Choline Parathyroid PET/CT scan

Information for patients

Department of Radiology
Churchill Hospital
Your doctor has requested that you have a Choline Parathyroid PET/CT scan. This relatively simple procedure will take between 1.5 to 2 hours. In this leaflet we will hopefully answer most of your questions about the scan. However, if you have any concerns, please do not hesitate to contact us on **01865 235734, 235733** or **235850**.

**Before your scan**

Please contact us before your scan if you:

- Are diabetic
- Are claustrophobic
- Are pregnant, (risk of pregnancy), breastfeeding or are in contact with small children
- Have any disabilities/ mobility requirements
- Weigh over 100 kg (16 st)
- Have any allergies
- Have any incontinence
- Are booked in for any other appointment on the same day as your scan

Please be on time for your appointment. This is very important because the radioactive tracer that we inject has a very short shelf life. Consequently if you are late we may not be able to proceed with your scan. Please only bring one person to accompany you (if needed) and do not bring any children with you.
What is a Choline Parathyroid PET/CT scan?

PET stands for Positron Emission Tomography. This is an imaging technique that uses small quantities of a radioactive tracer, F18 Choline, to produce images that show how your body is working. CT (Computed Tomography) uses x-rays to produce cross section pictures showing the density of different organs in the body. By combining these two techniques in one scanner, we are able to provide important information to help your doctor plan an appropriate treatment for you.

A choline Parathyroid PET/CT scan is used for the localisation of parathyroid adenomas which may not have been detected by other scans/tests. Choline is a common nutritional component which is built into cell membranes. In parathyroid adenomas, the absorption of choline may be increased. This scan may be able to help your doctors plan any required surgery.

Are there any side effects?

There are no known side effects from the injection of the radioactive tracer. There is a small amount of radiation involved in the procedure (a similar amount to other diagnostic procedures such as CT) but the risks associated with this are minimal. This is the equivalent of about 5 years naturally occurring (‘background’) radiation and is of no significant risk to you.

Any small risk is outweighed by the benefits of having the scan to help in your diagnosis and treatment.
Preparing for your scan

• Please do not eat or drink anything (except water) for 1 hour before your appointment.

• We encourage you to drink plenty of water both before and after the scan (approximately 4 to 5 glasses), as this helps to flush the tracer through your body. You may continue to go to the toilet as usual before your scan.

It is very important that you arrive on time for your appointment. If you are unable to attend or are going to be delayed, please telephone us as soon as possible.

Sometimes, due to the complexity of both the scanner and the radioactive tracer that is injected, we can experience unforeseen technical difficulties which could mean we’re unable to scan you on the day. If this happens, we may need to cancel your appointment at short notice, but we will rebook you for the first available convenient date. Please remain contactable on the day of your scan.

If you have private insurance, please bring your details with you.
What should you wear?
We suggest that you wear something warm, loose, comfortable and metal free, including jewellery, zips and bra hooks. A watch may be removed at the time of the scan.

When you arrive at the hospital
The procedure will be fully explained by a Radiographer/technologist who will take a brief clinical history, measure your height and weight. You may also be asked to fill in additional forms.

Administration of the tracer
In order for us to obtain images of your body, we need to give you an injection of radioactive tracer into a vein – usually your arm. This is similar to a blood test. After the injection you will need to rest and remain seated /reclined for 1 hour while the injection is absorbed into your body.

What happens during the scan?
Once the radioactive tracer has been absorbed into the body, you are ready for your scan. In the scanning room, you will be asked to lie down on your back on the scanning bed. The scanner is an open ring-like structure which resembles a giant doughnut. The bed will move through the ring of the scanner and collect images for between 20-30 minutes. You breathe normally throughout the scan – there are no instructions to follow. The next part of the procedure you will be given x-ray dye similar to that used in CT and you will be asked to hold your breath for 20-30 seconds.
After the scan

After the scan has been completed the canula will be removed and you are free to leave immediately. We will give you restrictions to follow including no close contact with pregnant women or any children for 6 hours after the scan. You are encouraged to drink plenty of fluids of any type as this will help flush any excess tracer through your kidneys.

Your images will be analysed by a Consultant Radiologist specialising in PET/CT, who will send a report to the doctor who requested your scan.

Your appointment time

Patient name: ........................................................................................................................................
Date of scan: .........................................................................................................................................
Arrival time: .........................................................................................................................................
Department: .........................................................................................................................................

Please see map for address and directions.
Questions / How to contact us

For more information, or if you have any questions, please do not hesitate to contact our PET team on:

Tel: 01865 235734
  01865 235733
  01865 235850
Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.