A guide to having a bone scan

There are many types of diagnostic tests, which show information about bones and their structure.

The type of investigation you may have is determined by what information your doctor is seeking. A bone scan is a special type of test, which allows most of the bones in your body to be seen at the same time. It involves one injection, usually through a vein in your arm.

This scan may show changes in your bones that may not show on an x-ray.

What is involved in having a bone scan?
A bone scan takes place in the Nuclear Medicine Department and may be performed as an inpatient or an outpatient.

The test involves 2 visits to the department on the same day. During the first visit you will be given an injection, which will contain a small amount of a radioactive material. This will enable us to see your bones on our gamma camera. Depending on what your doctor is looking for, we may also take a picture straight after your injection. This will last about 15 minutes.

After your injection (and picture) you will be free to leave the department. You will be given a time (usually 2 - 4 hours later) to return for your pictures. During this time you may eat and take any medications as normal. We would like you to drink 1 - 2 pints of fluid. You do not need to keep a full bladder. Please empty your bladder frequently.

On your return you will be required to either lie on a narrow bed or stand. A machine called a gamma camera will be placed next to your body.

You will not need to undress, although you may have to remove loose change or metal objects from your pockets. Pictures of your bones will be taken for 20 - 25 minutes.

Once the pictures have been completed, you will be allowed to leave the department and resume your normal activities.

Sometimes it may be necessary to take some x-rays to help your doctor understand your condition. If possible, we will try to arrange them during your visit, although sometimes they may be taken at a later date.

When will I know the results?
Not straight away. A doctor who specialises in reading these pictures needs to study them in detail. A report will be sent to the doctor who asked for this test and you will get the results when you see your doctor at your next outpatient appointment.
Are there any risks involved in having a bone scan?
A bone scan is one of the most common nuclear medicine tests undertaken. Adverse reactions occur in very few cases (1 in 200,000 investigations).

As with any injection there is a risk, eg. bruising.

Occasionally, you may develop a rash around the injection site 4 - 6 hours after your injection. This usually subsides within 48 hours. If you are concerned, seek medical advice.

Radiation risks
This scan involves using radioactive materials and possibly x-rays, and so has the usual risks associated with ionising radiation. The amount of radiation used is roughly equivalent to that which you receive from natural background radiation in about 24 months. This adds very slightly to the risk of, for example, developing a cancer. However, as one in three of us will develop a cancer at some stage during our lives, the added risk is very small. Indeed, the risks from missing a serious disorder by not having the scan are considerably greater.

Female patients who are or might be pregnant, or who are breast feeding, must inform a member of staff before the procedure.

If possible, please avoid close and prolonged contact with pregnant mothers, babies and children for 12 hours after the procedure. This helps to avoid exposing them to any unnecessary radiation. The possible radiation dose to them is very small, but it is sensible to reduce this to a minimum.

Are there any alternative treatment options?
Your consultant has recommended this procedure as being the best option. There are no alternative procedures available. However, there is always the option of not having any procedure at all. The consequences of not having this investigation are that your consultant may not have a full understanding of the cause of your symptoms and hence may not be able to offer you the best appropriate management. If you would like more information please speak to your consultant or a member of staff caring for you.

References