



Thyroid and parathyroid scans

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

What is a thyroid scan?

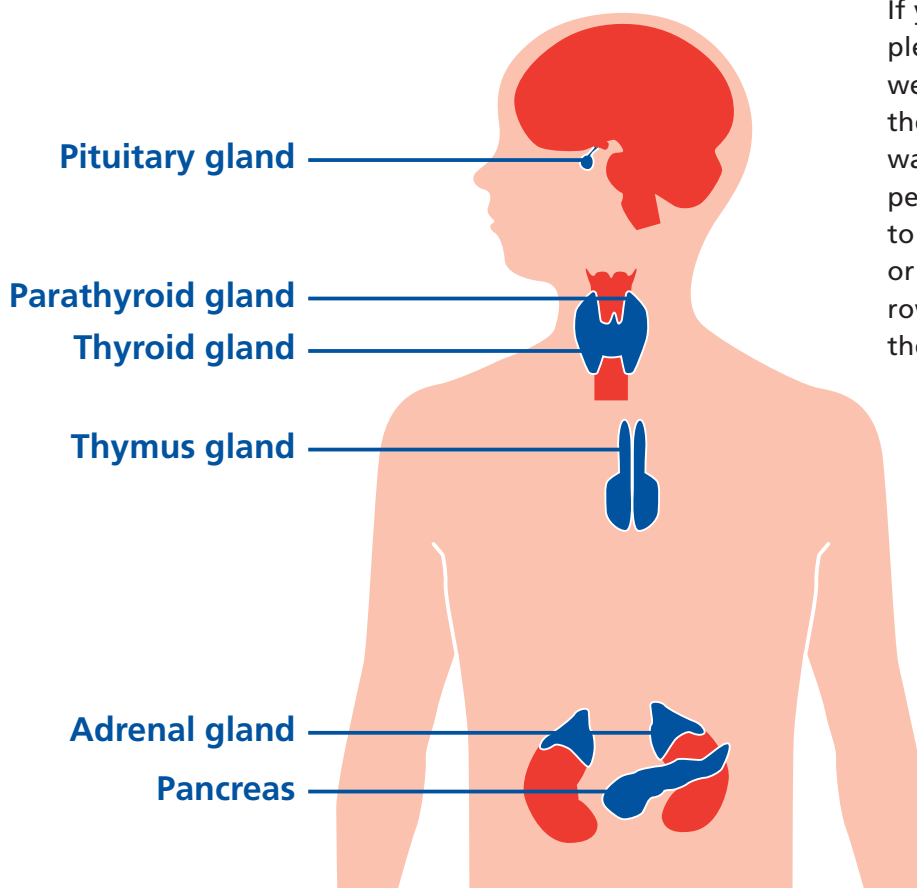
A thyroid scan is used to show the size and location of your child's thyroid and parathyroid glands and how well they are working. The thyroid and parathyroid glands are part of the endocrine system, which organises the release of hormones within the body. Hormones are chemical messengers that switch on and off processes within the body. The scan works by injecting a substance called an isotope before taking one or two sets of pictures.

Are there any alternatives?

Various types of scan such as CT, ultrasound and x-rays can show the size and shape of your child's thyroid and parathyroid but not how well they are working. The results of the scan 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.





Four weeks 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 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 scan. 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.

This scan is often carried out on newborn babies. If your baby is under two months old, it is likely that he or she will need to go to a ward early in the morning before the injection time. The ward staff will insert a cannula (thin, plastic tube) into a vein so that the isotope can be given more easily. The ward will contact you about the time of admission and any special instructions. If you have not heard from the ward three days before the scan, please telephone the Nuclear Medicine department.

The day of the scan

Please arrive at the Radiology (X-ray) 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, please arrive 15 minutes before the injection.

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

Your child will not need to get undressed for the scan. However, they should wear clothes containing as little metal, such as zips or buttons, as possible as this interferes with the scan.

The injection

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. The radiographer will put a very small needle in your child's hand, arm or foot and inject the isotope. If your child is having both thyroid and parathyroid scans, we will put a cannula (thin plastic tube) into the vein. We will remove it after all the pictures have been taken. If your child has had a cannula inserted on the ward, the isotope will be given through it. Immediately after the pictures have been taken, they will remove the needle or cannula and put a plaster over the area.



The first scan

We will call you and your child to come to the scanning room. You will be able to stay with your child throughout the scan. They will need to get up onto the scanning bed and lie very still while some pictures are taken. We can put sandbags around your child to help keep them still. The scan itself lasts around one hour.

Between the first and second scans

There will be a break of about an hour between scans. You are welcome to leave the hospital to explore the local area. There are plenty of things to do, such as lunch or shopping at the Brunswick Centre, visiting the British Museum or playing in Coram's Fields. For more ideas on activities in the local area, please call in at the Pals Office opposite the hospital shop for our Around GOSH information sheet.

The second scan

Please report back to the Nuclear Medicine department to let us know you have returned. We will call you and your child back into the scanning room for the second set of pictures. Your child will not have an injection this time. A second set of pictures will be taken in the same way as the first, lasting about 20 to 30 minutes this time.

After all the scans

Sometimes your child's doctor may want to examine your child's glands after the test. We will tell you if this is the case and if so, where to go next.

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

Are there any risks?

There are no side effects to the scan. 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 scan. However, it is necessary to take some precautions for the first 24 hours after the scan, 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 scan:

- Your child should drink plenty of fluids. This will allow the isotope to pass out through their body as quickly as possible.
- If your child is toilet-trained, they 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 re-start taking their medicines after the test. The isotope will not affect them in any way.

**If you have any questions,
please telephone the Radiology department
on 020 7405 9200 ext 5220**