

Internal / external dacryocystorhinostomy (DCR) surgery to improve tear drainage

This leaflet gives you advice and information about surgery to improve tear drainage including dacryocystorhinostomy (DCR). If you have any questions or concerns, please speak to your eye specialist or nurse.

Why do I need tear drainage surgery?

In order for the eye to remain healthy, it must remain moist. The lacrimal gland is a specialised gland that makes tears. It is located under the outer one-third of the upper eyelid. Each time you blink, the eyelid spreads the tears over the surface of the eye and pumps excess tears into the tear duct that drains the tears into the back of the nose. It is why your nose runs when you cry. You may need surgery because a part of the tear drainage system is blocked, resulting in:

- Watery eyes.
- Sticky discharge from the inner corner of your eye.
- A recurrent painful swelling at the inner corner of your eye.

What causes the blockage?

The blockage may be caused by chronic infection or because of an injury. It usually requires a procedure called a dacryocystorhinostomy or DCR.

Children are sometimes born with an incomplete canalization (the tear duct 'canal' isn't draining properly). This causes tearing and infection. Babies with watery eyes usually 'grow out of it' in the first few months with no treatment. However, if the problem does not improve by the age of 12-months, your eye specialist can treat this problem with surgical techniques. These may vary from passing a probe down the tear duct, to temporarily placing silicon stents (tubes) or even DCR surgery as carried out in adults.

How is the DCR carried out?

A DCR is commonly done under general anaesthesia (you are asleep during surgery), usually as a day case, although sometimes an overnight stay is needed.

The operation may be done internally via the nose (endonasal), using special equipment or it may be carried out externally through the skin by the side of your nose. This involves a small cut that is closed by stitches and usually heals well, leaving only a small scar. DCR via the nose may not be possible for all patients – your eye specialist will be able to advise you on your suitability and tell you about the success rates.

After the surgery, your doctor may place small silicone stents (tubes) temporarily to keep the new tear duct open while healing occurs.

Occasionally, it may not be possible to create a new opening from the existing tear ducts. If this is the case, an artificial tear duct called a Jones tube is used.

This is made of Pyrex glass and is practically invisible. The operation takes between 45 and 60 minutes.

What are the benefits of surgery?

The main benefits are relief of watering and/or discharge or stickiness and reduction in the risk of infection.

The success rates of the procedures are approximately 85-95% (85-95 out of every 100 patients having relief of their symptoms).

Is there an alternative to surgery?

No, if your watery eyes are due to a blockage in your tear drainage system, surgery is the only treatment available.

What are the risks and side effects?

- Bleeding.
- Infection.
- Bruising.
- Swelling.
- Scarring.
- Recurrence of symptoms in up to 15% of patients.

After the operation

- You will normally go home the same day, unless there is bleeding from the operation site.
- You will have some eye drops to use at home over the next four weeks. These will help prevent infection, reduce inflammation and aid healing.
- You may have a slight nasal discharge for 2-3 weeks – this is normal.
- You may have some bruising or swelling around the eye for the first two weeks – this is normal.
- You will have a follow-up appointment usually 2-4 weeks after your operation. You may have other follow up appointments after that.

Advice to follow at home

- Do not blow your nose or pick off any crusts.
- Avoid hot drinks for the first 48 hours
- Avoid strenuous lifting and contact sports – ask your doctor or nurse about resuming any very physical activities or sports.
- If you have any pain, take Paracetamol rather than Aspirin, as Aspirin promotes bleeding.
- Take 1-2 weeks off work, depending on the type of work you do.
- Ask the doctor about when you can start driving again.
- If you have any bleeding that does not stop or if you are worried you have an infection please attend the Eye Casualty Department.

Contacting us

If you have a minor eye problem, please seek advice from your GP, optician or pharmacist. If urgent, please attend Eye Casualty or call 111.

Eye Casualty (Reading):	Mon-Fri 8.30am to 5pm; Sat & Sun & bank holidays 9am-12.30pm; Closed Christmas Day and New Year's Day.
Eye Casualty: Prince Charles Eye Unit (Windsor):	Mon-Fri 8.30am to 5pm; Sat 8.30am-12.30pm; Closed Sun & bank holidays.
Dorrell Ward (Reading):	0118 322 7172 (24 hours a day)
Eye Day Unit (Reading):	0118 322 7123 (Mon-Fri 7am to 6pm)
Eye Day Unit (PCEU Windsor)	01753 636496 Mon-Fri 7am to 6pm)

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Please ask if you need this information in another language or format.

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