Patient information factsheet

DCR (Dacryocystorhinostomy) surgery

What is DCR surgery?

DCR surgery is done to treat a watery, sticky eye caused by narrowing or blockage of the tear drainage tubes, which run from the inner corner of the eye into the tear sac and then down into the nose. A new passage is made between the tear sac and the nose and this bypasses any blockage below the tear sac and allows tears to drain normally again. The operation is also performed in a modified way to relieve blockages higher in the tear drainage system.

Who needs DCR surgery?

DCR surgery is worthwhile if the watering is bad enough to really interfere with activities of daily living. It is also recommended if you have had an infection in the tear sac (acute dacryocystitis) as a result of the blocked tear duct in order to prevent repeated attacks of a red, painful swelling at the corner of the eye.

There are two ways of doing the surgery:

- Externally - through the skin
- Endoscopically - from within the nostril.

What is an external DCR?

A small cut is made on the side of the nose to access the tear sac. A piece of bone between the tear sac and nose is removed in order to reach the inside of the nose. The tear sac is opened and stitched to the lining of the nose so a direct passage is formed between the sac and the nose. A soft silicone “tube” or thread may be put into the tear passage to keep it open during healing. This tube is not usually noticed when in the correct position and is removed in clinic about 6-12 weeks after the operation.

The operation is performed only after examination and possibly X-rays have been done and you have had a chance to discuss the risks and benefits with the doctor in the outpatient clinic. The operation takes about 1-1½ hours so it is not a minor procedure.

Sometimes your surgeon will want to take a tiny piece of tissue from the lining of the tear sac or the nose and send it to the pathology laboratory for microscopic checks. It is not generally possible to know whether this will be necessary until during the operation. The results of such tests will be ready after a few weeks.

The success rate for this operation at Southampton Eye Unit is 85-90%. Success means that the watering stops completely or only happens in very windy weather. Surgery will help you to enjoy your indoor and outdoor pursuits again and stops you having a watery eye, which needs wiping all the time. For cure of infection (acute dacryocystitis) the success rate is over 95% - you will no longer have painful swelling at the corner of your eye.
If you are generally unfit or very overweight, or if it is essential for you to take blood thinning tablets eg Warfarin, surgery may not be advisable.

**What is an endoscopic DCR?**

In this operation the tear sac is reached from the inside of the nose, using a small telescopic instrument called an endoscope. The endoscope allows the surgeon to see inside the nose and make an opening between the tear sac and the lining of the nose but without using stitches. There is no cut in the skin for this operation. The opening is smaller than with an external DCR and the operation is usually quicker. Silicone tubing is always placed at the time of surgery to keep the new tear passage open.

**Which surgery will I have?**

There is no scar with endoscopic DCR although the scar from external DCR is often invisible after a few months. External DCR is better if the tiny tear ducts in the eyelids (canaliculi) are blocked as well as the bigger duct in the nose. Endoscopic surgery may be better if you have polyps or sinus problems, which may be dealt with at the same time as the tear duct operation. Your surgeon will recommend the best type of surgery for you.

**When will the operation be done?**

When you are put on the waiting list in the clinic you will be advised about the waiting time for surgery. Before the operation you will be seen in a pre-assessment clinic. You will be weighed and examined and may have blood tests and an ECG. You will be asked to bring your medications with you and will be asked about any illnesses or operations you have had.

You will then be sent a date for admission to hospital to the Eye Short Stay Unit (ESSU). You should come prepared to stay in hospital on the night after the operation although it may be possible to go home if your operation is being done in the morning. You should not have any thing to eat after midnight for surgery in the morning or after 7am for surgery in the afternoon.

**What type of anaesthetic is used?**

The operation may be done under general anaesthetic (you are completely asleep) or under local anaesthetic (you remain awake but have injections to numb the operated area and an injection in a vein to make you feel calm and relaxed). Quite a lot of anaesthetic is needed either way, so you need the same kind of preparation for the operation however the anaesthetic is given. We will discuss the best choice of anaesthetic with you before the operation. If you are elderly, have heart or chest problems or are overweight, local anaesthetic is safest.

**Can I have both tear ducts operated on?**

Normally we operate on one side at a time otherwise the operation might take too long or require too much anaesthetic. Once you have recovered from one operation, you can
go on the list to have the other side done. Endoscopic DCR can sometimes be done on both sides during the same session.

**What happens after the operation?**

After a general anaesthetic you may need some time that day to sleep off the anaesthetic before you are ready to resume normal activities. After a local anaesthetic you will be ready to have a drink and a snack fairly soon after the operation.

Often there is some bleeding from the nose. Usually there is only a little trickle from the nostril or down the back of the throat. If there is bleeding at the end of the operation the surgeon may pack the nostril. The pack is removed the next day. If you have heavy bleeding after you have left hospital, please contact the Eye Short Stay Unit for advice. Do not blow your nose hard for at least 6 weeks after the operation as this may cause bleeding to occur.

After External DCR you will have a dressing on your eye/ side of your nose, which will be removed next day. You may find it difficult to wear your spectacles until the dressing is removed. You will have stitches in the cut on the side of your nose, which will absorb away by themselves. The stitches may also make spectacle wear a little uncomfortable for a short time.

After both types of DCR, you will be given eye drops to use in the eye four times a day. You may be given a nasal spray to loosen crusts inside your nose. You should take it easy for the first week after the operation, and stay off work until your first clinic visit. Please ask for a certificate for work if you need one.

If you have a “tube” put in at the time of the operation, you should be careful not to explore the inner corner of your eye or blow your nose until it has been removed, or it may dislodge. If you do dislodge it by accident, please phone Eye Casualty on 023 8079 6592 to let them know what has happened. It should be possible to reposition the tube. Ideally the tube should stay in for three months and it can then be removed in the clinic. Tube removal is not painful – your eye is treated with anaesthetic drops and your nose with anaesthetic spray and the tube is then cut and removed.

The watering of your eye often stops before the second visit to clinic, but sometimes only when the tube has been removed. Usually no more visits are required unless you still have problems.

**What are the risks of the operation?**

- General anaesthetic can carry risks especially if you are unwell or overweight. Usually a local anaesthetic would be advised in this case.

- Local anaesthetic injections can very rarely damage the tissues of the eye, but usually prompt treatment would help to resolve any problem.

- Bleeding from the nose or into the tissues around the eye. Bleeding is quite common in the first few hours after the operation. Usually it is only slight and settles quickly. Heavy bleeding would need to be stopped by packing the nose or rarely by another operation.
Displacement of the tube. Usually this does not happen, unless you blow your nose hard or fiddle with the tube at the corner of your eye. It is usually possible to replace it.

Infection. This is unusual as antibiotics are given into a vein during the operation and drops are prescribed for you to use after the operation. If the cut on the side of your nose becomes red, swollen and very sore, please see your GP or Eye Casualty to see whether antibiotic tablets are necessary.

Scarring on the side of the nose after external DCR. Usually the operation cut heals very well and the scar becomes almost invisible after 3 –6 months. A scar that is unsightly could possibly be helped by plastic surgery.

Failure of the operation to cure the watering. A further operation may be possible and may well be successful. This would usually involve a cut in the skin, even if the first operation was performed entirely through the nose.

When do I consent for the operation?

Before your operation, usually at the pre-assessment visit, you will be asked to sign a consent form. The form is signed by both you and the doctor and is a permanent record to show that your operation and the type of anaesthetic have been discussed with you.

When you sign the consent form you are indicating that you want to go ahead with the operation. If you are not happy with anything on the form you should not sign it until you have had your worries discussed and resolved.

For a translation of this document, an interpreter or a version in large print, Braille or on audio tape, please telephone 023 8079 4688.

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