

# Bone Scan

## Patient Information



### What is a bone scan?

Your doctor has referred you to us for a radionuclide bone scan. This is one of the most widely performed Nuclear Medicine tests. It facilitates visualisation of the living molecules that make up bone tissue. This test is extraordinarily sensitive in detecting any abnormality within living bone. It is far more sensitive than Xray, CT or even MRI in the detection of fractures, and is the most sensitive means of detecting malignant tumour in bone. The entire skeleton can be surveyed easily and rapidly with modern Nuclear Medicine equipment. This test is also extremely useful for assessment of bone and joint pain following sporting activities or resulting from the many forms of arthritis. It also has an important role in detecting infection in bones and joints.

### What preparation is required?

No specific preparations are required.

### What documentation is required?

Bring your referral and any relevant previous images for comparison.

Also bring your Medicare card, Pension or Healthcare card or Veteran's Affairs card details if applicable.

### What you need to tell us prior to your examination?

This examination is not suitable for pregnant women. Please advise us if you are pregnant, or breast feeding, or unsure of your pregnancy status before commencing the procedure.

Also, there will be a short questionnaire to complete. It covers areas such as a description of symptoms, occurrences of arthritis, fractures, operations, cancer and previous xrays or bone scans.

### What will happen during the procedure?

Note, you will not be required to undress at any stage during the procedure.

You should wear comfortable clothing. We may ask you to remove metallic objects.

The first part of the procedure requires an intravenous injection (using a very small bore needle) of a small amount of radioactive liquid which will be gradually absorbed into your bones. The radiation dose is very small, and reactions are virtually unknown.

The liquid demonstrates blood flow from the injection site to the heart and then through the arterial system of the region imaged. This part of the test demonstrates how well that particular part of the body is perfused with blood.

Where there is inflammation, perfusion may be increased; where there is disease or trauma of an organ or blood vessels, perfusion may be reduced. This part of the scan usually takes only a very short time to perform.

The second part of the procedure is performed immediately after the first. Images are taken that demonstrate the pooling of blood in the veins. This too may indicate inflammation. Blood pool imaging is very useful to demonstrate inflammation in joints of patients with symptoms of arthritis, and may allow a specific diagnosis of particular types of arthritis, e.g. rheumatoid arthritis. This also allows the doctor to accurately locate and identify the source of joint or bone pain. This stage, which provides information about local blood flow, may not be performed in all cases - only if appropriate.

The final part of the procedure is performed 2-3 hours after the injection. During this intervening period you may eat, and leave the premises.

You are strongly encouraged to drink between one and two litres of fluid (e.g. water, tea, coffee, etc.). This will help clear the excess radioactivity from your body and give clearer pictures.

The images taken during this stage of the procedure focus on living bone. An accumulation of the radioactive liquid will occur where the bone is under repair which is seen in fractures, bone tumours, infection, other trauma and wear-and-tear. More diffuse accumulation is seen in arthritis, and other bone conditions.

### Your appointment details

Date

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Time

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Location

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**How long will the procedure take?**

The initial step of the procedure will take about 15 minutes. A wait of 2-3 hours then follows. The duration of the final step is usually 45 minutes to 1 hour. Hence, total time required is approximately 4 to 5 hours.

**What can you expect after your examination?**

The injection does not hurt, and it is unlikely that any side effects will eventuate. After the procedure you are able to drive a car, and eat and drink normally.

**Are there any risks?**

You will receive a dose of radiation. The benefits of detecting disease are considered to outweigh any potential risks from receiving such a dose.

Please, however, advise the Radiographer if you are, or think you may be, pregnant.

**What happens with the images and reports?**

After your examination a report, based on the images taken, will be provided directly to your referring doctor.

We store digital copies of all studies and reports on our secure patient information system for comparison with any future examinations.

