

Patient Information Factsheet - Ophthalmology Department

Corneal Transplant (also known as a Corneal Graft)

What is a corneal graft?

The cornea is the curved window at the front of your eye that must be clear to enable us to see. It is in front of the iris (the coloured part of the eye) and the pupil (the black hole in the centre of the iris).

If the cornea is hazy, so that you can no longer see through it, a corneal graft may be appropriate.

The corneal graft is taken from the healthy eye of a person who has died, where permission has been given by the deceased prior to death or, more usually, by the family.

The Operation

Various types of operations are performed and this will depend on your condition and discussion with your surgeon.

The types of operation that may be performed are:

Penetrating Keratoplasty - This is also known as a full thickness graft. A full thickness circular portion is removed from the centre of your cornea. A similar circular portion is then taken from the centre of the donor cornea (this is the corneal graft). This is placed into the hole in your cornea and stitched into place using very fine stitches, usually 16 stitches. You will now have a new corneal graft replacing the central part of your cornea.

The Corneal Graft - Healthy donor tissue is stitched in place, unhealthy cornea is removed.

Deep Anterior Lamellar Keratoplasty - This is also known as a partial thickness graft. A partial thickness circular portion is removed from the centre of your cornea, leaving the inner two layers intact.

A similar circular portion is then taken from the centre of the donor cornea, removing the inner layer and it is placed into the hole in your cornea and stitched as in a penetrating keratoplasty.

Anterior Lamellar Therapeutic Keratoplasty - This is also known as a partial thickness graft. A partial thickness circular portion is cut from the centre of your cornea using a machine, leaving the inner half of your cornea intact. A similar circular portion is also cut from the donor cornea, removing the outer half of the cornea. This is placed on your remaining cornea and stitched using a triangular stitch. A bandage contact lens is then placed onto the eye temporarily (for a couple of days) to protect the eye.

What happens to the part of my cornea which is removed?

Most corneas are examined under a microscope for further information. Some tissue may be kept for research into corneal disease. Your consent will be obtained and all research will be approved.

Will I be asleep for the operation?

The operation can be done either with you asleep (general anaesthetic) or when your eye has been numbed by an injection (local anaesthetic) or under sedation. Your surgeon will discuss these options with you.

How long will I be in hospital?

You will be admitted for this procedure as a day case.

What will my eye feel like the day after surgery?

Your eye may feel irritable and uncomfortable but this should settle in five to seven days. Your eye may also water and you may be light sensitive for a few days. Significant pain is not common. If you experience severe pain you must contact the urgent eye clinic on the number shown below.

Will I need drops after the operation?

You will need to put eye drops in frequently for the first few weeks; later they are used less frequently but for many months. You will be given drops on your discharge from the hospital and given instructions on their use. You may need to get further supplies.

How often will I need to be seen in Outpatients after the operation?

Your first visit is usually within one week of leaving hospital. We then increase the period between visits, often to four weeks, then two months and so on. Again, this will depend on each individual. You can expect to be seen at least six times a year.

Is there anything I should avoid after the operation?

You should plan to take up to one month off work. Swimming should be avoided for one month and you should never do contact sports, for example, rugby, football and boxing. Otherwise, try to live life as normal as possible.

Can I catch any diseases from the transplant?

The medical history of the donor is checked to exclude the following conditions: Rabies, Creutzfeldt-Jakob disease (CJD) and diseases of the nervous system of unknown cause. Blood is taken from all donors to exclude Hepatitis B, Hepatitis C and the Aids virus. The cornea is very carefully examined to reduce the risk of infection with bacteria and fungi. As a result of these checks, the risk is very small.

However, because of this minimal risk, once you have had a corneal transplant you will not be able to be a blood or organ donor.

What are the risks of surgery?

As with any operation there are risks involved that can affect the outcome. These may include:

- Infection
- Graft rejection
- Glaucoma (raised pressure in the eye)
- Cataract formation
- Haemorrhage (bleeding) in the eye
- Damage to the iris (coloured part of the eye)
- Retinal detachment
- Graft failure leading to reoperation

These can all lead to loss of vision in the eye or blindness and will be discussed further with you by your surgeon.

How good will my vision be eventually?

This will depend on the particular features of your eye, but your vision may not be perfect in the operated eye. How much you depend on this eye will be influenced by how good the other eye is.

When will I notice an improvement in my vision?

Each person varies in their response to the operation. Some notice a big improvement early on, whereas in others, the vision may improve gradually over several months.

When will my stitches be removed?

Again, this varies from person to person, but generally stitches will not be removed until at least nine months after the operation. The stitches will usually not be removed all at once, but a few at a time until they are all removed.

Will I need glasses afterwards?

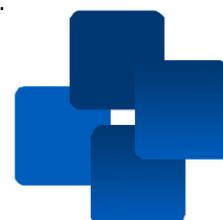
In some cases, it is possible to see quite clearly without glasses. However, most people usually require glasses or contact lenses. How long after your operation these are required depends on a number of things including when the stitches are removed.

What problems should I seek advice about?

Graft rejection is our main concern. This rejection results from your immune system recognising the graft as being 'foreign'. If you experience **Redness**, **Sensitivity to light**, **Disturbance of vision** or **Pain (RSVP)** you should contact the eye clinic on the number below.

If you experience any problems please call 01438 288122. Please use the menu option 2

You can request this information in a different format or another language.



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