



CORNEAL GRAFTS

What are corneal grafts?

A corneal graft is also referred to as a corneal transplant or keratoplasty. This is an operation in which abnormal corneal tissue is replaced by healthy donor tissue. The graft may be partial thickness (lamellar) or full thickness (penetrating).



Who needs a corneal transplant?

Patients who have conditions which cause damage and scarring to the cornea, like:

- Trauma (both accidental and surgical) and chemical burns can scar the cornea
- Keratitis (infections of the cornea)
- Keratoconus. This is a bilateral disease of unknown cause resulting in an abnormal conical shape of the cornea.
- Corneal degenerations
- Bullous keratopathy, a condition in which the cornea becomes irreversibly swollen.

How is it treated?

Surgery

Surgery needs to take place within a week (sometimes a little longer) after a cornea becomes available. The operation is usually done under general anaesthesia. In the first few days after surgery, the eye will be light-sensitive and scratchy. The eye will become more comfortable as it starts healing.

Possible post-operative complications:

1. Rejection

Although the cornea is an ideal site for an organ transplant, graft rejection can occur. As there is no blood supply to the cornea, no blood group or tissue matching is required. Oral and intravenous medication used to prevent rejection with other kinds of transplants, are seldom required. However, eye drops will need to be used for a long time after surgery.

Most graft rejection takes place in the first year after transplantation and can usually be reversed

with medication, as long as treatment is started immediately. If the graft is rejected, a repeat graft can be carried out. However, it is best to wait for 2-3 years to allow the immune system to 'forget' and become less sensitive to the foreign tissue of the donor cornea. The opaque corneal graft that has been rejected remains in place during this time.

2. Astigmatism

For perfect sight, you need a perfectly round, spherical cornea. This is very difficult to achieve when suturing the graft onto the eye.

Astigmatism refers to an eye condition where the eye shape, usually the cornea, is not perfectly spherical. This can be corrected with glasses or contact lenses. Laser surgery or wound revision can also be done. A year after surgery, the sutures around the graft can be removed if necessary.

** It is important to contact your ophthalmologist immediately if you have any concerns or unexpected symptoms.

Where do the corneas come from?

The corneas may be sourced locally or come from overseas, usually the USA.

What about the risk of HIV and other infections?

All potential donors are screened for infectious diseases such as HIV, Hepatitis B, Hepatitis C and Syphilis.

Please note that these are general guidelines. If in doubt, consult your ophthalmologist.