

Corneal Transplantation (EK)

Endothelial Keratoplasty
(EK, also known as DSAEK or DMEK)

زراعة القرنية (EK)

World leading
experts in
eye care



Moorfields
Eye Hospital Dubai
A branch of Moorfields London



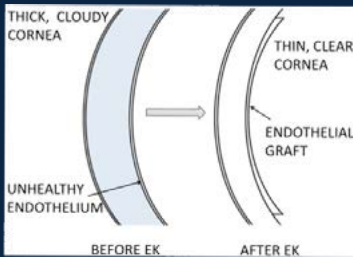
مستشفى كينغز كوليدج لندن
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Why do you need a **corneal transplant**?

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.



The cornea has three layers (thin outer and inner layers and a thick middle layer). In some diseases, only the inside layer (endothelium) is affected, causing corneal oedema (swelling) and clouding (see below).



Endothelial keratoplasty is a modern technique to replace the inside layer of your cornea with the inside layer from a donor cornea through a relatively small incision (opening).

Benefits of endothelial keratoplasty

Improved vision

The majority of transplant recipients have sufficiently good vision to be able to drive legally although many need glasses. It can take up to six months until the full improvement is appreciated. Comfort is improved in some cases.

Risks of endothelial 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 loss of vision

Corneal transplant rejection

A corneal transplant can be identified and attacked by your immune system. This happens in between 6% and 10% of DSAEK recipients in the first two years after transplantation and can cause graft failure. It can often be reversed if anti-rejection medication is started promptly. Rejection remains a possibility for your lifetime. The rejection risk in DMEK appears to be lower than in DSAEK.

Graft failure

When a graft fails, the cornea becomes cloudy again and vision becomes blurred.

Glaucoma

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

Graft dislocation

About 10% of endothelial grafts dislocate and need to be repositioned in theatre.

Cataract

This can be removed surgically.



Possible **advantages** of EK over full-thickness graft

- ▶ Faster recovery
- ▶ Fewer stitches, which means that the shape of the cornea is more “normal” and you are less dependent on glasses/contact lens
- ▶ Smaller wound so fewer wound complications such as leakage or wound rupture after accidental injury

About the **operation**

The operation

The operation is usually performed under local anaesthetic and takes about one hour. Through a small incision (opening), your endothelium is removed and an 8.5mm disc of donor endothelium is inserted and pressed in position against the back of your cornea by a bubble of air. You will need to lie flat for one hour after the operation. Usually, only two stitches are used to close the incision.

After the operation

You will usually be examined by the surgical team after your surgery and can generally go home the same day. You will be seen again the next day and within one week to make sure the graft stays in position. You will have about six visits to the outpatient clinic in the first year. We generally recommend that you take two weeks off work - discuss your individual circumstances with your doctor. You will need to use anti-rejection eyedrops for at least six months and in some cases indefinitely. The stitches are usually removed at about three months.



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 second and subsequent regrants.

Consenting for information sharing

We are required to share your information with the Eye Bank who supply donor corneas, to ensure high quality transplant material.

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 immediately call our 24-hour emergency phone line 055 516 1586.



Moorfields Dubai



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Opening hours:

Saturday to Thursday, 8.30am to 5.30pm,
for information and advice on eye conditions and
treatments from experienced ophthalmic trained staff.



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