



Having a parathyroid scan as an outpatient

A parathyroid scan is used to look at possible problems involving the parathyroid gland(s). The parathyroids are four small glands lying close to or embedded in the back surface of the thyroid gland, which is situated in the front of your neck. The scan is able to detect whether or not you have an overactive gland, and which one out of four it is.

Is it safe for me to have the scan?

For this scan it is necessary to inject a small amount of radioactive tracer, called a radiopharmaceutical, in order to take the pictures. The small risk from this radiation dose is outweighed by the valuable information that will be gained by having the scan. There is a table at the end of this leaflet giving various radiation risks. Ask if you want any more information. All investigations are vetted to make sure this is the appropriate test for you. If you don't understand why you need to have this scan please speak to the doctor who referred you.

For female patients

If you know that you are pregnant, or there is any chance that you may be pregnant, then please contact the department where you will be having the scan. **Do this as soon as possible as the scan can be postponed if it is not urgent.**

Also contact the department if you are breastfeeding, as we may give you special instructions.

Preparation for your scan

There are no special preparations for a parathyroid scan. You can eat, drink and take any medicines as normal.

Your injection

A small amount of radioactive tracer will be injected into a vein in your arm or hand. You may have had a blood test in the past. This is much the same. You will feel the 'pinprick' of the needle a bit, but that is all.



Your scan

Two scans will be performed, the first scan is 10 minutes after the injection and a second scan 1.5 hours after the injection. You are free to leave the department for the period of time between the two scans if you wish. The scans are taken by a special machine called a gamma camera. The camera detector will come close to your neck. The first scan takes 10 minutes.

For the second scan, we will take a 3D image of your neck and a CT where the camera moves around your neck slowly over 45 minutes. You will not be left on your own – there will always be someone immediately available.

After your scan

It is very unlikely that you will feel any side effects after the scan, but if you think that you have please let the Medical Physics Department know.

You may continue all your normal activities unless you have been advised otherwise.

After your scan there will be some radioactivity left in your body but this will not present a significant risk to other people around you. The radioactivity in your body will soon disappear, and if you continue to drink plenty of liquids this will help clear the radioactivity more quickly.

Your results

Your parathyroid scan will be looked at by a specialist doctor, who will issue a report. The report will be sent to the doctor who requested your scan rather than to your GP. This is because the doctor who requested your scan will have all the results from other tests and will be able to tell you how the result of your parathyroid scan affects your care.

Contacting us

Medical Physics Department, Level 1 North Block, Monday to Friday, 9.00 am to 5.00pm.
If you have any questions about your treatment, please ask the staff looking after you or telephone 0118 322 7355 or email: rbb-tr.physics@nhs.net

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Physics & Clinical Engineering Department, October 2024.

Next review due: October 2026.

The table below is a simple guide to the levels of radiation risks for various examinations. These are measured in millisieverts (mSv).

Source of exposure (using RBFT local diagnostic reference levels (DRLs) for Nuclear Medicine)	Dose
Having a chest x-ray	0.014 mSv
Taking a transatlantic flight	0.08 mSv
UK average annual radiation dose	2.7 mSv
Parathyroid scan*	7.2 mSv
CT scan of the chest – CT scan of whole spine	6.6 mSv – 10 mSv

*Please note that the dose stated is for the radiopharmaceuticals given in your injection. We use a hybrid imaging machine where we will take a CT scan as part of the procedure. This will incur an additional dose, where the effective dose is approximately 2.3mSv.