Paediatric ophthalmology

Syringe and probing of the nasolacrimal (tear) ducts

About syringe and probing of the nasolacrimal (tear) ducts
Blocked tear ducts are a fairly common problem in children and cause watery, sticky eyes. Although the symptoms resolve before the age of one in 85% of cases, some children continue to have sticky eyes and require surgical treatment to clear the blockage. This procedure takes five to 10 minutes and involves passing a very fine, flexible wire down one or both tear ducts to overcome the blockage and then flushing the duct(s) to ensure that the duct(s) are patent (free flowing).

Intended benefits
Syringing and probing is successful in 95% of cases that are caused by a simple duct blockage. The watering and stickiness usually resolve within a week of the procedure. Sometimes the tear duct has a more complicated type of obstruction, and sometimes the duct might not have developed properly. These problems become apparent at the time of the probing procedure and usually require a more complex procedure. Your doctor will discuss this with you after the procedure.

Who will perform my child’s procedure?
This procedure will be performed by a consultant or a specialist registrar who is experienced in the technique. You will meet the surgeon prior to the operation.

Before your child’s procedure
You may be required to attend ward F3 for a pre-op assessment – where possible we would request this on the same day as your clinic appointment but this is not always possible. Please inform the nurse or doctor if your child has had any recent health problems, and discuss any questions or concerns regarding the surgery that you might have.

We will ask if your child takes any tablets or uses any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all of the medications and any packaging (if available) with you.

This procedure involves the use of general anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet. You will see an anaesthetist before your child’s procedure.

Syringe and probing is usually performed as a day-case procedure and it is very unusual for a child to stay overnight unless there are other medical concerns.

You are welcome to look around ward F3 in advance of the procedure, but please contact them prior to your visit:
Ward F3 Tel: 01223 348313.
If to your knowledge the answer to any of the following is yes, it is important that you tell us. Has your child ever:

- received human growth hormone
- had brain surgery prior to 1992
- or has anyone in your family been diagnosed with CJD

A positive answer will not stop any treatment, it will however allow us to plan your operation so as to minimise any risks.

**Fasting before surgery**

Please ensure that your child has plenty to eat and drink the day before surgery. If your child is very young you might like to wake them in the evening for an extra drink.

To prepare for a general anaesthetic your child must stop eating and drinking for a set period of time before hand.

**Food includes formula baby milk, chewing gum, sucking hard boiled sweets and drinking milk and fruit juice.**

**Clear fluids are fluids through which newsprint can be read and DO NOT include fizzy drinks, red or purple drinks, caffeine drinks or hot drinks.**

This means that (unless you have been told otherwise by your child’s consultant):

- **If your child has been asked to come to ward F3 for 07:15hrs** they must not have anything to eat after 02:00 in the morning (last breast feed to be completed by 04:00). It may be easier to offer your child a snack before bed time and then nothing else to eat until after their anaesthetic. They may drink clear fluids (water or weak squash) until 06:00.

- **If your child has been asked to come to F3 for 11:00** they must not have anything to eat after 06:00 in the morning (last breast feed to be completed by 08:00). Please offer your child an early light breakfast, such as toast or cereal. They may drink clear fluids (water or weak squash) until 10:00.

**On the day of the surgery**

Please arrive at ward F3 (or the paediatric ward as instructed) at 07:15 for morning surgery or 11:00 hrs for afternoon surgery.

If you are unwell please do not accompany your child onto the ward. Visitors must be clear of any illness for 48 hours before arrival. To help us to prevent the spread of infection please ensure that you use the hand washing facilities and alcohol gel provided throughout the ward; especially upon entering and leaving the hospital.

Upon admission your child will need to have swabs taken to test for methicillin-resistant Staphylococcus aureus (MRSA). Please ask if you would like more information about this.

Addenbrooke’s has a number of advice leaflets for patients and their visitors about infection control. They can be accessed from the Addenbrooke’s website: [http://www.cuh.org.uk/addenbrookes-hospital/for-patients/patient-information-and-consent-forms](http://www.cuh.org.uk/addenbrookes-hospital/for-patients/patient-information-and-consent-forms)

If you do not have access to the Internet, please contact PALS on 01223 216756.

Parents are encouraged to stay with their child on the children’s wards.
Upon your arrival the nurses need to complete admission paperwork about your child and family.

The nurse will record your child’s weight and take some swabs to check for MRSA, check your child’s temperature, pulse rate, breathing rate and any other observations that are necessary. These are important measurements to ensure that your child is fit and healthy prior to undergoing any procedure.

Your doctor will be informed of your arrival and they will come to meet you in order to answer any further questions you may have and to complete a consent form if this has not already been completed. Your child’s legal guardian, a person with parental responsibility, will be asked to sign the consent form (if this has not already been signed).

Your child will also see an anaesthetist who will fully explain everything to you regarding your child’s general anaesthetic. This will give you the opportunity to ask questions about the procedure.

There will be a wait while all of the children are assessed.

There is a play room on F3 with a selection of toys, a selection of equipment for your child to engage with ‘colouring in’ and word searches and a television with a selection of DVDs to watch.

Please bring a small toy with you, a quiet activity, such as a book or magazine for example, to help to distract your child and pass the time while they are waiting.

When your child’s nursing team, surgical team and anaesthetist have assessed all children on the theatre list and confirmed that they are fit for theatre, if you so desire, you can be provided with the order on the list your child’s procedure will be taking place.

When your child’s allocated theatre slot is ready, a member of theatre staff will arrive to collect your child and take him/her to theatre. A maximum of two parents are allowed into the theatre area with your child to comfort him/her whilst the anaesthetic is administered. Usually a member of staff from the ward will accompany you from the anaesthetic room to paediatric recovery where you will be issued with a bleep. You are then free to have a break in the concourse and you will be bleeped when your child is in recovery.

**What should my child wear?**

Your child may need to wear a theatre gown for their procedure. Therefore it is important that your child wears loose fitting clothes so that they remain comfortable throughout their stay with us.

We request that you remove all makeup, nail varnish and jewellery (other than those with religious connotation), including earrings, prior to your child’s admission.

Please keep the amount of property that you bring with you on the day to a minimum, as space is limited around waiting areas and bed spaces and we cannot take responsibility for any loss or damage to items left unattended during your time spent with us.

**During the procedure**

While your child is asleep with the general anaesthetic, the tear duct(s) are syringed with a salt solution to find the blockage. Then a fine wire is passed down the tear duct from its opening on the lower lid margin next to the nose. During this probing, the blockage is
cleared. Finally, an orange-stained salt-water solution is flushed through the duct. Following this, we look for this orange dye in the nose to ensure that the tear duct is now functioning normally.

**After the procedure**

You will be bleeped to return to the recovery area when your child’s recovery nurse considers it appropriate for you to be present. The paediatric recovery staff will try to call you to recovery prior to your child waking, however this is not always possible and your child may already be awake by the time you arrive in recovery. Your child may be very sleepy when you first see them, or a little disorientated and tearful. Both reactions are completely normal.

Your child might have an oxygen mask on his/her face to help him/her breathe.

After this procedure, your child will have a small plastic tube in one of the veins of his/her arm. This is called a cannula and is left in place in case your child requires any medication that they are unable to take in their mouth.

Upon return to the ward, close observation will be made of your child. The nursing staff can give your child pain relief if needed.

Following surgery, it is fairly common for children to feel a little unwell and vomit.

Once your child has eaten and drunk (without vomiting), passed urine, is comfortable and back to their usual self, mobilising and communicating appropriately then your child’s cannula can be removed and they can be considered fit for discharge.

**Eating and drinking.** When your child is fully awake, they will be encouraged to drink and eat. We provide snacks for your child, such as a sandwich, crisps, cake, yoghurt and juice.

We also have cereal, toast, milk and squash if they would prefer. Alternatively please feel free to bring in appropriate light snacks. Please bring with you any formula milk that you may require for the day and ask a member of staff if this requires warming. If your child has any special dietary requirements, please discuss this with your allocated nurse on arrival.

For safety reasons if you have a hot drink please take care not to leave it unattended.

**Leaving hospital.** Parents are expected to provide transport to get home. The use of a bus may not be appropriate. If transport is difficult then ask your GP surgery if hospital transport can be arranged.

Your child is undergoing a planned surgical procedure therefore it would be helpful if you ensure that you have sufficient supplies of simple pain relief such as paracetamol and ibuprofen at home, in anticipation of some minor discomfort.

You should plan for your child to spend at least half a day on F3. This is an estimated average length of stay; please bear this in mind when planning your day.
**Car parking:** There are car parking facilities in the multi-storey car park, close to the hospital main entrance. Discount can be obtained by getting your car parking ticket stamped by the ward and taking this or your appointment letter to the customer services desk (by the pay point in the car park).

**Resuming normal activities including work.** Your child should be well enough to resume their normal routine (including swimming) from the day after surgery.

**NB:** For several hours following surgery it is common to see some blood, or orange-dye-stained tears and blood, or (orange/yellow) dye-stained discharge from the nose.

**Check-ups and results:** Before leaving hospital you should be given:
- Antibiotic eye drops to use for one week.
- A follow-up appointment for the eye clinic is not usually made unless this is your child’s second syringe and probing procedure or there are other eye problems (if your child still has significant problems with watering and sticky eyes four to six weeks after surgery, another procedure may be required – please ask your GP to re-refer you to the clinic).

**Significant, unavoidable or frequently occurring risks of this procedure**
- Syringing and probing is a very safe procedure, but occasional nose bleeds can occur up to three days following surgery.
- More complicated obstructions (found in 5% of cases) might require further surgery, such as the insertion of a silicone tube in the tear duct, or a surgical procedure to make a new drainage system.

**Alternative procedures that are available**
Simple massaging of the tear duct(s) can sometimes overcome the obstruction. In general, this is more successful in infants under the age of one year. Some surgeons, especially in the USA, probe the ducts of young babies (less than six months of age) without an anaesthetic in their outpatient departments. We do not favour this approach in the UK because many blockages of tear ducts in young babies will resolve if they are left alone.

**Information and support**
Additional information is available in the patient information leaflet entitled ‘Children with sticky and watery eyes due to failure of tear drainage’. If you have any questions or anxieties, please feel free to ask a member of staff.
- Ward F3: (01223) 348313
- Paediatric ophthalmology nurses telephone number (01223) 596414 (Monday – Friday 08:00-17:00hrs, 24 hour answerphone)
Further information
http://eyewiki.aao.org/Congenital_Nasolacrimal_Duct_Obstruction

If you have any other children, please try to avoid bringing them along with you on the day. It is not always appropriate to have additional children on the ward and we do not provide child minding facilities. No siblings are allowed into the theatre or recovery areas.

As we plan for your child’s stay with us to only be for a few hours visitors are not encouraged. However, people are welcome to telephone you to enquire about your child on (01223) 348313.

We encourage children to rest following their general anaesthetic. Due to this fact please be mindful to ensure that mobile phones are in silent mode for the duration of your child’s time with us. Thank you.

Anaesthesia

Anaesthesia means ‘loss of sensation’. There are three types of anaesthesia: general, regional and local. **The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness.** Sometimes different types of anaesthesia are used together.

Before your operation

Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery. To inform this decision, he/she will need to know about:

- your general health, including previous and current health problems
- whether you or anyone in your family has had problems with anaesthetics
- any medicines or drugs you use
- whether you smoke
- whether you have had any abnormal reactions to any drugs or have any other allergies
- your teeth, whether you wear dentures, or have caps or crowns

Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and will review your test results.

Pre-medication

You may be prescribed a ‘premed’ prior to your operation. This is a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects specific for the procedure that you are going to have or for any medical conditions that you may have. Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

Moving to the operating room or theatre

You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room and **before starting your anaesthesia, the medical team will perform a check of your name, personal details and confirm the operation you are expecting.**
Once that is complete, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted. If a regional anaesthetic is going to be performed, this may be performed at this stage. If you are to have a general anaesthetic, you may be asked to breathe oxygen through a face mask.

It is common practice nowadays to allow a parent into the anaesthetic room with children; as the child goes unconscious, the parent will be asked to leave.

**General anaesthesia**

During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation. Your anaesthetist achieves this by giving you a combination of drugs.

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you at the correct level of unconsciousness for the period of the surgery. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement.

**What will my child feel like after the operation?**

Your child will have been given some pain relieving medication in theatre to prevent pain after the operation. Most children recover from this surgery very quickly without much pain although they may have some temporary discomfort from their eyes or nose.

**What are the risks of anaesthesia?**

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to your child will depend on his / her general health.

**Very common (one in 10 people) and common side effects (1 in 100 people)**

- Feeling sick and vomiting after surgery
- Sore throat
- Dizziness, blurred vision
- Headache
- Bladder problems
- Damage to lips or tongue (usually minor)
- Itching
- Aches, pains and backache
- Pain during injection of drugs
- Bruising and soreness
- Confusion or memory loss

**Uncommon side effects and complications (one in 1000 people)**

- Chest infection
- Muscle pains
- Slow breathing (depressed respiration)
• Damage to teeth
• An existing medical condition getting worse
• Awareness (becoming conscious during your operation)

Rare (one in 10,000 people) and very rare (one in 100,000 people) complications
• Damage to the eyes
• Heart attack or stroke
• Serious allergy to drugs
• Nerve damage
• Death
• Equipment failure

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK.

For more information about anaesthesia, please visit the Royal College of Anaesthetists website: www.rcoa.ac.uk

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We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:
If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

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