What is a submandibular duct?
Saliva is a substance produced by the body to help with swallowing and digestion of food. It can also help with oral hygiene – that is, keeping the mouth clean. Saliva is produced by the salivary glands. There are three major salivary glands: the parotid gland at the back of the cheek, the submandibular gland in the floor of the mouth and the sublingual gland under the tongue. Saliva passes from these glands into the mouth through narrow tubes called ducts. The submandibular duct opens into the floor of the mouth either side of the tongue.

What is bilateral submandibular duct transposition (BSMDT) and why does my child need one?
A bilateral submandibular duct transposition (BSMDT) is a surgical procedure that moves the ducts on both sides of the tongue further back in the mouth. This makes excess saliva easier to swallow so reduces dribbling and drooling. Dribbling and drooling can be a problem with various neuromuscular diseases, such as cerebral palsy.
**What happens before the operation?**

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.

On the day of the operation, you will meet the surgeon who will explain the operation in detail, discuss any worries you may have and ask you to give permission for the operation by signing a consent form. An anaesthetist will also see you to explain your child’s anaesthetic in more detail. If your child has any medical problems, like allergies, please tell the doctors.

**What does the operation involve?**

While your child is under general anaesthetic, the surgeon will disconnect the ducts from their original position and tunnel them under the lining of the mouth towards the back of the mouth. The incisions are closed with dissolvable stitches. The surgeon will inject some local anaesthetic into the area during the operation so it is not too uncomfortable when your child wakes up from the general anaesthetic. The operation lasts between one and two hours.

**Are there any risks?**

Every anaesthetic carries a risk of complications but this is small. After an anaesthetic, children sometimes feel sick and vomit, may have a headache, sore throat or feel dizzy. These side effects are usually short-lived. There is a small risk that the nerve supplying sensation to the tongue could be damaged during the operation. Any surgery carries a risk of infection. Your child will have a course of antibiotics after the operation to reduce this risk.

**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. Injections with botulinum toxin into the salivary glands may also be suggested. 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 about two weeks after the injections. The effects of the injections last between three and six months so the procedure may need to be repeated in future.
What happens after the operation?

After the operation, your child will recover from the anaesthetic in the recovery room. When they are more awake, your child will be moved back to the ward.

Your child will usually have a cannula (thin plastic tube) in their hand or foot so that they can be given intravenous fluids or medication if they need it. We will make sure that your child has regular pain relief so that eating and drinking is more comfortable. We will encourage your child to start to eat and drink again once they feel able. We will give your child a seven-day course of antibiotics to prevent any infection after the operation. Please make sure your child takes the entire course, even if they are feeling better.

Going home

Most children stay overnight after the operation to make sure that they are recovering well. Before you leave GOSH, we will advise you about aftercare and give you antibiotics and pain relief to continue at home. The effects of the operation will usually show two to three weeks after the operation – that is, your child will not dribble or drool as much as before. We will send you an outpatient appointment for around six to eight weeks after the operation.

You should call the hospital or your family doctor (GP) if:

- 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

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

Notes

Compiled by Peter Pan Ward in collaboration with the Child and Family Information Group

Great Ormond Street Hospital for Children NHS Trust
Great Ormond Street,
London WC1N 3JH

www.gosh.nhs.uk