PET-CT department

C¹¹ Metomidate PET-CT scan

What is a PET/CT scan?
PET/CT (Positron Emission Tomography and Computerised Tomography) is a scanning method that allows us to see how organs are working. PET/CT helps us identify organs or tissues that are not working normally. The body is imaged following the injection of a radioactive tracer. This provides important information about many conditions affecting different organs and these images provide a great deal of information to your doctor.

The radioactivity in the tracers we use decays quite rapidly so it is therefore necessary that they are manufactured for the individual and that there is a minimum delay between manufacture and administration to the patient.

When you arrive in the department for your scan we will inform the onsite radiochemistry which makes the tracers for us. They will inform us at this stage at what time they expect the injection to be ready. Due to the complexity of the process this can be up to an hour or more after you arrive in the department. While we are waiting we will prepare you for the scan.

The Radiochemistry department have asked us to make it clear that due to the complex processes involved in the manufacture of these tracers there may be delays and on occasion the process may fail or the tracers may not conform to strict quality control measures that are in place. Obviously we aim to keep such occurrences to a minimum and we will keep you informed if we are having problems.

Do I need to confirm my appointment?
- **Yes** it is important that you telephone and confirm this appointment. This way we can give your appointment to another patient if you are unable to attend.
- Please allow plenty of time to get to the department as your radioactive tracer is specially ordered and scan times cannot normally be delayed.
- When confirming please tell us if any of the following apply:
  - You are pregnant, breast feeding, or have young children at home.
  - You have had previous MRI or CT scans that you have found hard to tolerate or you are claustrophobic.
  - You are unable to lie flat.

Preparing for your scan
- Please have plenty of fluids prior to your appointment.
- Take all prescribed medications on the day of your scan as usual, unless otherwise instructed by your doctor.
- Please leave all jewellery at home as we need to remove all metallic objects for the scan. We suggest wearing something loose and comfortable, a hospital gown will be provided for the scan.
- You do need to be able to lie flat for this scan. Please inform us if you do not think you can manage this.
What will happen on the day of the scan?
- Our staff will fully explain the procedure to you when you arrive for your appointment.
- A small needle will be inserted into a vein either in your arm, hand or foot.
- A small amount of a radioactive tracer will be injected through this needle.
- Your scan will start **30 minutes** after the radioactive injection.
- The scan then takes **30 minutes**.

How long will I be in the department for?
- In total be prepared to be in the department for about one to one and a half hours. This includes explanation, preparation and scanning time.

Can I bring someone with me?
- You can bring a relative or friend but they will have to wait in the waiting room. Space is limited so we ask that just one person accompany you if at all possible.
- Please do not bring children or pregnant friends or relatives with you.

What are the benefits?
- PET/CT combines two types of imaging in one scan.
- Your doctors get functional information from the PET scan as well as organ anatomy from the CT scan.

Are there any side effects or risks?
- The scan involves an injection of a small amount of a radioactive tracer which will remain in your body for a few hours. This will not normally cause you any problems.
- Very rarely there may be bruising at the site of the injection.

What happens after my scan?
- You are free to go home.
- You may eat and drink as normal.
- Continue to drink plenty of fluids for the remainder of the day and empty your bladder regularly.
- **Please avoid close contact with pregnant women and young children for six hours after your scan.**

When will I get my results?
- Your results will be sent to the doctor who requested your scan.
- Results are usually with your doctor within a week.
- If you have a further appointment with your doctor, please let us know the date when you attend for your scan.

Alternatives
- This scan forms part of a series of investigations your doctor will be undertaking. There is no equivalent scan to this study.
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.
For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

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