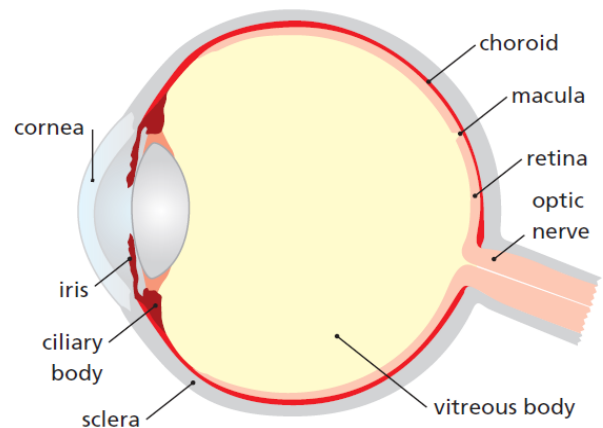


Patient information – external disease and corneal services

Corneal transplantation: penetrating keratoplasty (PK)

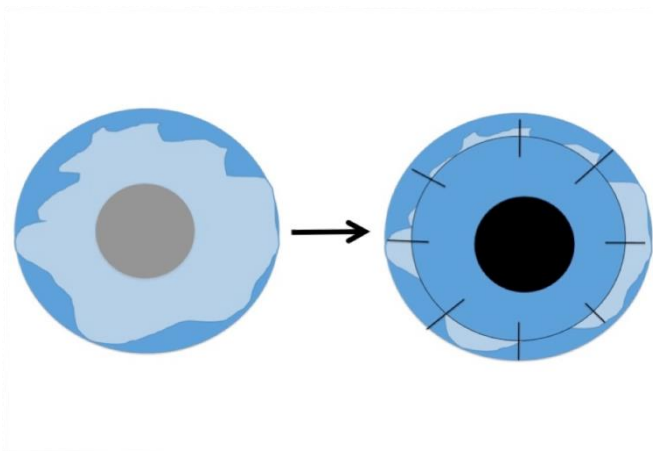
Why would I need a corneal transplant?

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 so that images can be seen. Various diseases or injury 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.
(see picture on following page)

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, on request.
Please call the booking centre number on your appointment letter.



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 75% of transplant recipients have good enough vision to drive legally but usually need glasses or contact lenses or sometimes further surgery for best results
- It may take up to 24 months until the full improvement in vision is seen.

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.

Corneal transplant rejection

A corneal transplant may be rejected by your immune system. This happens in one in six patients in the first two years after transplantation and can cause graft failure. It can often be reversed if anti-rejection medication is started promptly, but rejection remains a possibility in your lifetime.

Graft failure

When a graft fails, your cornea becomes cloudy again and your vision becomes blurred. See the table below for more detailed information on graft survival.

Glaucoma

This can usually be controlled by eye drops, but occasionally requires surgery and may harm your sight.

Cataract

This can be removed surgically.

About the operation

The operation

The operation is performed under general or local anaesthetic and takes about one

hour. A central 8mm button of your cornea is removed and a similar-sized button of the donor cornea is stitched in with tiny stitches (see front cover of leaflet). These cannot be felt or seen. The abnormal cornea, which is removed, is 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 again within one week in the outpatient clinic and regularly thereafter (approximately six visits in the first year). 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 six months and indefinitely in some cases. Individual stitches may be removed from three months after the operation, 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 further rejection and failure increases each time for subsequent re-grafts.

The percentages of full-thickness corneal grafts that are still functioning well under

various conditions five years after the operation 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
Third or higher number regrant	0-50
Four 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

Rejection needs urgent treatment as 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, call 020 7253

3411 and ask to speak with the doctor on duty in the emergency department.

Consenting for 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), who supply 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 availability of donor tissue for the transplant or create problems with contacting you should any issues be identified later on 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

Author: Tom Flynn, consultant ophthalmologist
Revision number: 3
Approval date: February 2018
Review date: February 2020

**Moorfields Eye Hospital NHS
Foundation Trust
City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk**

Moorfields Direct advice line

Phone: 020 7566 2345

Monday to Friday, 8.30am–9pm

Saturday, 9am–5pm

Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324 or 020 7566 2325

Email: pals@moorfields.nhs.uk

Moorfields’ PALS team provides confidential advice and support to help you sort out any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to start their consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further – see above for contact details. For more information about your rights under the NHS constitution, please visit www.nhs.uk/choiceinthenhs.

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City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk