

## Final points

We hope this information is sufficient to help you decide whether to go ahead with surgery. Please write down any further questions to ask the doctor or nurse when you come to the hospital for your appointment. Don't worry about asking questions. Our staff will be happy to answer them.

## Contact Details for Further information

ENT Outpatients - Tel. (01752) 763182  
Bracken Ward – Tel. (01752) 792940  
Royal Eye Infirmary ward Tel : (01752) 315139

## If you need to raise a concern

The Patient Advice & Liaison Service (PALS) offers help and advice to those who have concerns about the treatment, care or support they have received. You can contact PALS on Tel. No. (01752) 517683 or (01752) 517657.

This leaflet is also available in large  
print. Contact: Patient Involvement  
Officer on  
**01752 763010**

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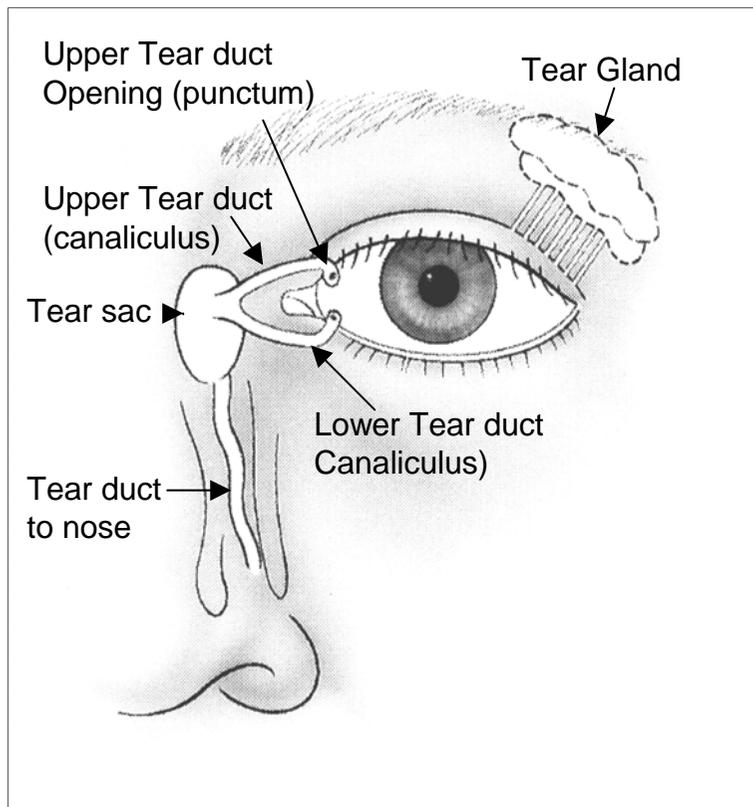
# Endoscopic Dacryocystorhinostomy (DCR)

Patient information leaflet

This leaflet was prepared by  
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## What are the tear drains (*lacrimonal drainage system*)?

Tears are produced continuously by the tear gland (which is buried under the upper lid at its outer third). Tears are spread evenly across the eyes each time we blink and are essential for clear vision and maintenance and comfort of the eyes. They wash away dirt and germs. Our tears drain away from the eyes through tiny holes (*puncta*) on the upper and lower eyelids, near to your nose, entering little canals (*canaliculi*) which join and enter the tear sac (*lacrimonal sac*). They then flow down a duct (*naso-lacrimonal duct*) into your nose. This explains why our noses run when we cry.



## Can there be problems?

- Bleeding of any significant amount is uncommon though a small amount of bleeding may occur with removal of the nasal packs.
- The nose may feel blocked for a while following the surgery. This is caused by a swelling in the lining of the nose and crusts blocking the nasal passages. This usually improves in a few weeks time. Your doctor may give you medical treatment for a period of time following your operation.
- Very rarely bleeding into the eye socket (orbit) or damage to the muscles that move the eye may occur. This can affect the vision but the chances of this happening are very low. If this happens, an operation to relieve the pressure on the eye may be needed.
- The operation is close to the bone at the base of the brain. There is a small risk of leakage of the fluid from the space around the brain. If this rare complication happens, you will need to stay in hospital until the leak stops and another operation to stop the leak may be needed.

## Will the operation cure my symptoms?

DCR operations are not very common, however, the success rate is high and, hopefully, your symptoms will be cured. If a tube has been left in place, the eye may continue to water until this is removed. The operation is unsuccessful in about 10–30% of patients.

If the watering of the eye continues, another operation may be required.

## How soon will I have my operation?

You should have your operation within 6 to 9 months from going on the waiting list.

Please follow the written instructions on the medication pack. Your surgeon will arrange to see you in clinic in about 6-12 weeks following your operation.

### What care is needed after my operation?

- **Do not blow your nose for the first two weeks after the operation.** The operation has connected your tear sac to the lining of your nose. If you blow your nose you will blow air and germs into the operation wound and this can cause an infection.
- **Do not rub your eye.** A fine silicone rubber tube is sometimes left in your tear ducts to splint them. This joins the inner part of the upper lid to the lower lid. If rubbed, the tube may accidentally come out.
- **Take your treatment.** You will be given antibiotic drops and possibly capsules/tablets to keep germs away during healing. Please use them as instructed.
- Wash any stickiness from your eye gently with cotton wool and cooled boiled water.
- Your doctor may give you a spray for the nose to help with your breathing. Please use this as instructed.

### Do I need to take time off work?

You are usually advised to take 2 weeks of rest following your operation.

### How long will I stay in hospital?

You will usually be discharged from hospital the day following the surgery.

### Why do people get watery eyes?

Eye watering may be due to extra tear production, such as when we injure our eye or cry. Watering also occurs when the tear drains cannot keep pace with tear production. This is why our eyes commonly water in cold windy conditions. The tears may stay on the eye causing watery vision or spill over the lids (*epiphora*). Watering can have many causes. Here we shall only discuss tear drainage system problems.

### What causes the tear drainage system become blocked?

Most often we cannot tell what has caused the blockage, but infection in the tear drains is the main suspect. When the blockage has been caused by an injury or previous surgery there is usually a clear story to connect the two events.

### Can the tear drains be unblocked?

The short answer is usually not, or if so only temporarily. However the blockage can often be bypassed surgically. The most common tear bypass operation is called a *Dacryo-cysto-rhinostomy* (DCR), which means 'tear sac to nose connection'.

### Why do I need a DCR operation?

You will undoubtedly have been suffering from a watery eye, possibly repeated eye infections or continually sticky eye discharge and sometimes a painful infection of the tear sac that forms a lump between your eye and your nose (*dacryocystitis*). Your Eye Surgeon or doctor will have referred you because you have a blocked tear drain.

### Are there any alternatives?

- The first option is to put up with the watering.

- Sometimes the blockage can be overcome with a blunt probe (like a pipe cleaner) but it tends to re-block. To discourage this from happening small rubber tubes are sometimes left in place for a couple of months. However when they are removed the drains re-block half of the time.

### Are there are different ways of having a DCR?

- The traditional operation is performed from the outside (usually by an Eye Surgeon) through a small cut in the skin (1" or 2-3 cm long) between the inner corner of the eye and the nose. This operation has the best success rate (70-95% depending on where the blockage is) but leaves a small, sometimes visible scar.
- More recently the DCR can be done through the nose by a Nose (ENT) surgeon, leaving no external scar. At present this operation is slightly less successful (60-90% depending on the position of the blockage and the surgical technique used). **This is the operation for which you have been listed.**

### What will happen before my operation?

Two to three weeks before your operation, you will be invited to attend a pre-operative assessment clinic (PAC). This is a clinic run by one of the Senior House Officers and a Nurse on Bracken ward on level 8 at Derriford Hospital. The purpose of this clinic is to assess your fitness for the surgery, to request any necessary tests (e.g. X ray, ECG "heart tracing", blood tests) and to sign a consent form giving the surgeon permission to carry out your operation.

### What happens on the day of my operation?

On the day of your surgery, you will need to go to Bracken ward, on level 8. You will be asked to wait in the dayroom

until your bed is ready and one of the nursing staff admits you. The anaesthetist and a member of your Consultant's team will also see you.

### What about the anaesthetic?

Your surgery will usually be carried out under general anaesthesia (you will be asleep during the operation). You will be asked to stop eating and drinking from midnight on the day of your operation. If your operation is in the afternoon you might be allowed to drink water until a time specified by your anaesthetist.

### What does the operation actually involve?

Your Ophthalmic (Eye) Surgeon has referred you to have an **Endoscopic DCR**. This is an operation done jointly by the Ear, Nose and Throat (ENT) surgeon and the Ophthalmic Surgeon. The operation is carried out using a fine telescope through the nose. A new connection is made between the tear sac and the inside of the nose. A very fine clear rubber tube may be placed in the tear ducts, from the inner corner of the eye (where it is just visible) with the ends emerging inside the nose. This tube is left in place for a variable period (usually 6-12 weeks) while healing takes place and is then removed. The ENT surgeon may occasionally use a dressing inside the nose (*nasal pack*) at the end of the operation to avoid a nosebleed.

### What happens after my operation?

You will need to stay overnight on the ward. You will be seen by your consultant's team the next morning and if you had a nasal pack this will be removed by one of the nurses. You may have slight bleeding from your nose after removal of the nasal packs. You will be advised to stay in bed for one hour after removal of the packs. You will usually be able to go home on the day following your surgery. You may be given medication to take home.