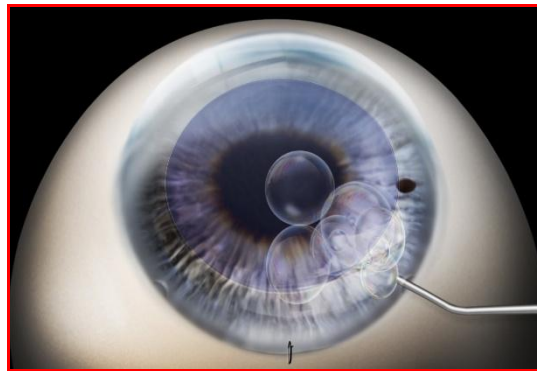


Patient Information

Descemet Membrane Endothelial Keratoplasty (DMEK)

Eye Unit



What is DMEK?

Descemet Membrane Endothelial Keratoplasty (DMEK) is a type of corneal transplant where only the innermost layer of the cornea – the **Descemet membrane & endothelium** is replaced with healthy donor tissue.

It is a “selective, partial thickness transplant” offering faster recovery and better vision than older methods.

Why is DMEK done?

DMEK is used to treat conditions where the endothelial layer of the cornea is damaged, such as:

1. Fuchs endothelial dystrophy.
2. Bullous Keratopathy.
3. Endothelial failure after eye surgery (e.g., cataract surgery).
4. Other causes of corneal oedema.

What Happens During the Surgery?

- Performed under local anaesthesia (you will be awake but won't feel pain).
- The surgeon removes the damaged inner layer of your cornea.
- A thin layer of donor endothelial tissue (only about 10-15 microns thick) is placed inside your eye.
- An air bubble is used to hold the graft in position until it sticks naturally.

Benefits of DMEK:

1. Better visual outcomes (vision closer to normal vision).
2. Faster recovery than older techniques like (DSAEK or PKP).
3. Lower risk of rejection.
4. Smaller incision and less tissue disruption.

Risk & Complications:

While DMEK is generally safe and effective, risks include:

- Graft detachment (may need a minor procedure call "re-bubbling").
- Increased eye pressure.
- Infection.
- Graft Failure (rare).
- Vision not fully restored (may need glasses or other treatment).

What to Expect After Surgery:

1. You must lie on your back for several hours (e.g., at least 4 hours) to keep the air bubble in place.
2. Vision will be blurry for the first few days, then gradually improve.
3. You will use steroid and antibiotic eyedrops.
4. You must attend regular follow ups to monitor graft health.

Post Operative Care Instructions:

1. Use eyedrops exactly as prescribed.
2. Avoid heavy lifting, swimming or dusty environments.
3. Avoid flying in the first 10 days when air bubble is still present in the eye.
4. Wear a protective shield at night for 1- 2 weeks while sleeping.
5. Contact Emergency Eye Clinic Team immediately if you notice: sudden decrease in vision, pain, redness or light sensitivity, black spots or flashes.

Recovery Timeline:

Time Frame	What to Expect
Days 1-3	Rest, bubble in eye, blurry vision.
1-2 weeks	Vision begins improving, can resume light activities.
1-3 months	Clearer vision; most recovery complete
Ongoing	Regular check-ups & eyedrops use.

FAQS:

Q: Will I need glasses after surgery?

A: Possibly, especially for reading or correcting astigmatism.

Q: What if the graft detaches?

A: It can often be re-attached with a simple "re-bubbling procedure".

Q: Is DMEK better than other corneal transplants?

A: For endothelial diseases, DMEK offers the best visual outcomes & fastest healing.

Contact us:

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**"This document is available in Welsh /
Mae'r ddogfen hon ar gael yn Gymraeg".**