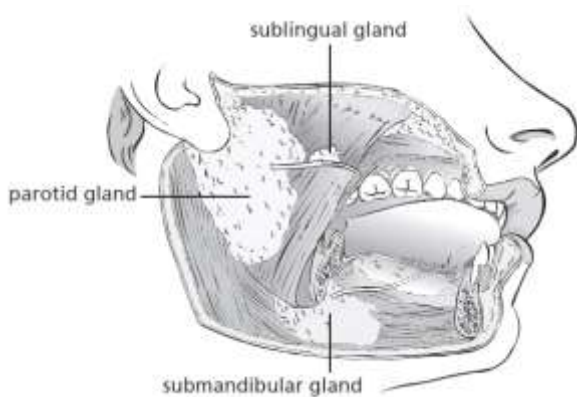


Salivary gland injections with botulinum toxin: information for families

Injecting botulinum toxin into the salivary glands reduces saliva production, so should improve your child's dribbling and drooling. This information sheet from Great Ormond Street Hospital (GOSH) explains about salivary gland injections with botulinum toxin, why it might be suggested and what to expect when your child has the injections. An Easy Read information sheet is also included for your child.

Botulinum toxin is produced naturally by the bacterium *Clostridium botulinum*. When purified, it can be used in tiny, controlled doses to relax excessive muscle contraction. It has been used as a medicine for many years in the UK.

Dribbling and drooling can be a problem with various neuromuscular diseases, such as cerebral palsy. The botulinum toxin acts on the nerves around the salivary glands reducing the amount of saliva produced.



The injections are carried out in the Interventional Radiology department by a doctor (radiologist) who specialises in using imaging to carry out procedures.

What happens before the injections?

You will already have received information about how to prepare your child for the procedure in your admission letter.

You may need to come to GOSH before the procedure so that your child can have a pre-admission assessment to check that they are well enough. The appointment may involve taking blood samples and other tests.

The person bringing your child to the test should have 'Parental Responsibility' for them. Parental Responsibility refers to the individual who has legal rights, responsibilities, duties, power and authority to make decisions for a child. If the person bringing your child does not have Parental Responsibility, we may have to cancel the test.

The doctor will explain the procedure in more detail, discuss any questions you may have and ask you to sign a consent form giving permission for your child to have the angiogram. If your child has any medical problems, please tell the doctors.

What does the procedure involve?

Almost all salivary gland injections are carried out as a day case while your child is under general anaesthetic.

It is important that your child does not eat or drink anything for a few hours before the anaesthetic. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure. You will be informed the night before the procedure of the time that your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the anaesthetic. Fasting times are provided in your admissions letter.

It is equally important to keep giving your child food and drink until those times to ensure they remain well-hydrated and get adequate nutrition. This may involve waking your child in the night to give them a drink which we recommend.

When your child is under general anaesthetic, the radiologist will use ultrasound to identify the exact position of your child's salivary glands. The salivary glands lie along the jaw line.

They will then insert a small needle through the skin into the glands, again using ultrasound to guide them, before infusing the botulinum toxin in and around the gland. Once enough botulinum toxin has been infused, they will remove the needle. No dressing is needed as there is only a tiny puncture in the skin.

The injection procedure lasts about 30 minutes.

Are there any risks?

Every anaesthetic carries a risk, although this is extremely small. The risk of infection with this procedure is extremely small as no incisions are made in the skin. The botulinum toxin can affect the muscles in the jaw on a temporary basis, making chewing more difficult.

There is a very small chance that the nerves around the salivary glands could be affected by the botulinum toxin, which could cause swallowing difficulties and aspiration (breathing into the lungs) of food and drink. Using ultrasound to identify the exact position of the glands reduces the chance of this happening.

Salivary gland injections with botulinum toxin are not a permanent solution to excessive dribbling and drooling and they are not effective for every child. If they are effective, you should notice a reduction in your child's dribbling and drooling between three and eight days after the injections.

It may take longer for positive effects to show in some children, occasionally taking two to four weeks. Some children may only show partial effects. The effects of the injections last between three and six months so the procedure may need to be repeated in future.

Are there any alternatives?

Medicines can be used to 'dry up' your child's saliva but it can be difficult to achieve a good balance between drying your child up too much and not giving an adequate dose.

Surgery to re-position the salivary gland duct (opening into the mouth) to the back of the mouth is also possible. This procedure is called a bilateral submandibular duct transposition (BSMDT).

What happens afterwards?

Your child will return to the ward after they have recovered from the general anaesthetic. Some children feel sick and vomit after a general anaesthetic. Your child may have a headache or sore throat or feel dizzy, but these side effects are usually short-lived and not severe. Your child can start eating and drinking as normal once they feel like it.

Going home

If your child does not need to stay in hospital for other treatment, you can return home once they have recovered from the anaesthetic.

Your child may experience pain or discomfort around the injection site. This should only last for a couple of days and paracetamol is usually enough to make your child feel more comfortable.

Some children complain of mild flu-like symptoms in the days after injections, which may be treated with paracetamol if necessary.

Usually your child should feel well enough to return to school the day after the injections.

You should call the hospital if:

- The injection site looks red, swollen and feels hotter than the surrounding skin
- The injection site is oozing
- Your child has difficulty swallowing or chewing
- Your child is in a lot of pain and pain relief does not seem to help
- Your child has a temperature of 38°C or higher.

Further information and support

If you have any questions, please telephone 020 7405 9200 and ask for the ward from which your child was discharged.

Having salivary gland injections



You dribble a lot at the moment because of your medical condition. The dribble comes out of your salivary glands around your chin. You are coming to hospital for a small operation.



This operation will stop you dribbling so much.



While you are under general anaesthetic, the doctor will use an ultrasound scan to check your salivary glands.



The doctor will put an injection into your salivary glands.



You can wake up from the anaesthetic in a bed on the ward.



You can eat and drink again when you feel like it.



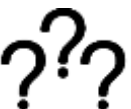
You can go home when you have had something to eat and drink.



You might feel a bit ill when you get home. You can take pain medicine to help.



You can go back to school the day after the operation.



Please ask us if you have any questions.