NHS
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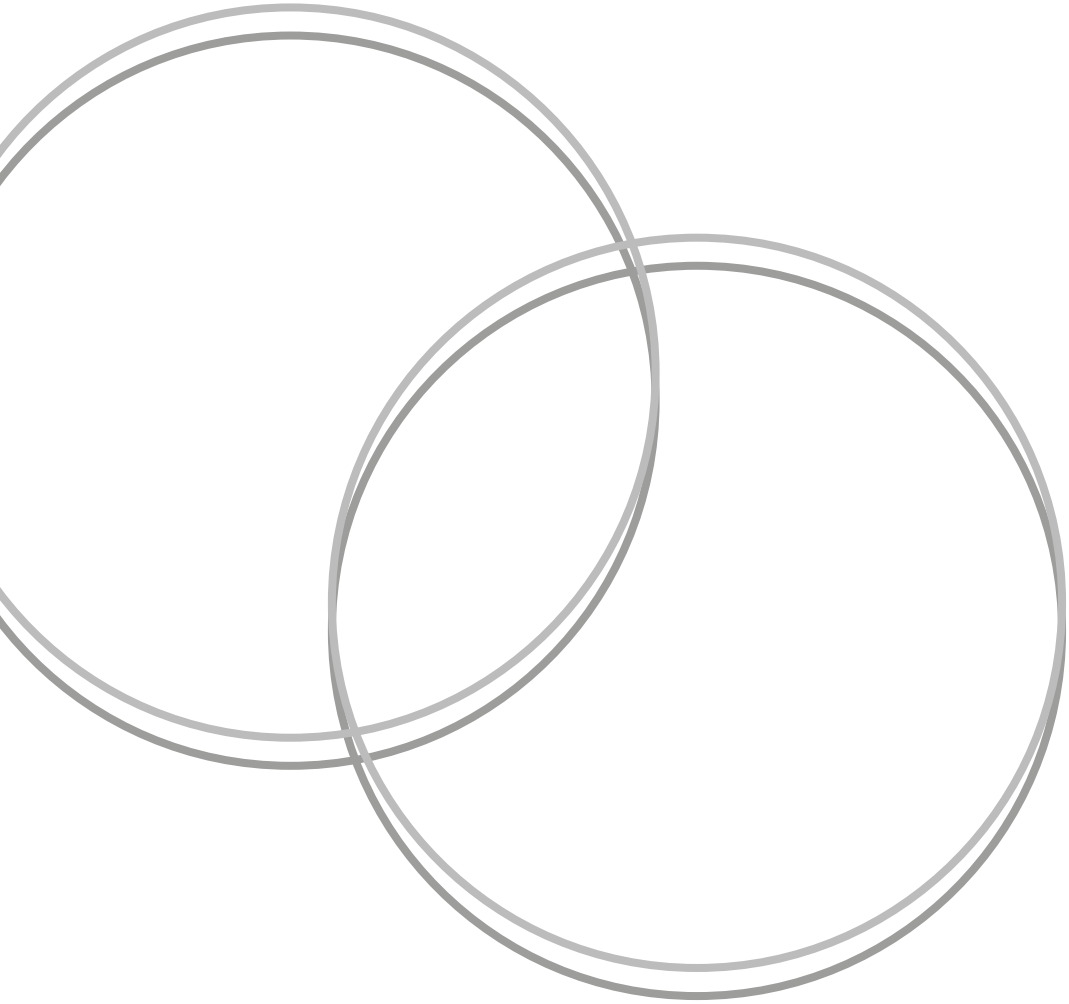
EDTA Chelation for Band Keratopathy

Information for patients



What is Band Keratopathy?

Band keratopathy is when calcium builds up on the clear front surface of the eye (the cornea). These deposits often form a band shape and can cause blurred vision, glare, and irritation. If they are in the center of the cornea, they may interfere with your vision and daily tasks.

Band keratopathy can happen for several reasons, including inflammation inside the eye, long-term eye conditions, previous eye surgery or injury, or changes in the body's calcium levels.

What is EDTA Chelation?

EDTA is the name of a medication. It stands for ethylenediamine tetraacetic acid.

EDTA chelation is a treatment used to gently remove small calcium deposits from the clear front surface of the eye (the cornea). By clearing these deposits, the surface of the eye can become smoother, which may help reduce irritation and, in some cases, improve vision.

What happens on the day of surgery?

- Superficial keratectomy is usually carried out under local anaesthetic eye drops to numb the eye.
- Before the operation, the eye and eyelids will be cleaned and a sterile drape placed over the face. This will be lifted away from the mouth and nose, with fresh air gently blown underneath.
- The first step is to remove the top layer of the cornea (superficial keratectomy).
- Sometimes a small amount of alcohol is used to loosen the cells on the surface of the cornea.
- EDTA is then applied to dissolve and lift away the calcium.
- You may notice a bright operating light and feel fluid on the eye, but the procedure is not painful.
- Surgery usually takes less than 30 minutes, though this varies.
- At the end, a bandage contact lens may be placed on the eye, or the eye may be padded closed with antibiotic ointment.

What are the benefits?

- Improvement in vision
- Smoother corneal surface
- Reduced irritation

What are the risks?

- Remaining or returning cloudiness
- Delayed healing of the corneal surface
- Recurrent corneal erosions (surface layer of the cornea does not stay fully healed and can break open again from time to time.)
- Change in glasses prescription
- Scarring or haze affecting vision
- Irregular corneal surface causing distortion
- Recurrence of calcium deposits
- Rarely, unexpected reduction in vision
- Infection is rare and affects fewer than 1% of patients

Your doctor will discuss these risks with you and answer any questions you may have.

What to expect after surgery

Pain and comfort

- The eye will feel very sore and watery, like a deep scratch. This can be quite painful for a few days
- You may be given a small bottle of anaesthetic eye drops to use only in the first 12 hours if pain becomes severe
- Do not continue using the anaesthetic drops after this because they delay healing
- Over the counter pain relief like paracetamol and ibuprofen can be used although they may not completely remove the discomfort
- Pain often varies in the first two days. If pain suddenly worsens three to four days later, this could be infection and you should go to A&E
- Infection is rare and affects fewer than 1% of patients

Vision and healing

- Vision will be blurry at first and should gradually improve over the next few weeks
- Benefits are usually seen within 2–4 weeks, or over several months when treating recurrent erosions

Eye drops

- You will be given antibiotic eye drops to use after the procedure. Usually for a couple of weeks
- Check with staff if you should continue any other eye drops you already use

Bandage contact lens

- You will have a follow-up appointment 1–2 weeks after surgery. Any bandage contact lens will be removed then
- If the bandage lens falls out earlier, throw it away and do not try to put it back in

Can I drive?

The legal requirement for driving is that you can read (with glasses or contact lenses, if necessary) a number plate at 20 metres, with both eyes open. You may be able to meet this requirement a few days after surgery but if you are unsure, or if you rely on your operated eye for driving acuity (perception), please ask for advice at your follow-up appointment.

Contacting us

If you have a minor eye problem, please seek advice from your GP, optician or pharmacist.

Call our specialist telephone triage number if you need URGENT help or advice or if you notice:

- Redness and/or swelling of your eye lids and/or eyeball
- Any loss of sight
- Intense pain

Tel: **01865 234 567**
(select the option for "Eye Emergencies")

Monday to Friday
8:30am – 4:30pm

Saturday and Sunday
8:30am – 3:30pm (including Bank Holidays)

You will be able to speak to an ophthalmic health professional who will advise you.

If you need advice out of hours, please phone NHS 111 or your out of hours GP practice.

Further information

NHS Website: www.nhs.uk

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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