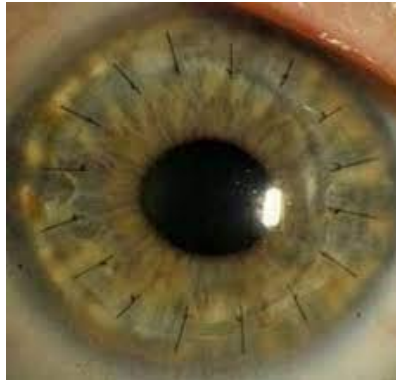


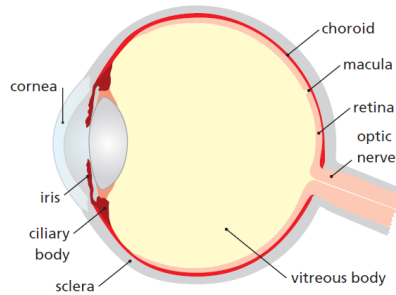
Corneal transplantation: Penetrating Keratoplasty (PK)

Information for patients

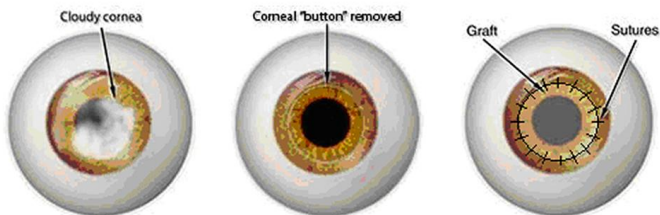
Why would I need a corneal transplant?

The cornea is a window of transparent tissue at the front of the eyeball. It allows light to pass into the eye and provides focus to see images. Various diseases or injuries can make the cornea either cloudy or out of shape. This prevents the normal passage of light and affects vision.





A cloudy cornea can be replaced by a healthy one from a donor to restore vision. If the full thickness of the cornea is affected by disease then a full thickness transplant is performed. This is known as a penetrating keratoplasty.



Benefits of Penetrating Keratoplasty

Improved vision

- Approximately 90% of transplant recipients for this surgery have good enough vision to drive legally, although they usually need glasses or contact lenses or sometimes further surgery for best results.
- It may take 12 to 24 months until the full improvement in vision is appreciated.

Risks of Penetrating Keratoplasty

Rare but serious complications

- Sight-threatening infection (1 in 1,000)
- Severe haemorrhage causing loss of vision.
- Retinal detachment
- Severe inflammation or other rare causes of vision loss
- Graft rejection.
- Increased pressure inside the eye.
- Cataract formation (Unless you have already had Cataract removal).

Corneal transplant rejection

The patient's immune system can identify and attack a corneal transplant. This happens in 1 in 6 patients in the first 2 years after transplantation and can cause graft failure. It can often be reversed if anti-rejection medication is started promptly. It remains a possibility for your lifetime.

Graft Failure

When a graft fails the cornea becomes cloudy again and vision becomes blurred. This happens in 1 in 10 transplants for keratoconus in the first 10 years.

Glaucoma

This can usually be controlled by eyedrops but occasionally requires surgery.

Cataract

This can be removed surgically.

About the operation

The operation

The operation is performed under general or local anaesthetic. The operation takes about one hour. A central (average 8mm) button of the patient's cornea is removed and a similar-sized button of the donor cornea is stitched in with tiny stitches (see front cover). These cannot be felt nor seen. The abnormal cornea is removed and sent to our pathology laboratory for examination under a microscope.

After the operation

You will usually be examined by the surgical team after the surgery and can generally go home the same day. You will be seen the following day in the clinic and subsequently weekly for a fortnight in the outpatient clinic and further follow-up appointments based on progress thereafter. We generally recommend that you take two weeks off work but please discuss your individual circumstances with your doctor. You will need to use anti-rejection eye drops for at least 12 months and indefinitely in some cases. Individual stitches may be removed if they get loose or develop infection during the post-operative period, but complete stitch removal is not performed until at least one year after the procedure.

What if my transplant fails?

A failed transplant can be replaced in a procedure known as a regrant. However, the risk of subsequent rejection and failure increases each time for regrafts.

5-year survival rates of full-thickness corneal transplants under various conditions are:

Condition	%
Keratoconus	95
Fuchs' dystrophy	80-90
Stromal scar	80-90
Stromal dystrophies	80-90
Bullous keratopathy	50-80
Bacterial infections	50-80
Herpetic keratitis	50-80
Fungal infection	0-50
3rd or higher number regrant	0-50
4 quadrants of blood vessels	0-50
Inflammation at time of surgery	0-50
Severe ocular surface disease	0-50
Grafts greater than 10mm	0-50

Corneal Transplant Rejection

If not treated urgently this can lead to failure of the transplant and loss of vision.

Symptoms of rejection are:

Red eye
Sensitivity to light
Visual loss
Pain

If you experience any of these symptoms, you should come immediately to our 24-hour emergency department. If in doubt, during working hours (9 am to 5 pm) contact the eye clinic at 01622 226228, out of hours please contact the emergency department who will in turn contact the on-call eye doctors.

Consenting to information sharing


To comply with the law and to ensure high-quality transplant material, we are required to share your information with the NHS Blood and Transplant Special Health Authority (NHSBT), which supplies donor corneas. However, we require your consent to share this information. If you do not give consent for your information to be shared with or held by the NHSBT, this may affect the availability of donor tissue for the transplant or create problems with contacting you should any issues be identified later with the tissue you received. For further details, please read the leaflet “NHS Blood and Transplant: Giving consent for use of your information,” which can be found here:

https://www.organdonation.nhs.uk/newsroom/publications/living_donor_consent.pdf

Please use this space for your notes

Further information and advice can be obtained from:

NHS 111
NHS Choices online

 **111**
www.nhs.uk

MTW NHS Trust is committed to making its patient information accessible in a range of languages and formats. If you need this leaflet in another language or format please ask one of your clinical care team or the Patient Advice and Liaison Service (PALS). We will do our best to arrange this.

Maidstone and Tunbridge Wells NHS Trust welcomes all forms of feedback from our service users. If the standard of service expectations; received from the Trust does not meet your expectations, we want to hear from you. Please speak with the ward manager or the nurse in charge in the first instance, or you can contact the **Patient Advice and Liaison Service (PALS)** on:

Telephone:  01622 224960 or  01892 632953

Email: mtw-tr.palsoffice@nhs.net

or visit their office at either Maidstone or Tunbridge Wells Hospital between 9.00 am and 5.00 pm, Monday to Friday.

You can be confident that your care will not be affected by highlighting any areas of concern or making a complaint. The Trust will retain a record of your contact, which is held separately from any medical records. If you are acting on behalf of a patient, we may need to obtain the patient's consent in order to protect patient confidentiality. More information on PALS or making a complaint can be found on the Trust's website: www.mtw.nhs.uk or pick up a leaflet from the main reception.

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