly used in eye surgery. Occasionally, the area of the pterygium is treated with a chemical called Mitomycin-C to help prevent the pterygium from re-growing.

The surgery usually takes around 45 minutes to one hour to perform.



### What are the risks of the operation?

Every operation carries some possible risk. Most pterygium surgery goes well with no serious problems. However, possible complications which can occur are outlined below.

- **Recurrence:** This is the main risk. It is more common if a conjunctival autograft or amniotic membrane graft is not performed. The surgery can be repeated if necessary.
- **Pain or discomfort:** Some pain is common in the first 24-48 hours because the corneal surface previously covered by the pterygium is left bare, taking time to heal. Regular headache medication can be used and the drops given out after the operation will help. There may be gritty sensation for a few weeks.
- **Bleeding:** This is not usually a problem and can be dealt with during the operation.
- **Inflammation:** This may occur with any eye operation. Steroid drops are provided after surgery to help reduce the inflammation.
- **Corneal ulceration or infection:** Sterile instruments are used during the procedure and antibiotics are given after the operation to help prevent this happening. Further treatment can be given if necessary.

- **Scarring:** A faint scar over the cornea may be left afterwards, but this is usually much less noticeable than the pterygium.
- **Double vision:** This is an unusual complication which can occur if one of the muscles around the eye is attached to the pterygium or affected by the surgery. Very rarely, further surgery may be needed to correct the double vision.
- **Others:** Other complications are rare but can involve thinning of the eye, perforation of the eye, poor vision, and the need for further surgery. An amniotic membrane graft carries a risk of infection being transmitted, but strict procedures are followed and the risk is very small.

### **How will I feel after the procedure?**

There is usually some discomfort initially, but this normally subsides after a few days. The eyesight in the operated eye is usually blurry initially but this improves as the surface heals. If at any stage the eyesight deteriorates, the discomfort increases, or if you have any concerns please contact the hospital (see end of leaflet for details).

### **When can I go home?**

If the procedure is done under local anaesthetic, you should be able to leave straight away. You will be given eye drops to take and a follow up appointment made for you. If you had a general anaesthetic, you will need to stay in hospital until you have fully recovered from the effects of the anaesthesia. This may take a few hours, during which your progress will be monitored.

### **What do I need to do once I get home?**

A pad will be covering your eye, which should remain in place until the following morning. After this you should take the eye drops as directed. If you wear contact lenses, please refrain from using them until advised by the eye specialist.

Look out for signs of infection, including redness and pain. If this occurs, please contact the hospital as below.

### **When can I resume my normal activities?**

Depending on what work you do we suggest you plan to be absent from work for around one week as the eye heals. Please ask if you would like to discuss this further.

Avoid rubbing the eye. Try to avoid getting tap water into the eye for one week. Avoid swimming for at least two weeks to avoid the risk of infection. Please refrain from any sports or activities that put your eye at risk for at least 1 month.

### **Contact telephone numbers**

In case of urgent problems telephone Leighton Hospital Switchboard on 01270 255141 and ask for the Emergency Ophthalmology Triage Nurse on call. Available Monday to Friday, 9.00am – 5.00pm (excluding Bank Holidays)

Out of these hours, telephone Leighton Hospital Switchboard and ask for the Ophthalmologist on call.

Secretary for Mr Hu (Consultant, Ophthalmologist):

Tel: 01270 612306

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This information is available in audio, Braille, large print and other languages. To request a copy, please ask a member of staff.

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