



Perchlorate discharge test

This information explains about the perchlorate discharge test, what is involved and what to expect when your child comes to Great Ormond Street Hospital (GOSH) for the test.

What is a perchlorate discharge test?

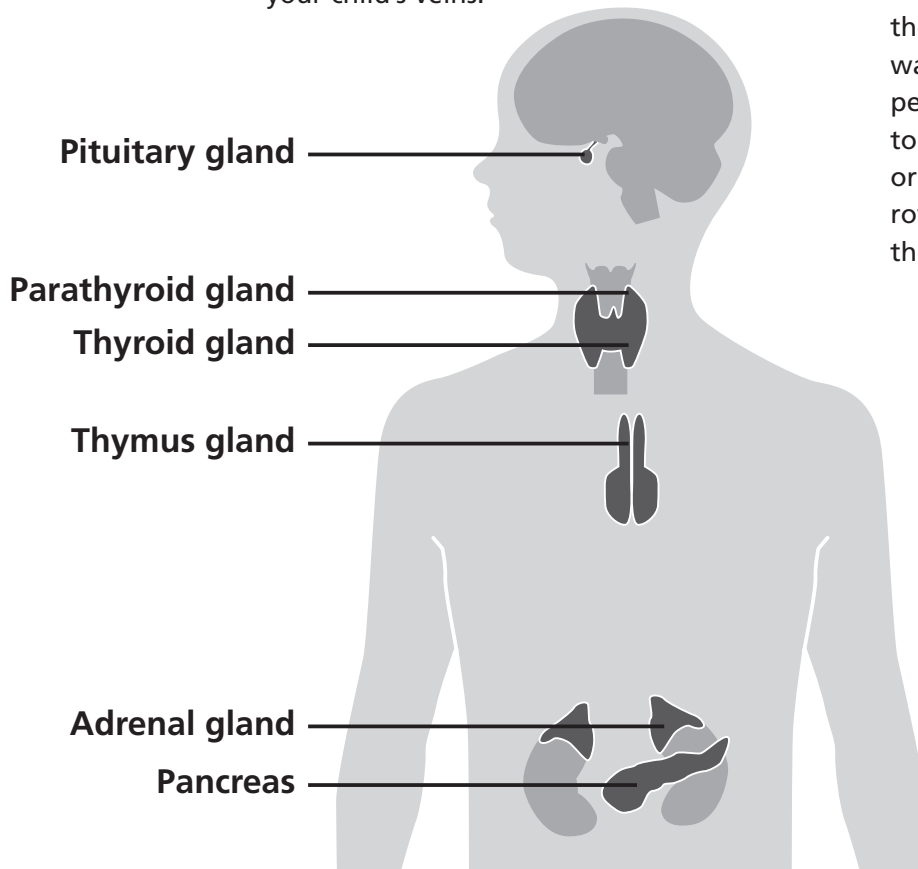
A perchlorate discharge test is used to show how well the thyroid gland in your child's neck takes up a substance called iodine. It is used to diagnose certain thyroid conditions. The thyroid gland is part of the endocrine system, which organises the release of hormones within the body. Hormones are chemical messengers that switch on and off processes within the body. The test works by injecting a substance called an isotope into your child's veins.

Are there any alternatives?

Various types of test such as CT, ultrasound and x-rays can show the size and shape of your child's thyroid but not how well it is working. The results of the test are then used to plan your child's treatment.

When you receive your appointment letter

If you are unable to keep this appointment, please inform the department at least two weeks beforehand. Sometimes, we can offer the appointment to another child on the waiting list. As so many children and young people need to use our services, we have had to introduce a policy where if a child cancels or does not attend two appointments in a row, we will close their referral and inform their GOSH consultant.





One week before the appointment

If your child is taking thyroid medicine or medicines containing iodine (including steroids), please discuss this with your doctor as some medicines may need to be stopped three to four weeks before the scan.

If your child has had a reaction to iodine or medicines containing iodine in the past, please telephone us.

If you are pregnant or think you could be pregnant, please let us know at least two days before your child is due to come to GOSH for the injection. There is a risk that the isotope given to your child could harm your unborn baby, so we advise you to organise another adult to look after your child for the first 24 hours after the test. If this is not possible, we may have to reschedule your appointment. If your daughter is 12 years old or older, we will ask her about her periods and any possibility that she could be pregnant.

The day of the test

Please arrive at the Nuclear Medicine department at the time stated in your child's appointment letter. This is one hour before the injection is due to be given, so your child can have local anaesthetic cream applied. This will numb the skin so the needle does not hurt so much. If your child is apprehensive or scared of needles, please telephone us beforehand and discuss your concerns with our play specialist.

If your child does not want local anaesthetic cream or weighs less than 5kg, please arrive 15 minutes before the injection.

Your child will be able to listen to music during the test, so please bring along any favourites. It can also help if your child has a favourite toy to hold as well.

The injection and test

Once the local anaesthetic cream has made your child's skin numb, we will ask you and your child to come to have the injection and test. Your child will not need to get undressed for the test. The radiographer will put a cannula (thin, plastic tube) in your child's hand, arm or foot and inject the isotope. Your child will need to lie very still on the scanning bed while some pictures are taken. We can put sandbags around your child to help keep him or her still. Around 30 minutes after this injection, your child will have another injection into the cannula. After this injection, the radiographer will remove the cannula and put a plaster over the area. A series of pictures are taken over about one hour.

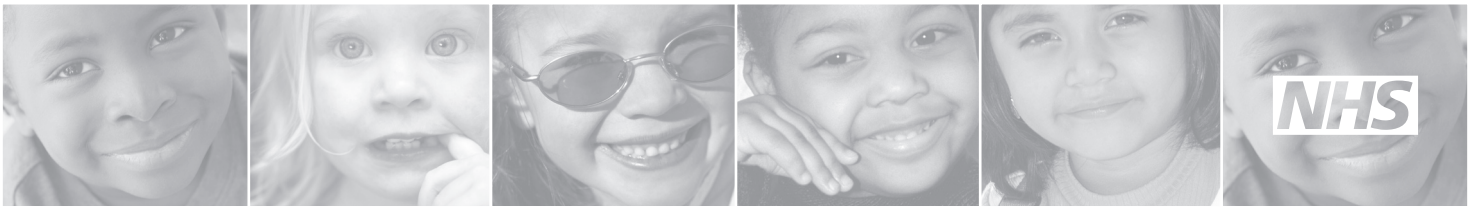
After the test

If your child is not having any further tests or tests, you will be free to go home. The radiographer will send a report about the test to your child's doctor.

Are there any risks?

There are no side effects to the test. The isotope that we inject will not interfere with any medicines your child is taking. The isotope contains a very small amount of radioactivity, similar to the amount we receive from natural background radiation in about six months. This is not a danger to your child as the isotope becomes inactive in the hours following the test. However, it is necessary to take some precautions for the first 24 hours after the test, while the isotope is leaving your child's body. These are explained in the next section.

There is a risk that the isotope could harm the unborn baby, so please follow the instructions earlier in this leaflet to minimise these risks.



Going home

For the first 24 hours after the test:

- Your child should drink plenty of fluids. This will allow the isotope to pass out through his or her body as quickly as possible.
- If your child is toilet-trained, he or she should go to the toilet as often as possible. Hand washing afterwards is very important.
- If your child is in nappies, you should change them frequently and dispose of the dirty nappy in an outside bin. Wash your hands thoroughly after nappy changing.
- If you are pregnant or think you could be pregnant, you should avoid contact with your child's bodily fluids, such as urine (wee), faeces (poo) and vomit.
- Your child should continue to take any medicines as usual. The isotope will not affect them in any way.

**If you have any questions,
please telephone the Radiology
department on 020 7829 8615**

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