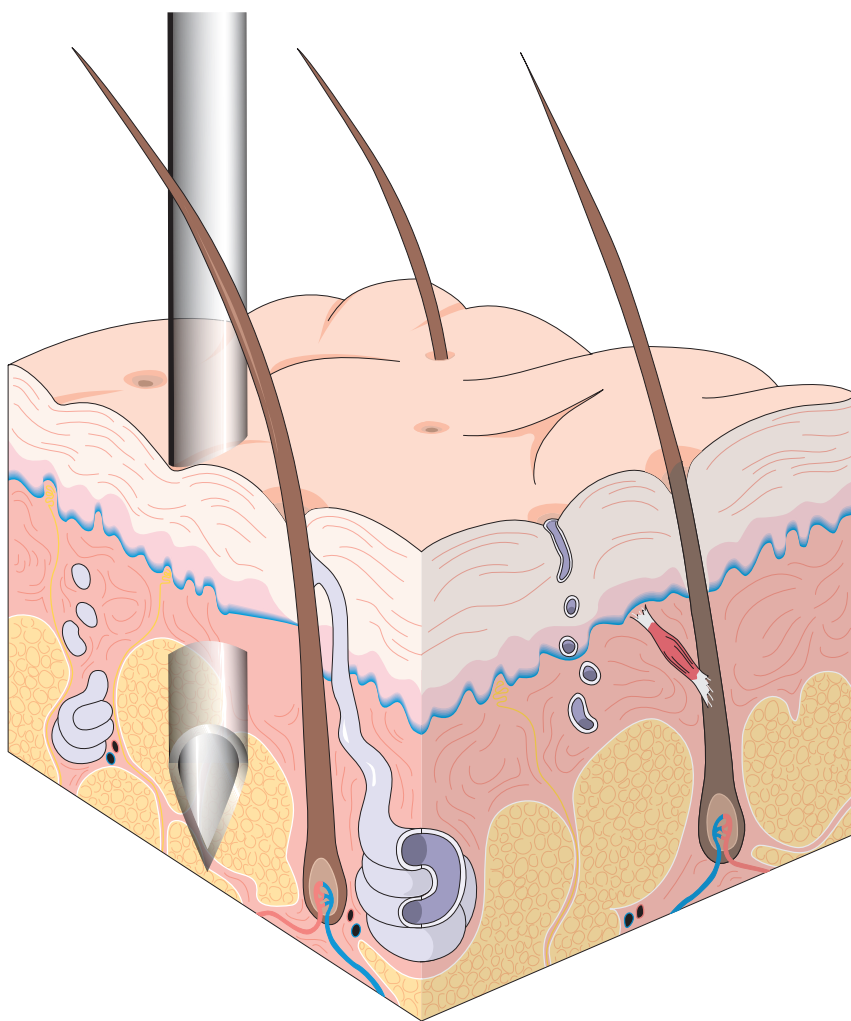


Great Ormond Street Hospital for Children NHS Foundation Trust:
Information for families and children's community nursing teams

Lanreotide injections

This information sheet from Great Ormond Street Hospital (GOSH) describes lanreotide injections, how they are given and some of its side effects.

Each person reacts different to medicines so your child will not necessarily suffer every side effect mentioned. If you have any questions or concerns, please ask your doctor, nurse or pharmacist or telephone one of the contact numbers on the information sheet.

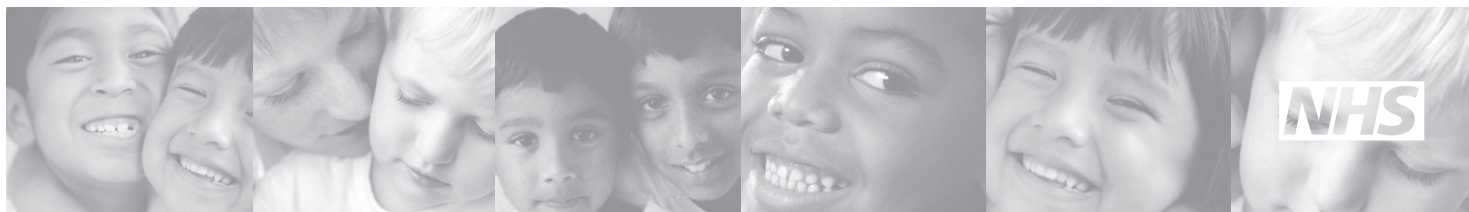


What is lanreotide?

Lanreotide is used to treat persistently low blood sugar levels (hypoglycaemia) caused by the body producing too much insulin (hyperinsulinism). It is a manmade version of the natural hormone, somatostatin, which stops certain cells in the pancreas releasing insulin. It can be used alone or together with the medicines diazoxide, chlorothiazide and octreotide as directed by your child's doctor.

The use of lanreotide injections in children is not currently licensed in the UK. Medicines are often used outside of their license (off-label) in children because trial data is not available for a specific use. This is not necessarily hazardous but should be explained and agreed before use. Your doctor will explain this further to you.

Lanreotide is available in a pre-filled syringe containing 60mg lanreotide under the brand name Somatuline® Autogel®. It is injected into the deep layer of subcutaneous fat under the skin, usually in the upper and outer part of the buttock. It is a white to pale yellow semi-solid gel – a similar texture to petroleum jelly. The starting dose of lanreotide is often 30mg but is adjusted



according to your child's response to the medicine. The injection is given every 28 days – the aim is that the daily doses of octreotide or diazoxide can be gradually cut down and then stopped. During the weaning process, we will give you clear written instructions and a hypoglycaemia plan as well as regular support from the Congenital Hyperinsulinism Clinical Nurse Specialists at GOSH.

Before starting lanreotide injections, your child will need a series of blood tests plus an ultrasound of their liver and gall bladder. During treatment, your child will then need to have blood tests along with an ultrasound scan of their gall bladder every six months.

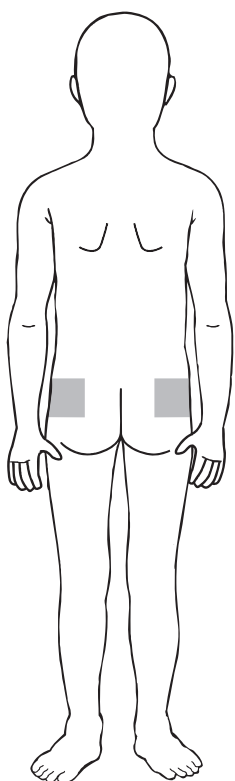
Will the injection hurt?

Subcutaneous injections can be painful but there are various ways you can reduce this pain.

Avoiding nerve endings

The skin is full of nerve endings, which can send a pain message to the brain if they are touched by the needle. They branch out throughout the skin but you can work out where they are by gently pressing the skin to see which area is less painful.

We also recommend giving your child a dose of pain relief medicine about 30 minutes before the injection and using local anaesthetic cream on the injection area so that the skin is numb. Some children also use Buzzy® which vibrates the skin and confuses the nerve endings so the injection hurts less.



Rotation of injection sites

One important way to reduce the pain and irritation of injections is to rotate the position on the body where you give the injections. We recommend using the upper and outer part of the buttocks for lanreotide injections as there is usually a substantial amount of subcutaneous fat in this area. This also reduces the risk of hitting the sciatic nerve with the injection.

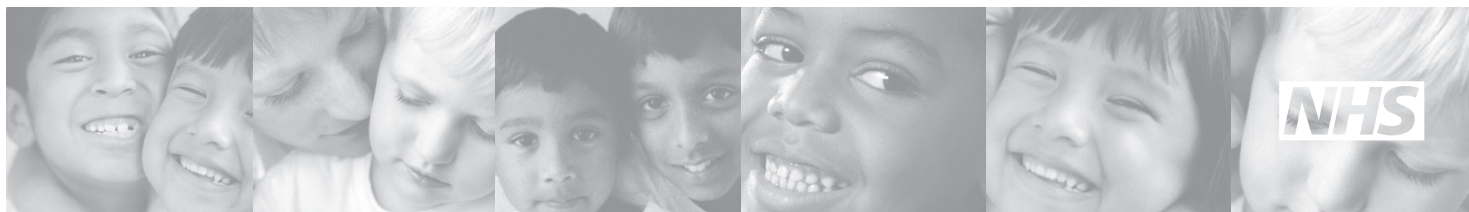
We also recommend that you give the injection into alternate buttocks each month to avoid any soreness. Changing injection area also reduces the risk of lipohypertrophy (fatty lump) developing. While this is not dangerous, it will affect how the medicine is absorbed.

Distraction

There are lots of techniques you can use to prepare your child for injections and to distract them while the injection is happening. Talk to your play specialist or read our *Distraction therapy* information sheet for ideas.

Preparing the injection

1. Collect together all the equipment you will need:
 - Local anaesthetic cream
 - Pain relief medicine as advised
 - Syringe package
 - Cotton wool or gauze
 - Plaster or medical tape
 - Injection site rotation chart
2. Wash your hands with soap and water
3. Put some local anaesthetic cream on the injection site and wait for the skin to become numb – the package insert will tell you how long to wait

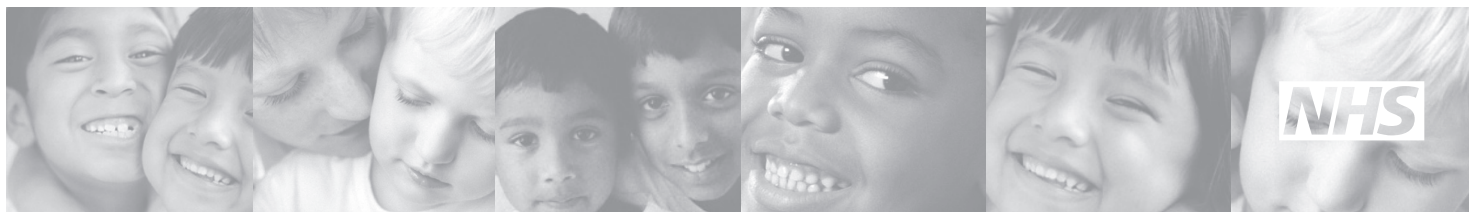


4. Give your child a dose of pain relief medicine according to the instructions on the bottle or package
5. Take the syringe package out of the fridge and leave to reach room temperature for at least 30 minutes before you give the injection
6. Remove the syringe from the packaging and place on a clean surface
7. Remove the protective cover over the plunger by twisting it sharply and throw away
8. If giving 30 mg dose then measure the length of the barrel of the syringe as below
 - The barrel of the syringe containing 60mg is about 3.4cm long so for a 30mg dose, it will be marked at half the length, which is 1.7cm, using the 'mark a dose' tape supplied by GOSH
9. Remove the protective cover from the needle
10. Push the plunger up to the top of the marker squirting the unwanted amount of medicine into a tissue or gauze square and throw away
11. Replace the protective cover over the needle until you are ready to give the injection



Giving the injection

1. Wash your hands with soap and water – health care professionals may choose to wear gloves
2. Your child should lie flat on their tummy or rest over your lap so their buttocks are upwards
3. Start distraction therapy as you have been shown previously
4. Wipe off the local anaesthetic cream with a tissue
5. Clean skin with alcohol wipe
6. If using, hold Buzzy® over the injection area for 30 seconds
7. Remove the protective cover from the needle and throw away
8. Stretch the skin around the planned injection site between your thumb and forefinger so that it is taut
9. Insert the needle into the skin at a 90 degree angle to a depth as taught by clinical staff
10. Push the plunger in fully until you hear a click, hold the plunger in place with your thumb and wait 10 seconds
11. While still holding the plunger down with your thumb, withdraw the needle from the skin
12. Release the plunger so that the needle retracts back into the protective sheath
13. Press a piece of cotton wool or gauze over the injection site for a few seconds – do not rub the area
14. Apply a plaster over the injection site if needed
15. Throw the syringe away in a 'sharps' bin as you have been taught
16. Mark the injection site on your site rotation chart



Who should not use lanreotide injections?

People with the following conditions should discuss using lanreotide with their doctor.

- Hypersensitivity to lanreotide or any of its ingredients
- Pregnant, could be pregnant, trying to become pregnant or breast feeding

What are the side effects?

Rarely allergic type reactions have been seen. Local reactions at the site of injection include pain, sensation of stinging, tingling, and burning as well as redness and swelling.

No severe side effects have been reported but lanreotide can cause:

- Loss of appetite, sickness, tummy pain, bloating and/or diarrhoea
- Gall bladder or liver problems, possibly showing as yellowing of the skin or whites of the eyes
- Hair loss
- Growth issues (only if given in high doses)

Interaction with other medicines

Some medicines can react with lanreotide, altering how well they work. Always check with your doctor or pharmacist before giving your child any other medicines, including herbal or complementary medicines. The following are known to interact with lanreotide.

- Ciclosporin
- Beta blockers

Important information

- Keep medicines in a safe place where children cannot reach them
- Keep the medicine in the fridge in their original packaging. Take them out of the fridge and leave at room temperature for at least 30 minutes before giving the injection.

Useful numbers

GOSH Switchboard – 020 7405 9200

Pharmacy Medicines Information
– 020 7829 8608 Monday to Friday
from 9am to 5pm

Congenital Hyperinsulinism Clinical
Nurse Specialists – ext 0360 or bleep 1016

Compiled by the CHI team and Pharmacy department
in collaboration with the Child and Family Information Group

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Record of learning

Lanreotide injections

	Watched	Supervised practice	Competent
Preparing lanreotide injection			
Giving injections into pad			
Giving lanreotide injection			
Disposal of lanreotide			
Trouble shooting			

Parents to sign re competency: