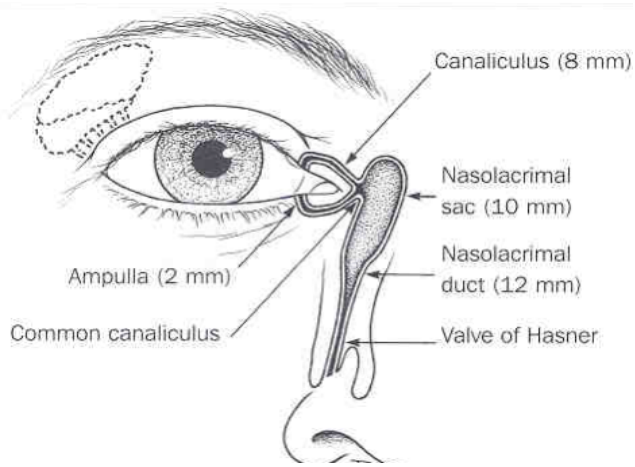
DACRYOCYSTORHINOSTOMY (DCR)
PATIENT INFORMATION



WHAT CAUSES A WATERY EYE?

A watery eye can be due to many causes. It is essentially an imbalance between the amount of tears being produced by the tear gland and amount that can be removed by evaporation and the tear drainage system. Problems with the eyelid or narrowing of the drainage canals can prevent tears being drained into the nose. Some people have more than one factor causing their watering. Even some people with dry eyes may also experience watering due to reflex tearing as the eye attempts to keep itself moist.

WHAT IS A BLOCKED TEAR DUCT?

Tears are produced continuously and are drawn into a small hole in the inner corner of your eyelid known as a punctum. There is one in the upper and lower eyelid. They lead into small tubes known as the canaliculi, which in turn drain into the lacrimal or tear sac. This lies between the corner of your eye and your nose and has a duct at the bottom, which drains into your nose, the nasolacrimal duct. If the nasolacrimal duct blocks the eye becomes watery, and sometimes sticky. Some people develop a painless swelling of the tear sac at the inner corner of the eye and a few get repeated painful infections, like a boil or abscess.

Why does blocked tear duct occur?

The normal system does not have much spare capacity (that is why we “cry”) and the narrow drainage channel becomes even narrower with age, especially if there has been nose or sinus disease.

HOW DO I KNOW IF I NEED AN OPERATION?

Your doctor will examine you to see if your watering is due to a problem in the tear drainage system. This will include syringing water through the tear ducts to see whether there is a blockage. Sometimes an x-ray examination of the tear drainage pathway (a dacryocystogram and/or dacryoscintillogram) is needed to help determine the cause of your watery eye.

WHAT DOES THE SURGERY INVOLVE?

The surgery creates a new pathway between the tear sac and the inside of the nose by removing a small piece of bone between them and bypassing the blocked nasolacrimal duct. This operation is called a dacryocystorhinostomy or DCR for short.

The surgery is done through an endonasal approach avoiding a skin incision and is performed through the nose using an endoscope. If the nasal passage is too narrow a procedure to straighten the nasal septum (septoplasty) may also be done.

In a few patients small soft silicon tubes are placed in the tear canals to keep the passages open while healing takes place.

HOW SUCCESSFUL IS THE SURGERY?

In most cases where the obstruction of the tear duct is in the nose, there is a 90% success rate. This means 1 in 10 people may not improve after surgery.

Rarely if the obstruction is in the tiny tear canals on the eyelid, the success rate is less and can vary between 50-90% depending on the extent of blockage.

WHAT TYPE OF ANAESTHETIC IS NECESSARY AND DO I NEED TO STAY IN HOSPITAL?

The operation takes about 30 minutes and is usually performed under a general anaesthetic where you are asleep, or under local anaesthetic with intravenous sedation to make you sleepy so you do not feel any discomfort.

You will usually have the surgery as a day patient and go home the same day. Although the great majority of patients will have surgery as a day patient, some may elect to stay in hospital overnight. This will usually be for social reasons such as if you live alone. Professor Selva will discuss this with you as necessary at the consultation prior to surgery.
If you do stay overnight then you will be discharged the next morning by the nursing staff if you have no problems. You do not need to see Professor Selva.
It is advisable to be driven home by a friend or relative and not to travel home on public transport. You must not drive yourself.

WHAT SHOULD I DO IN PREPARATION FOR SURGERY?

Blood thinning medications such as aspirin, clopidrogel (Plavix, Iscover) and warfarin can make bleeding more likely during and after surgery. If you are taking these drugs your doctor will tell you if and when to stop these medications prior to surgery. You should also stop anti-inflammatory drugs like ibuprofen (Nurofen), fish oil, ginger, ginseng and garlic containing supplements 2 weeks before surgery.

If you smoke you should stop smoking for at least 3 days prior and 1 week after surgery. This is important as smoking impairs wound healing and increases the risk of infection.

Avoid alcohol for a day before and a day after surgery.

You will need to fast – **no FOOD** from midnight and then **CLEAR fluids only** (water/cordial or black tea/coffee – no milk,) up to two hours before admission.

On the day of surgery please dress casually and wear a top which buttons at the front.

Do not wear any makeup, jewellery or contact lenses.

IS THERE ANYTHING I SHOULD NOT DO AFTER THE OPERATION?

After your operation, have a quiet evening and avoid strenuous exercise, running or heavy lifting (>5kg) for a week. You cannot drive, operate machinery, drink alcohol or take sedative drugs for 24 hours. You can wash and shower normally but avoid a very hot shower/bath in the first week. Do not swim for two weeks.

Do not blow your nose for 2 weeks as this may cause bleeding. You may wipe your nose or gently sniff to clear it. If you sneeze, try to keep your mouth open.

Very hot food and drink should be avoided for 1 week after the operation as they can increase the risk of bleeding.

WHAT HAPPENS AFTER SURGERY?

After the operation you will have some bright blood/pinkish discharge ooze from the nose. This usually stops within a few days. If there is bleeding sit forward and apply an ice pack to the bridge of your nose for 15 minutes by the clock without releasing. You may also suck on an ice cube as this may help reduce the bleeding. Wipe away any bleeding with a clean tissue/towel. Spit out any blood into a bowl on your lap. Repeat for another 15 minutes. If the bleeding is severe or continues for more than half an hour, call Prof Selva or attend your nearest accident and emergency department.

There is usually no significant pain after the surgery. You may note some aching, tenderness, swelling and bruising on the side of the nose and around the eye. If you experience pain take panadol or panadeine (not aspirin or ibuprofen for two weeks as this could cause bleeding). Take 2 tablets every 4 hours as necessary (maximum of 8 in a day).

If you wear glasses you may find that it is a little tender where the glasses rest on the nose and you may need to rest your glasses a little further down the nose for a couple of weeks.

Your nose will feel blocked for about a week, however, remember you are not allowed to blow your nose. You will be given a saline nasal spray which you should spray up the nostril on the side of the surgery twice a day for 2 weeks. You can start this 24 hours after surgery. This helps to wash away any old blood and discharge from the nose. If you have been given antibiotics to take after the surgery then please complete the course as directed.

You may drive after 24 hours and most people require a week off work.

Do not travel on an airplane for 2 weeks after surgery.

Do not be discouraged if your eye is still watery after surgery. It is usual to have a watery eye for some weeks or even months after surgery until the swelling and inflammation has settled.

When you do start to blow your nose after 2 weeks you may notice a slight puff of air over the eye. This occurs in many patients after successful surgery and is a sign that the new drainage passage is open.

If you have had tubes inserted at the time of surgery, they are often just visible in the corner of the eye between the two eyelids. The tubes will be removed at your appointment 6-12 weeks after surgery. They are tied inside the nose and a loop can occasionally protrude from the inner corner of the eyelids. If this happens do not be alarmed: if you are able to gently push the tubes in again then do so. Otherwise make an appointment to be seen at the clinic so they can be repositioned or removed. If the loop is large it can be taped to the side of the nose or onto the cheek until you see the doctor so it does not prevent blinking.

WHAT ARE THE MAIN COMPLICATIONS FOLLOWING A DCR?

Bleeding: A nose-bleed can occur up to 14 days after surgery. This happens to about 1 in 100 patients. In most cases the bleeding will stop by itself or with icepacks, but if it continues or is very heavy you should call the Adelaide Skin & Eye Centre. If after hours please call Prof Selva or attend the accident and emergency department at your nearest hospital.

Infection: Infection of the wound or sinuses may rarely occur in 1 in a 100 people usually within the first week and is treated with oral antibiotics. If you develop a temperature or increased nasal or facial pain then seek medical advice.

Failure of the watery eye to improve: This occurs in 1 in 10 people and can sometimes be improved with a second operation.

If a septoplasty is done, rare complications include a small hole (perforation) in the septum which can give rise to crusting and bleeding. Other rare complications include nasal deformity, infection, cerebrospinal fluid leakage and alteration of sense of smell.

WHAT IS THE FOLLOW-UP TREATMENT?

You will be given an appointment with Professor Selva for 4-6 weeks after surgery to check if the new drainage pathway is open.

If you require any further information or advice about your operation, please call:

Adelaide Skin & Eye Centre 8211 0000 (Monday to Friday 9am to 5pm)