



Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families

# Tendon sheath injections in the Interventional Radiology department

This information sheet explains about the tendon sheath injection procedure carried out in the Interventional Radiology department at Great Ormond Street Hospital (GOSH).

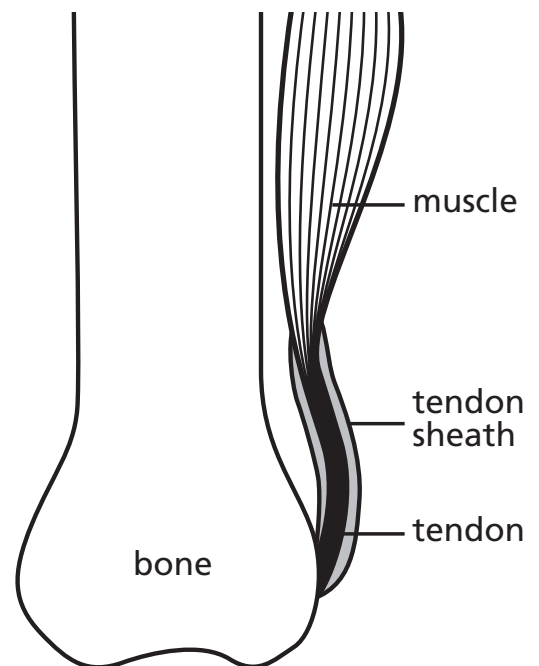
## What are tendon sheath injections and why does my child need them?

Tendon sheath injections are suggested when the tissues around a tendon are painful, swollen or difficult to move. This can be caused by many conditions, but the most common is arthritis (inflammation of the joints).

A tendon is a cord of strong fibrous tissue that connects muscle to bone. It is what allows the muscle to bend and straighten a joint when it contracts. Most tendons are surrounded by a sheath or sleeve of synovial tissue. This tissue produces tiny quantities of fluid that lubricate the tendon and allow it to slide smoothly over the joint and work effectively.

In some inflammatory conditions, the synovial tissue becomes thickened and irritable, so that it produces too much fluid and causes pain. Injecting steroid medicine into the fluid within the tendon sheath can treat the inflammation, decreasing the pain and increasing the range of movement in that area.

Your doctor will suggest tendon sheath injections based on your child's current symptoms, the underlying cause of these symptoms and recent imaging studies. Tendon sheath injections on their own are unlikely to offer a 'cure' but can be helpful alongside other treatments such as physiotherapy, splinting and other longer-term medicines.



## What happens before the procedure?

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 doctor will also discuss whether your child needs a general anaesthetic for the procedure. Older children and young people may prefer to be awake and may be offered a gas and air mixture called Entonox® to help with anxiety and pain relief.



## What does the procedure involve?

If they are having the tendon sheath injections under general anaesthetic, it is very important that your child's stomach is as empty as possible on the day of the procedure, as this reduces the risk of vomiting during and after the anaesthetic. If someone vomits during an anaesthetic, there is a chance that the stomach contents could get into the lungs, damaging them. Your child's nurse will explain exactly what time your child can last eat or drink before the procedure, but as a general rule, the following applies.

### Food and milk:

Breast-fed babies – give them their last feed four hours before the procedure is scheduled

Bottle-fed babies and children – give them their last milk feed, food or milk drink six hours before the procedure is scheduled

### Clear fluids:

All babies and children can have a drink of water or weak squash, but no fizzy drinks, until two hours before the procedure is scheduled but no food or milk for six hours before.

Please follow these instructions carefully, otherwise your child's procedure may be delayed or even cancelled.

If your child is having the joint injections while awake, they will not need to fast but it is preferable not to have a heavy meal beforehand.

Once your child is under general anaesthetic or awake on the procedure table, the doctor will clean the area over the joint and use ultrasound to assess the tendon sheath and confirm that it looks abnormal and can be treated. They then insert a very small needle into the tendon sheath (sleeve surrounding the tendon). The doctor uses real-time ultrasound images to guide the needle into place. When it is in the correct position, they will inject a mixture of steroid medicine and local anaesthetic around the tendon. They

will then remove the needle and may cover the injection site with a small plaster if required.

## 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. Occasionally it is difficult to inject much medicine into the tendon sheath space, as the doctor needs to avoid injecting the steroid into the tendon itself. If the sheath is not very inflamed, it can be difficult to do this safely, as there is not enough space around the tendon. If this is the case, other medicines may be prescribed to treat your child's symptoms.

## Are there any alternatives to tendon sheath injections?

Physiotherapy and medicines taken by mouth or intravenously can be used as an alternative to tendon sheath injections. The doctor will explain all the options suitable for your child before you make a decision.

## What happens afterwards?

Your child will return to the ward after they have recovered from the general anaesthetic if they have had one. 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 or sedation. The doctor on the ward will give you advice regarding rest, physiotherapy and exercises after the procedure.



**You should call the hospital if:**

- **The injection site looks red, swollen and feels hotter than the surrounding skin for longer than 24 hours after the procedure**
- **The injection site is oozing**
- **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**

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Compiled by the Interventional Radiology team in collaboration with the Child and Family Information Group  
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