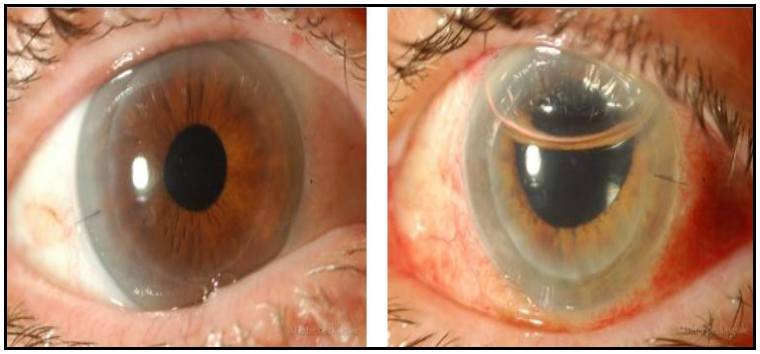
Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Patient Information

Descemet Stripping Automated Endothelial Keratoplasty (DSAEK)

Eye Unit



What is DSAEK?

Descemet Stripping Automated Endothelial Keratoplasty **(DSAEK)** is a type of "**Partial Thickness Corneal Transplant"**. It is used to treat diseases affecting the innermost layer of the cornea - **the endothelium** which is responsible for keeping the cornea clear.
In DSAEK, only the damaged inner layer is replaced with a thin layer of healthy donor tissue, not the full thickness of the cornea.

Why is DSAEK Done?

DSAEK is recommended when the endothelial cells stop working properly, causing the cornea to swell and vison to become cloudy.

Common conditions treated with DSAEK include:

1. Fuch's Endothelial Dystrophy (FED).
2. Bullous Keratopathy.
3. Endothelial Failure after surgery (e.g., cataract).
4. Congenital or acquired endothelial dysfunction.

How is the Procedure Done?

- Surgery is usually done under local anaesthesia.
- The surgeon removes your damaged endothelial layer through a small incision.
- A thin donor graft is inserted and positioned using special instruments.

- An air bubble is used to hold the graft in place against your cornea.
- The small incision usually seals on its own, no stitches are needed on the cornea.
- The entire procedure typically takes 30-60 minutes.

Benefits of DSAEK:

- ✓ Smaller incision & faster healing compared to Full Thickness transplant.
- ✓ Lower risk of rejection.
- ✓ Quicker visual recovery.
- ✓ Stronger & more stable eye structure.

Possible Risks & Complications:

Like all surgeries, DSAEK carries some risks:

1. Graft dislocation (may need repositioning or re-bubbling).
2. Increased eye pressure.
3. Infection.
4. Graft failure.
5. Mild blurred or distorted vision.
6. Rare risk of rejection.

Post Operative Care Instructions:

To support healing & prevent complications:

- Lie flat on your back as advised for the first few hours to help the graft attach.
- Use eyedrops as exactly as prescribed (usually antibiotics & steroids).
- Avoid rubbing your eye.
- Wear a protective shield when sleeping for 1-2 weeks.
- Avoid swimming, dusty environments & heavy lifting.
- Avoid flying in the first 10 days when the air bubble is still present in the eye.
- Attend follow-up appointments.

Recovery Timeline:

Time Frame	**What to Expect**
Days 1-3	Blurry vision, bubble in eye, rest at home
1-2 weeks	Gradual vision improvement; can resume light activities.
1-3 months	Vision continues to stabilise.
3-6 months	Most patients achieve best vision by this time.

Contact us if you notice:

- Sudden drop in vision, redness, pain or light sensitivity.
- Signs of infection (discharge or swelling).
- Seeing floaters or flashing lights.

FAQS:

Q: Will my vision be perfect after DSAEK?
A: Most patients see significant improvement but may still need glasses for best vision.

Q: Will I feel the graft inside my eye?
A: No, the graft is very thin & cannot be felt.

Q: What if the graft detaches?
A: It can often be re-attached with a simple air injection procedure in eye theatre.

Contact us:

EEC Tel: 01633 – 238856 during working days/hours**.**

Weekend/Out of Hours: Ophthalmology on Call Team via switchboard:
01633- 234234

E-mail (only if needs advice): EmergencyEyeClinic.abb@wales.nhs.uk

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