

Partial thickness corneal graft surgery

Deep Anterior Lamellar Keratoplasty

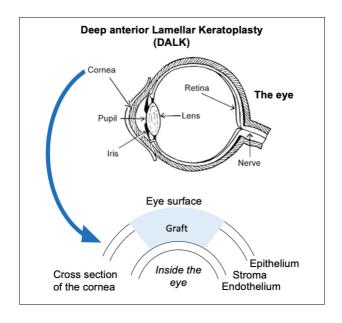
The cornea is the clear window at the front of your eye. It acts like a clear lens through which light rays pass onto the back of the eye or the retina. To be able to see clearly, your cornea must remain transparent, healthy and in the correct shape.

Deep Anterior Lamellar Keratoplasty (DALK) is an operation in which the front 95% of the cornea is replaced with similar tissue from a donated cornea that will be stitched into place. The stitches remain for around 12 to 18 months.

Why do I need this operation?

Typical situations where DALK is performed are keratoconus, corneal dystrophies, or partial thickness corneal scars.

DALK is an alternative to penetrating keratoplasty (PK), and PK replaces the entire thickness of the cornea. By preserving the inner part of the cornea, which is healthy, the risks of graft surgery (such as graft rejection, bleeding and infection) are reduced.



What are the complications of this procedure?

The risks of the surgery include, but are not limited to:

- Infection
- Bleeding
- Graft rejection or failure
- Glaucoma
- Need for full-thickness graft (Penetrating Keratoplasty)
- Cataract
- Astigmatism (requiring glasses or special contact lenses afterwards)
- Retinal complications, including retinal detachment or inflammation
- Need for further procedure
- Loss of vision (1 in 1000).

In addition to the risks specific to the individual procedure, there are also risks associated with anaesthesia. This operation is usually carried out under general anaesthesia.

For further information about the risks of anaesthetics, please see the booklet 'You and your Anaesthetic' or visit The Royal College of Anaesthetists website: www.rcoa.ac.uk.

Frequently asked questions What happens now I am on the waiting list?

There will be other people on the list ahead of you, and you will have to wait for donor eye material to be available. This period can vary. When donor material has been arranged, you will usually be given a few weeks' notice by post (and / or telephone) of your admission date, though sometimes this may be only days (in case of cancellation replacements).

What happens after the operation?

The procedure lasts 1-2 hours and is performed under general anaesthetic. This can vary depending on your diagnosis and recovery. You may either stay in the hospital for one night or return home the same day.

Will I be able to see it straight away?

Your vision is expected to be blurred for a few days and gradually improve over weeks to months. It can fluctuate during the healing process until a few months after all stitches are removed. This is because the curvature of the new cornea is not as regular as a healthy cornea. You will require some form of refractive correction, i.e., spectacles or, more commonly, special contact lenses, to see better.

When and how do I have the stitches removed?

The stitches will stay in for at least one year, though this will vary depending on the eye's healing rate. When it is necessary to remove the stitches, this may be performed either in the outpatient clinic or theatre. The procedure is done as a day case, usually under local anaesthetic, though you can discuss more with your doctor.

Will I have to use eye drops after the operation?

Yes. You will be given steroid drops to help prevent graft rejection. When you are discharged from the ward, these will be given to you, and instructions will be explained to you by the nursing staff. Initially, you will have to use these drops every few hours and then gradually reduce in frequency over months.

Depending on your clinical situation, you will likely be advised to continue low-dose drops (once or twice a day) for at least two years and maybe longer.

You will have regular follow-up appointments in the outpatient clinic after the surgery, and your doctor will advise when to stop your drops.

When can I resume normal activities?

- Work: You are likely to need one week, or longer, off work, depending on the type of job you have
- **Sport/Hobbies:** We advise that you wait for four weeks before returning to sport or active hobbies.
- Flying: Air travel is usually permissible any time after the surgery.

What if I have any problems or worries?

After the operation, it is important to contact the hospital immediately if the eye becomes sore, red, light-sensitive, or blurred vision. This could represent a rejection of the graft and requires urgent treatment.

Who should I contact for further information and advice?

If you have problems or need urgent advice, ring the eye hospital. Ask for the Accident and Emergency Department (A&E) or Nursing Staff. There is always someone on duty, night and day.

Telephone: 01273 696955

Out of Hours telephone: 01273 664881

Contact details:

Sussex Eye Hospital

Eastern Road

Brighton BN2 5BF

Website: www.uhsussex.nhs.uk/hospitals/sussex-eye-hospital/

Compiled by
Ms Ritika Mukhija, MBBS, MD, FRCOphth
Dr Gabriella Quiney, MBBS
Mr Mayank A. Nanavaty, MBBS, DO, FRCOphth, PhD

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

Ref. number: 2187 Publication date: 03/2023 Review date: 03/2026

© University Hospitals Sussex NHS Foundation Trust Disclaimer: The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a gualified practitioner.

