NHS
Torbay and South Devon
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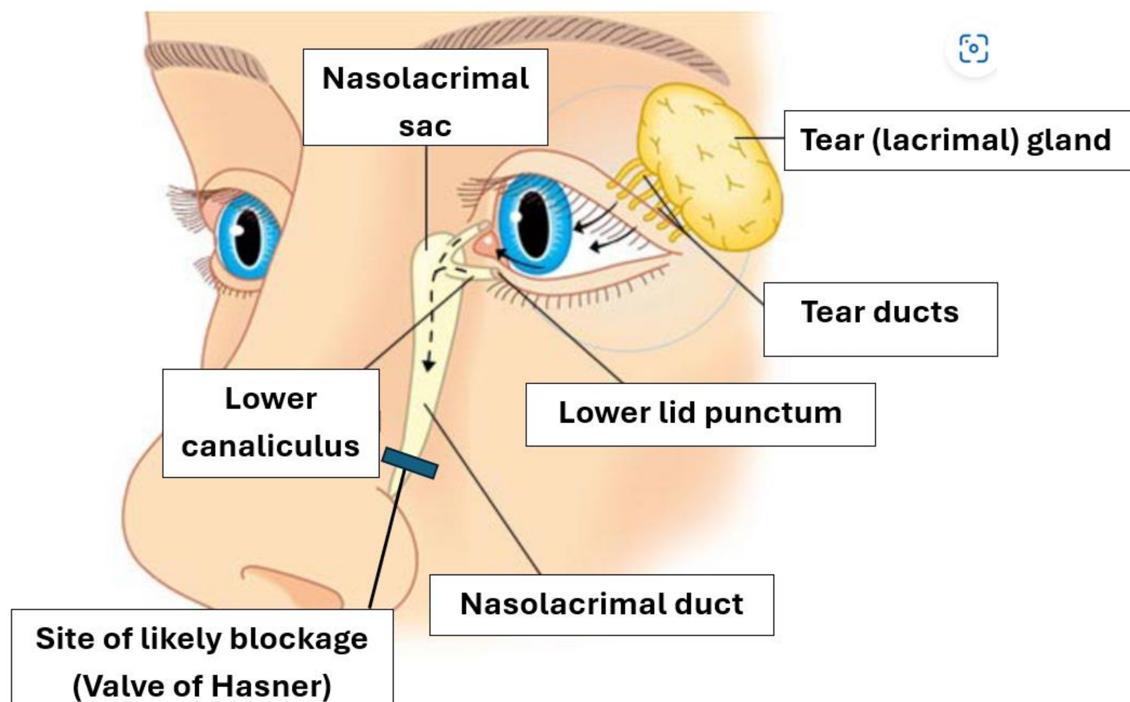
PATIENT INFORMATION

# Nasolacrimal Duct Blockage and Syringing, Probing and Intubation

# Information for parents

Watery/sticky eyes in babies and children



This is a diagram of how the eye produces tears, and how they normally drain away. Tears are produced in the lacrimal gland and drain away through tiny tubes in the corner of the eye (punctum and canaliculus), down the nasolacrimal duct, into the nose.

50% of babies have a blockage of the nasolacrimal duct at birth, towards the bottom, caused by a membrane which hasn't yet naturally opened. In most babies this membrane breaks down very quickly after birth. In a few infants it does not open until 9-12 months of age.

Until the nasolacrimal duct is open, there may be a watery or sticky eye. Sometimes the eye may be very sticky, with yellow or green, sticky discharge collecting in the corner of the eye and sticking the lids together. Rarely there might be episodes of dacrocystitis (swelling and redness on the side of the nose with a discharge from the eye), or infection of the eyelids (preseptal cellulitis).

The best way to treat this condition is by cleaning the eye with cotton wool and clean, previously boiled water as many times a day as is necessary.

You should also firmly massage down the side of the nose from the corner of the eye down to the bottom of the nose, several times a day (for example, repeatedly whilst the baby is feeding or taking a bottle).

You can protect the skin at the corner of the eye or under the eye with a smear of plain Vaseline. This will make the eye easier to clean in the morning, and protects the skin from getting sore because of the salty tears.

With this treatment most cases will resolve by a year old.

**Eye drops to treat the stickiness are not needed unless the white part of the eye is red (conjunctivitis), even if there is a lot of discharge or a swab grows bugs. The discharge is caused by a build-up of tears in the nasolacrimal sac which can't drain away, but get sticky and come back up into the eye.**

Dacrocystitis or cellulitis will usually need antibiotic syrup given by mouth.

## Syringing, probing and intubation

Children whose watering does not resolve by a year old will usually be offered nasolacrimal duct **syringing and probing**. This is a treatment given under a general anaesthetic (asleep). The tear drainage system is flushed through with water, then a fine metal probe is inserted into the nasolacrimal duct from the top (puntum) to overcome the blockage at the bottom of the duct. This is sometimes combined with a tiny snip at the top of the nasolacrimal duct **(one snip)** to make the punctum bigger and make it easier for the tears to enter the top of the duct. The duct is then flushed again with water to check that it is open (patent), this is called **syringing**.

During the procedure, if the blockage is more difficult to clear, then a soft plastic cord will be placed in the nasolacrimal duct which stays in for a few months after surgery, to try to help and keep the nasolacrimal duct open, this is called **intubation**.

Syringing and probing (with intubation if necessary) is successful in improving the watering in 8 or 9 out of 10 cases.

The plastic cord will be removed in clinic about 3 months after surgery. **Very** rarely a second anaesthetic might be needed to remove the tube.

Sometimes, the probing procedure will discover that there is an unusual cause of the blockage, for example there may be a bone causing an obstruction, rather than just a membrane. If this were the case, the probing will not work, and other procedures will be discussed with you in a clinic appointment after your child's operation.

**Your appointments**

During your appointment in the Eye Clinic, your child may need to see the Orthoptists, the Optometrist and the Doctor. Because of this the appointment may take a few hours, and eye drops may be used.

There are other some other eye problems that can cause watery eyes, for example eye infections, lid problems, allergies and very rarely, glaucoma. Your child will be examined for these at the time of their appointment, although it is often possible to tell what the problem is from your description of it to the GP or staff in the eye clinic.

When you are put on the waiting list for tear duct syringing and probing or intubation, you will need at least one further preassessment appointment before we can give you a date for surgery.

**Risks and benefits of syringing, probing and intubation**

As with every operation, syringing and probing has risks, but all serious complications are rare.

The procedure has an 85-90% chance of improving your child's wateriness and stickiness. It might not get rid of it completely.

In older children (older than 2 or 3), the success rate is about 75-80%

The main risk is that the procedure may not work and may need to be repeated, or a different treatment offered (10%)

A second general anaesthetic may be needed to remove the plastic cord if we can't do it in clinic (very rare)

There is a very small chance of the probe damaging structures along the duct and making the watering worse by causing scarring (<1%).

The plastic cord (if used) may move after the surgery and hang out in the corner of the eye. It can usually be easily pulled out without problems if this happens.

The risk of a general anaesthetic causing a serious problem in a healthy child is about 1 in 100 000.

**What will happen on the day?**

Your child will be admitted as a day-case in the morning (usually on a Thursday). You will see the doctor who will be giving the anaesthetic (the anaesthetist), and the eye doctor, before the procedure. The surgical procedure takes between 15-45 minutes, but all children are different and the time it takes them to go to sleep with

the anaesthetic before, and wake up after the procedure is variable. One carer can be with your child as they go off to sleep, and you will be called when you can see them again afterwards.

**After the procedure**

You child may be cross when they wake up, as they will be a bit confused and probably hungry. They will not usually have a dressing on their eye. The procedure is not normally painful. They may have some blood-stained tears, or a small nosebleed, as part of the operation involves the lower part of the inside of the nose. There are no stitches.

They will have eyedrops to use for 4 weeks after the surgery, the nurse looking after you will talk to you about how to use the drops and clean the eye.

There are no restrictions on your child’s activities once the anaesthetic has worn off.

You will have an appointment in 3 months in the eye clinic with the surgeon to see what effect the operation has had. If a cord has been placed (intubation) and it is still in, and hasn’t already fallen out, it will be removed at this appointment. This is a painless and very quick procedure, but it does require your child to be still, so we normally just ask one parent or carer to give your child a big cuddle while the doctor removes the tube.

If it not possible to safely remove the tube in clinic, then a second anaesthetic to remove the tube will be arranged.

Quite often the tube has already come out by the 3 month appointment. Do not worry if it does, it does not need to be replaced.

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For further assistance or to receive this information in a different format, please contact the department which created this leaflet.