

## Complications

As with any surgical procedure, complications can occasionally happen, even though your ophthalmologist makes every attempt to minimise risks. Most of these are generally not serious. They include:

- excessive post operative pain, discomfort, watering and redness
- dislodgement of the graft, requiring resuturing
- prolonged redness and discomfort
- bleeding
- infection
- damage to muscles that move the eye
- damage to the inside of the eye
- recurrence.

## Recurrence

A pterygium may grow back after it has been removed. The recurrent growth is often more rapid than the growth of the initial pterygium, and each successive excision more difficult surgically. Recurrence following simple excision may be as high as 25%, but with modern conjunctival graft methods, is probably much lower than 1 in 10 cases. Recurrence is more likely if a person continues to be exposed to excessive levels of ultraviolet light or irritants.

## PINGUECULAE

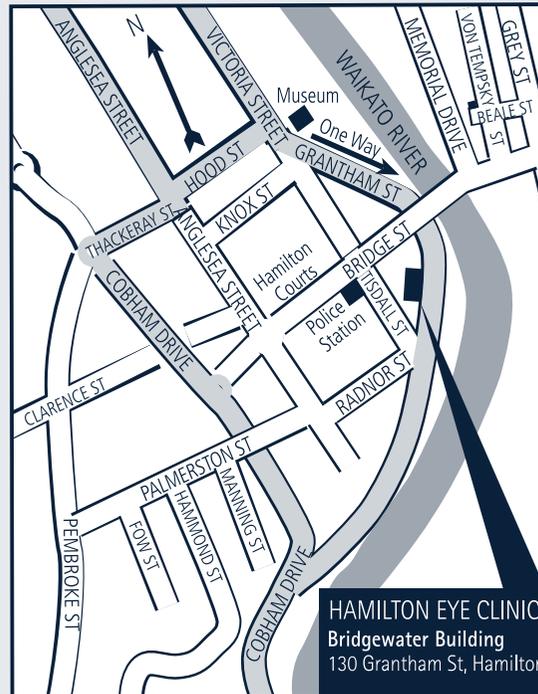
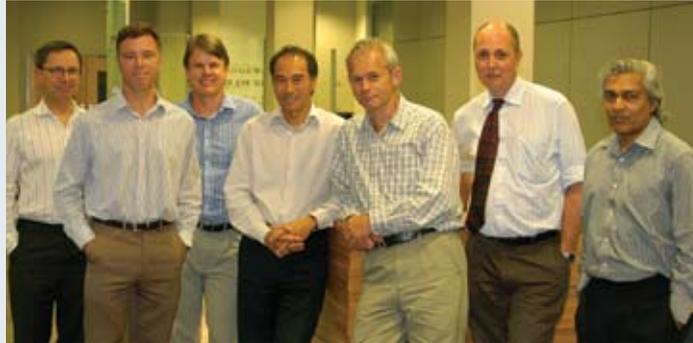


Pingueculae are often confused with pterygia. A pinguecula is a soft yellowish thickening of the conjunctiva adjacent to the cornea. It is similar to a pterygium, but does not grow onto the cornea. Although it

can be removed easily, this is rarely necessary.

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HEC 09/2010



BRIDGEWATER

HAMILTON EYE CLINIC



A guide to  
**Pterygium**

Waikato's Specialist Eye Centre  
and Eye Surgery Facility



## PTERYGIUM



A pterygium is a wing-shaped extension of thickened tissue on the surface (conjunctiva) of the white of the eye, which grows onto the adjacent cornea (the window into the eye). Pterygia are benign growths (not cancers), which can continue to grow across the eye and eventually seriously affect sight. The term is derived

from the Greek word “ptery-gion” meaning “little wing”.

It is a fairly common condition. It may occur in one or both eyes.

Pterygia generally start in susceptible young adults, and gradually increase in size over the years. In some people, growth may cease after a period, and particularly in the elderly, they may become inactive.

## Causes

The causes of pterygia are not clearly understood, but it is known that the ultraviolet rays present in sunlight, as well as chronic irritation due to dust etc, play a major part in their development and growth. They are more common in people between the ages of 20 and 50 years and more common in men. Those who have spent a great deal of time outdoors are particularly prone. Also, people who live in tropical climates, sports people such as sailors and skiers who are subject to a lot of reflected ultraviolet light, and populations living where there is ozone layer depletion have a higher incidence.

## Symptoms

Symptoms include recurrent redness, a feeling of irritation and watering, although some people may not have any symptoms. If the pterygium grows too far across the cornea, it may affect sight.

## Treatment

Protection from the elements (wind, dust, sea water, sunlight etc) is important; particularly the wearing of a hat and UV filtering sun-glasses when outdoors. This will reduce symptoms and prevent progression. It will also reduce the risk of recurrence following removal.

In addition, for small pterygia which do not seem to be growing and for which surgery is not necessary, lubricant drops and occasional decongestant drops that reduce the redness may be prescribed.

If the pterygium appears to be growing, removal is necessary before it gets to the point where it starts to affect vision. If it is left to grow too far across the cornea, residual scarring means that even after excision vision will not return to normal.

## Reasons for removal

- Threat to normal vision.
- Induced astigmatism – the pterygium may alter the curve of the cornea.
- Symptoms of irritation, redness and tearing that cannot be controlled using eye drops.
- Interference with the wearing of contact lenses.
- Cosmetic – some people may want to have the pterygium removed if it becomes unsightly.

## SURGICAL EXCISION

### Anaesthesia

Surgery is generally performed using “local” anaesthesia. This means the patient is awake during the procedure and drops and surface injections are used to numb the eye. In a minority of cases, where the patient is very apprehensive or claustrophobic, a general anaesthetic may be used. You should discuss this with your ophthalmologist.

### Methods

Simple excision involves removal, leaving the bare area on the white of the eye to heal by itself. In general, simple excision has a high recurrence rate – about 25% - and is not suitable except for the most inactive of pterygia.

Surgical excision, followed by application of beta-radiation to the affected area, or the use of eye drops that prevent re-growth, are other methods for dealing with pterygia, with the aim of preventing recurrence. They have now mostly been superseded by the use of a conjunctival “graft”.

### Modern surgery

Modern surgical treatment involves excision of the pterygium, and using a “graft” of adjacent conjunctiva from the same eye to cover the bare area left on the white of the eye. This has the advantage of forming a barrier between the cornea and the tissues towards the corner of the eye, which have the tendency to want to grow back over the cornea.

Following surgery the eye tends to be quite uncomfortable for a few days and does not settle completely for about a month. This is due to the surgery having been on the surface of the eye rather than within it (cataract surgery, by contrast, being fairly comfortable post operatively).