

Endothelial Keratoplasty

What is endothelial keratoplasty?

This is a type of corneal transplantation. It is a surgical procedure used to replace the unhealthy, diseased portion of the front part of the eye called the cornea. The unhealthy tissue is removed and replaced with healthy human donor tissue. Only the diseased inner layer of the cornea is replaced. This technique is less invasive and heals faster than standard corneal transplantation in which the full thickness of the cornea is replaced.

How is the surgery done?

This procedure is done under local anaesthetic. Local anaesthetic will numb the eye so that you will not feel anything. The surgery takes about 1 hour.

The doctor makes a small incision in the cornea and removes the diseased tissue. The doctor then prepares the donor material, folds it to fit through the small incision and uses an air bubble to secure it into the correct position.

The wound is closed with a few tiny stitches. You will be asked to lie flat for an additional hour after the surgery to allow the donor tissue to adhere properly to the new location.

What are the risks and benefits of this surgery?

Your doctor will explain the risks and benefits before you sign the consent form. Make sure you have your questions answered before signing the consent.

What happens after surgery?

Your eye will be patched when you leave surgery.

You will lie flat in the Day Surgery Unit for 1 hour after the procedure. You will then be discharged. You may walk out to obtain your ride home. You should not drive until instructed by your surgeon.

Your surgeon will remove the patch the next day. You will begin using eye drops as directed. The visual improvement is a gradual process. The healing time for full recovery is about 6 months.

How will I feel after surgery?

The area around the eye will be numb from the local anaesthetic for 8 to 12 hours. Afterwards you may have pain or discomfort under the patch. Use the oral pain control medication prescribed by your surgeon if needed.

What activities can I do after surgery?

You may read or watch TV, but you may find your vision blurry at first. You may go for walks but avoid strenuous exercise for 1 week after surgery. Slowly resume your regular activities. You can bend down for routine activities.

DO NOT lift anything greater than 20 pounds for the first week.

DO NOT go swimming or get water directly into the eye for 2 weeks.

DO NOT rub or bump the eye.

DO NOT enter a dirty, dusty, or smoky area for at least 2 weeks.

How do I care for my eye?

Keep the eye patch on until the next day when you see your surgeon. Bring all your eye medications and any forms you need filled out with you to this appointment. You will need to use eye drops after eye surgery. Your surgeon will tell you when and how often to use them. This is a good time to ask about any questions or concerns you have about your recovery.

Wear your glasses or sunglasses during the day to protect your eye. Wear the eye shield at night for the first week.

If you have problems

Expect to have some pain, redness and blurring of vision.

If the pain in your eye becomes severe, or your vision suddenly worsens, call your surgeon. If you cannot contact your surgeon, go to the Emergency Department of St. Joseph's Healthcare Hamilton (either Charlton Avenue downtown site or the Urgent Care Centre in Stoney Creek).