



## Your nuclear medicine (gamma camera) scan

Your doctor has referred you for a nuclear medicine scan. The information in this leaflet is intended to explain what will happen before, during, and after the test and to answer any questions that you may have.

### What is a nuclear medicine scan?

Nuclear medicine is the name given to the use of radioactive isotopes attached to a tracer to produce images of different parts of the body. For most examinations, the radioisotope is injected into a vein, but in some cases may be inhaled. The tracer then carries the radioisotope to the part of your body under investigation. The radioisotope gives off gamma rays (similar to X-rays), which are detected by a gamma camera. The gamma camera is positioned either over or under your body while you lie on a couch. The radioactivity is converted to electrical impulses by the camera and the information is passed to a computer which produces an image on a TV screen. A nuclear medicine scan will show how well an organ or part of your body is working, as well as what it looks like.

### Before your nuclear medicine scan

For most scans you will be able to eat and drink normally. Any special instructions are given in your appointment letter. Please read this carefully.

### What will happen on arrival?

You will be cared for by a small team of highly trained staff. On arrival you will be taken to a room where the procedure will be explained and you will be able to ask any questions that you have. You will be given the injection of radioisotope either in this room, or, for some types of scan, while you are lying on the scanning couch. Some images may be taken immediately, but for most types of examination you will need to return for your scan some time later. This could be anything from 10 minutes to 5 hours. You will find details of these timings on your appointment letter. During this time, you may leave the hospital premises provided you return at your scan time. This is to allow time for the radioisotope to be taken up by the part of the body to be scanned. You will be given specific instructions on when to return at the time of your injection.

### What will happen during the scan?

For most types of scan you will be able to stay in your own clothes although you may be asked to remove coats and belts, and to empty your pockets. During the scan you will be asked to lie on your back on the scanning table. Most scans will take around 30 minutes. Some patients find lying for this length of time difficult, but staff will do everything they can to make you as comfortable as possible. The camera/cameras will be positioned either over or under your body. The camera will come very close to you but will not touch you. You will **not** be in a tunnel or completely enclosed, as with some other types of scan. The radiographer will be in the same room as you during the scan.

### After the scan

You will be able to return to your normal daily activities. You will be able to drive and return to work. If possible, you should avoid close prolonged contact with children and pregnant women for the rest of the day. This will be explained in more detail when you attend for your scan. You should drink a little more fluid than normal to ensure you are well hydrated. You should empty your bladder (pass urine) regularly, which will help the body get rid of the radioactivity.

### When will I get the results?

You will not be given any results on the day of your scan. A radiologist (X-ray doctor) will interpret and report on your scan. This result should reach the doctor that sent you for the scan within 7 days.

## Your nuclear medicine (gamma camera) scan (continued)

### **Are there any risks?**

Nuclear medicine scanning involves the use of radioisotopes and so has the usual risks associated with ionising radiation. We are all exposed to radiation naturally (background radiation). The amount of radiation you receive depends on the examination being performed. For most tests, the extra radiation is equivalent to what you would receive from the atmosphere (background radiation) over a period ranging from a few months up to 3 years. However, the dose administered is kept to a minimum, especially in children.

If you are pregnant or think you could be, you must let us know as this test may not be suitable. You will find our telephone number on your appointment letter.

The majority of nuclear medicine scans involve an injection of a radioactive isotope into a vein, usually at your elbow or in the back of your hand. This should be no more painful than a simple blood test. Side effects from this injection are uncommon and the radioactivity is excreted quickly and naturally through your kidneys when you pass urine. It should not make you feel any different and you should see no other effects on the body. It should not prevent you from carrying out your normal daily activities.

As with any procedure, unforeseen complications can occur, although this is rare. Despite these risks, it is important to remember that the risk of missing a serious problem by not having the test could be much greater.

### **Who should I contact if I have any questions?**

If you have any questions about your test, please contact a member of the nuclear medicine (gamma camera) team. You will find our telephone number on your appointment letter.

We will do everything we can to make your visit to the gamma camera department as pleasant as possible.