

Nuclear Medicine Bone Scan

Information for patients, relatives and carers

① For more information, please contact: Radiology Department

York Hospital, Wigginton Road, York, YO31 8HE

Nuclear Medicine

Telephone: 01904 725936

About this leaflet

In this leaflet, we tell you about the procedure known as a Nuclear Medicine bone scan. We explain what is involved and what the possible risks are. The information in this leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

What is a bone scan?

This is a Nuclear Medicine diagnostic imaging test that uses a radioactive tracer to take images of your bones.

Are there any alternatives?

There may be alternative imaging studies available. However, your doctor has decided this test is the most appropriate for you, and it gives different information to other types of scans. If you have any concerns, please discuss them with the doctor who referred you to us.

What preparation is needed before the bone scan?

There is no special preparation for the scan so you can eat and drink normally. You can bring a relative or friend with you, but they will have to wait in the waiting room while you have your scan. Please do not bring children or pregnant adults with you to your appointment.

You will not be asked to remove your clothes for the scan, but it is a good idea to wear clothing that does not have a lot of metal on it. Small buttons and zips are fine.

What happens during the bone scan?

At your first appointment, you will receive an injection into a vein in your arm. The injection is a small amount of a radioactive tracer, which is absorbed by your bones and should have no adverse effect. The amount of radiation in your body will be highest in the first three hours after your injection. Pregnant women and children are especially sensitive to the effects of radiation, so we ask that you **avoid close prolonged contact with any pregnant women or children until after your scan**. After the injection you are free to leave the department and eat and drink as normal.

Your second appointment will be three hours after the injection and when you arrive back at the department you will be asked to empty your bladder. This is to get rid of any radioactive tracer that may have passed into your urine.

At your second appointment pictures of your bones will be taken using a machine called a "gamma camera." You will not be asked to remove your clothes for the scan, but you will be required to remove metal items such as belts, keys and coins. Buttons and zips are fine.

You will be asked to lie flat on your back on a bed while the gamma camera takes the pictures. The scan starts with the gamma camera very close to your head. After about five minutes, you start to move out of the scanner. The whole scan will usually take about 20 minutes.

Sometimes we need to take some extra scans which involve using the CT scanning part of the scanner. We will not know until your bone scan has been done whether we will need these extra images. If we do require extra imaging this usually takes an extra 10-15 minutes.

Why do I have to wait three hours?

The radioactive tracer is injected into your bloodstream and over a period of time, your bones take the tracer out of your blood and absorb it. It is important that we have the maximum amount of radioactive tracer in your bones and very little left circulating in your blood. Evidence shows that the best images are obtained after waiting three hours.

What happens after the bone scan?

After the scan you will be free to leave the Nuclear Medicine department.

We recommend that you drink plenty of fluids for the rest of the day to help flush any remaining radioactive tracer out of your system. Your urine will be radioactive for around 24 hours from the injection time. It is a good idea for men to sit on the toilet to pass urine to avoid splashes. Wash your hands carefully after going to the toilet.

Are there any risks or complications?

Nuclear Medicine procedures are safe diagnostic imaging tests. Side effects from the radioactive tracers are extremely rare.

The amount of radioactivity involved is small, and after 24 hours most of the radioactive tracer will have passed out of your body.

There is radiation in the air and ground all around us called background radiation. Most radioisotope scans give you on average the equivalent of a year's background radiation or less.

This scan is not recommended for pregnant women. If you are pregnant, or might be pregnant, or if you are breastfeeding, please let us know before your appointment.

Further guidance has been published by Public Health England, visit website <https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice>

Results

You will not be given the results on the day of your scan. A report will be sent to the doctor who asked us to do the test. They will then let you know the results.

What if I have any other questions?

If you have any worries or questions about your scan, please feel free to telephone us on 01904 726696.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Nuclear Medicine, Radiology Department, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725936.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net

An answer phone is available out of hours.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

Owner	Joanne Hopkins, Radiographer
Date first issued	October 2007
Review Date	September 2024
Version	6 (issued September 2027)
Approved by	Nuclear Medicine Modality Meeting
Document Reference	PIL150 v6
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