

Corneal transplantation and donation

The cornea is the clear 'dome-like' window covering the front of the eye that allows the light to pass through to the retina, which enables us to see. To stay clear, the cornea must remain healthy. A corneal transplant is the transfer of corneal tissue from a donor to a recipient. Whole eye transplantation is not possible.

People who suffer from certain neurological (nervous system) conditions may not be eligible as donors.

Conditions that require a transplant

A person may need a corneal transplant when their cornea has deteriorated to the point where they can no longer see properly. Some diseases which can cause the cornea to deteriorate are:

- **Keratoconus** - in this condition, the central cornea thins and bulges forward. This prevents light from being focused correctly into the eye.
- **Bullous keratopathy** - this is a generic term for corneal swelling and blistering. The cornea becomes cloudy and gradually loses clarity. It is caused by damage to the cells responsible for keeping the cornea clear and healthy.
- **Fuch's dystrophy** - a condition which causes cells in the cornea to deteriorate.
- **Herpetic eye disease** - scarring of the cornea caused by the herpes virus.

A transplant may also be necessary when the cornea has been perforated, either due to an accident or as the result of disease like rheumatoid arthritis.

Success of corneal transplants

The survival rate after corneal transplants is:

- After one year - 91.2 per cent
- After four years - 80 per cent.

Some conditions (such as keratoconus) have even higher success rates - 98.1 per cent. These figures come from the Australian Corneal Graft Registry (one of the largest of its kind in the world).

Corneal donation

The only substitute for a human cornea is another human cornea. Corneal transplant surgery would not be possible without the thousands of generous donors and their families who have donated corneal tissue so that others may see.

When consent for donation is given, corneas must be surgically removed from a deceased person within twelve hours of their death. Very few conditions exclude people from corneal donation.

How to become a donor

If you wish to be a donor after your death, the most important thing to do is to tell your family of your wishes. In addition, because it is not always routine for the hospital to approach the family about eye donation, the family should raise the issue with the hospital staff within a few hours of death.

Although no forms or formal registration needs to be completed, an individual can register with the Organ Donor Registry.

Where to get help

- Your ophthalmologist
- The Organ Donor Registry Tel. 1800 645 899 freecall.

- The Royal Victorian Eye and Ear Hospital Tel. (03) 9929 8666.

Things to remember

- Corneal transplants replace the 'window of the eye' if it is diseased or damaged.
- Only corneas, not eyes, can be transplanted.
- The only substitute for a human cornea is another donated human cornea.
- If you wish to be an eye donor after your death, tell your family.

This page has been produced in consultation with, and approved by:

Centre for Eye Research Australia

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