

Diagnosing Osteoporosis and Determining Bone Strength by DEXA Scan

Taher Mahmud*

Consultant Rheumatologist, London Bridge Hospital HCA the SHARD, UK

***Corresponding Author:** Taher Mahmud, Consultant Rheumatologist, London Bridge Hospital HCA the SHARD, UK.

Received: November 08, 2021; **Published:** January 31, 2022

What is a DEXA scan?

A DEXA scan, or DXA scan, is a type of X-ray that is used to measure bone density. DEXA stands for dual energy X-ray absorptiometry, and there are different ways to refer to the scan, including DXA, bone density scan, and bone densitometry scan.

DEXA Scanner at The Shard.

Why is a DEXA scan performed?

Usually, a DEXA scan is performed to diagnose or assess the risk of osteoporosis. Osteoporosis weakens the bones, so a DEXA scan can help to identify this and check the density of your bones.

Who should have a DEXA scan for osteoporosis?

A DEXA scan is recommended in those over 50, at risk from developing osteoporosis. You are more likely to be at risk if members in your family have experienced fractures at some point. A bone density scan may also be taken with those under 50 with additional risk factors, such as smoking, excessive drinking, or having fractured a bone already.

A DEXA scan may also be considered if:

- You are a woman experiencing early menopause, or who has had early menopause and not received hormone replacement therapy. After menopause, oestrogen in the body declines, which can result in a bone mineral density decrease.
- You have a condition such as arthritis, or other inflammatory conditions, which can result in low bone density.
- You take medication which can contribute to bone weakening over time.
- You are a woman with large gaps between periods.

How is a DEXA scan performed?

DEXA scans are quick and painless. You may be able to remain dressed, but you have to remove clothes with metal in, such as hooks, or zips. You do not need to prepare anything, fast, or follow any special diet.

When the scan is performed, you lie on your back, but a DEXA scan is not like an MRI, where you must go into a tunnel-like device. The X-ray table is flat, and open, so you are unlikely to feel closed in or claustrophobic.

A large scanning machine is passed over the body, emitting a low-dose X-ray beam to measure bone density in your skeleton. The machine can scan various parts of your body, but the most common areas examined are the hip, spine, and wrist.

Scans take a very short amount of time, perhaps five minutes - depending on the part of the body being scanned. There is no need to wait in hospital and you can go home after the scan.

What do DEXA scan results mean?

Bone density has a healthy-level 'score' - a number which varies on age, ethnicity, and gender. The DEXA scan will give you a certain score too, and the difference between the expected healthy score, and your DEXA result is called the T score.

T scores are classified like this:

- Normal: Above -1 deviation
- Slightly reduced: between -1 and -2.5 deviation
- Osteoporosis: at or below 2.5.

These results will give a fair indication of bone strength but cannot tell you whether you will get a fracture, or not. Some people even with normal bone density can experience a fracture at some point.

Your doctor will look at your results after the test and take into account risk factors, before deciding on a course of treatment, or deciding if it is necessary.

Volume 13 Issue 2 February 2022

©All rights reserved by Taher Mahmud.