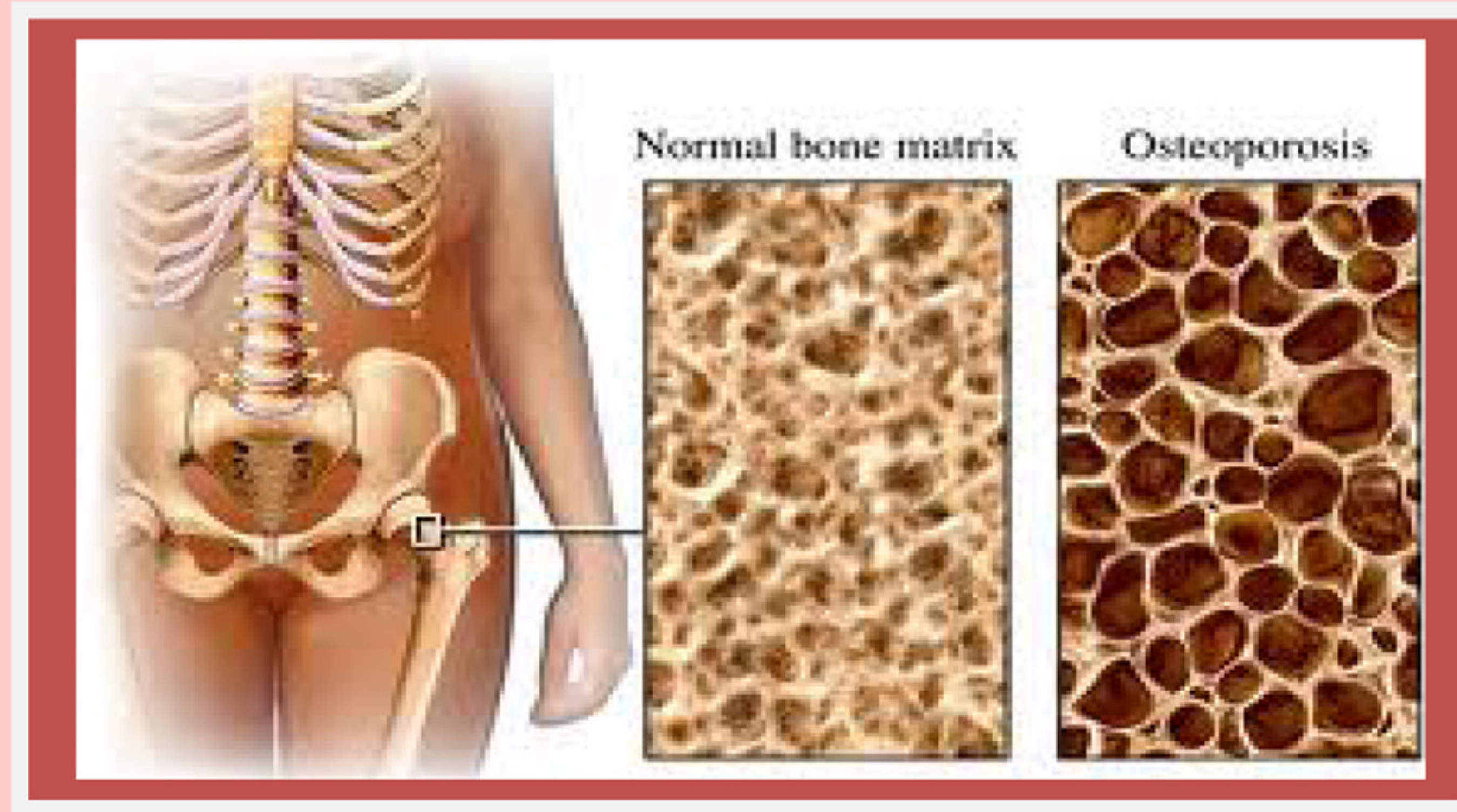




Kingdom of Saudi Arabia
National Guard Health Affairs
King Abdulaziz Medical city
Medical Imaging Department

Diagnostic Imaging Section Bone Densitometry BMD

A bone mineral density (BMD) test measures how much calcium and other types of minerals are in an area of your bone. This test helps your health care provider detect osteoporosis and predict your risk of bone fractures



How the Test is Performed

Bone density testing can be done several different ways:-

The most common and accurate way uses a dual-energy x-ray absorptiometry (DEXA) scan. It uses low-dose x-rays. You receive more radiation with a chest x-ray

There are two different types of DEXA scans

Central DEXA. You lay on a soft table, and the scanner passes over your lower spine and hip. Usually, you do not need to undress. This scan is the best test to predict your risk of fractures

Peripheral DEXA (p-DEXA). These smaller machines measure the bone density in your wrist, fingers, leg, or heel. You may find these machines in doctor's offices, pharmacies, shopping centers, and health fairs

How to Prepare for the Test

If you are or could be pregnant, tell your health care provider before this test is done.

No preparation is required prior to exam.

How the Test Will Feel

The scan is painless. You will need to remain still during the test

Why the Test is Performed

- ✓ Bone mineral density (BMD) tests are used to:-
- ✓ Diagnose bone loss and osteoporosis
- ✓ See how well osteoporosis medicine is working
- ✓ Predict your risk of future bone fractures
- ✓

You should have bone mineral testing or screening if you have an increased risk for osteoporosis. You are more likely to get osteoporosis if you are:-

- Women over 65
- A man over age 70

Women under age 65 and men ages 50 - 70 are at increased risk for osteoporosis if they have:

- ✓ A broken bone caused by normal activities, such as a fall from standing height or less fragility fracture
- ✓ Chronic rheumatoid arthritis, chronic kidney disease, eating disorders
- ✓ Early menopause either from natural causes or surgery
- ✓ History of hormone treatment for prostate cancer or breast cancer
- ✓ Significant loss of height
- ✓ Smoking
- ✓ Strong family history of osteoporosis
- ✓ Taking corticosteroid medications (prednisone, methylprednisolone) every day for more than 3 months

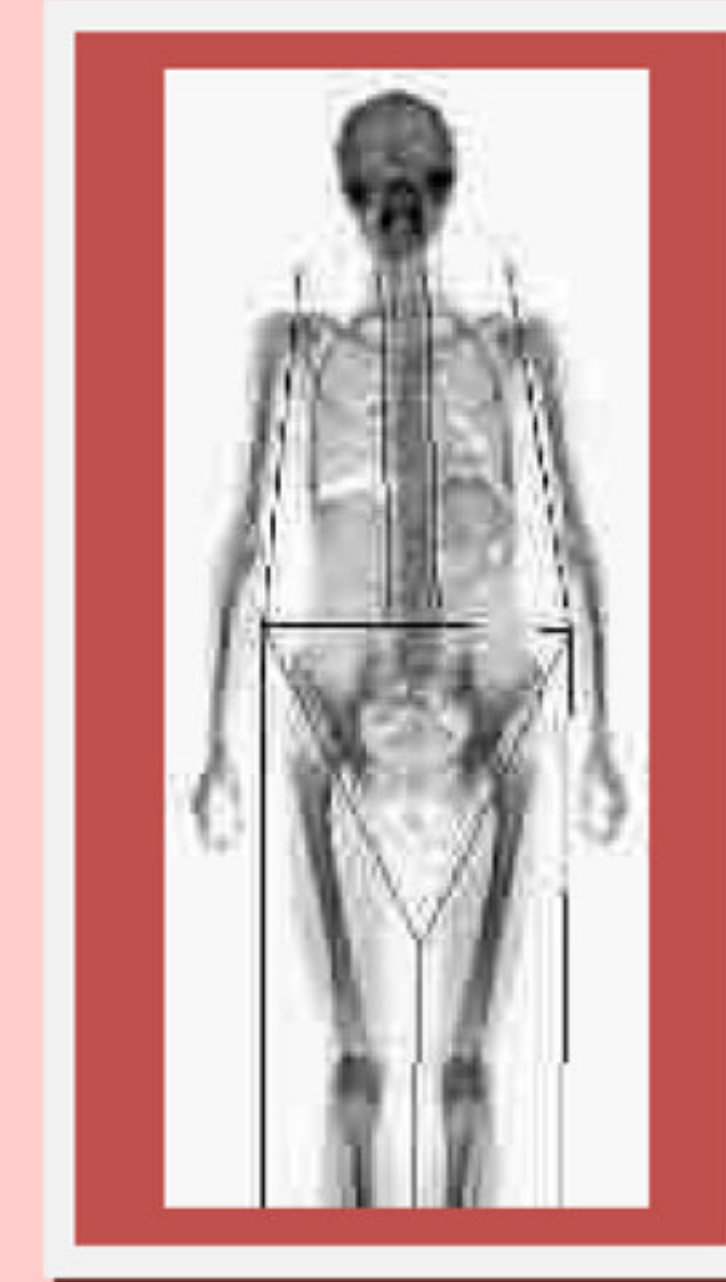
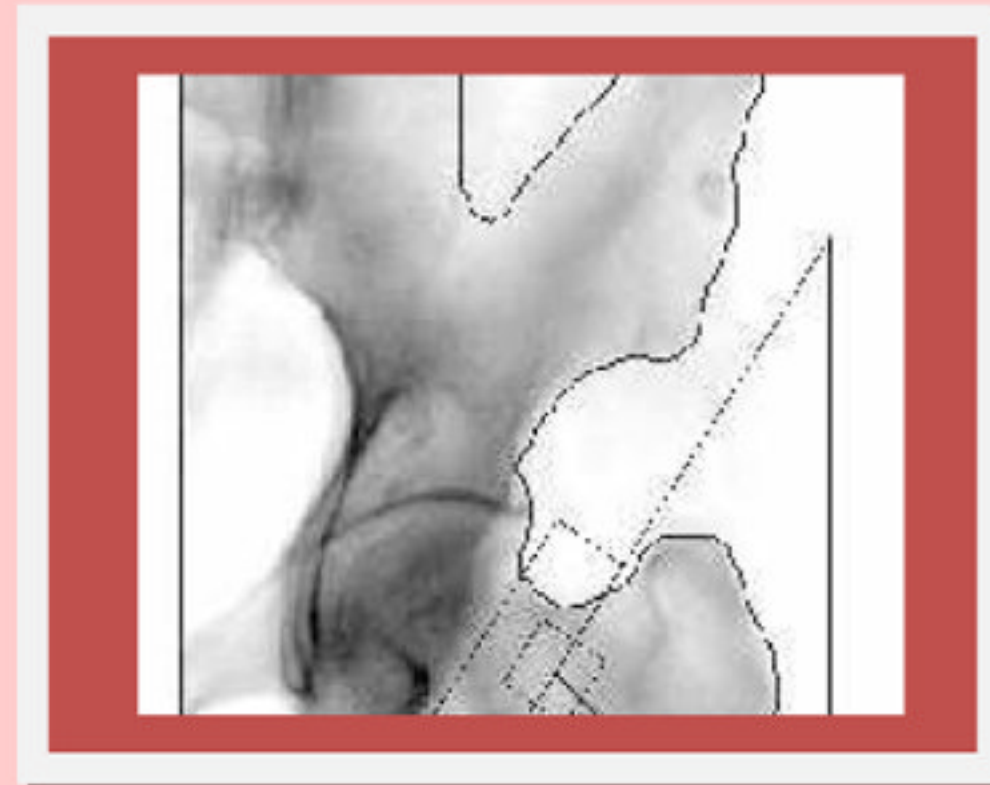
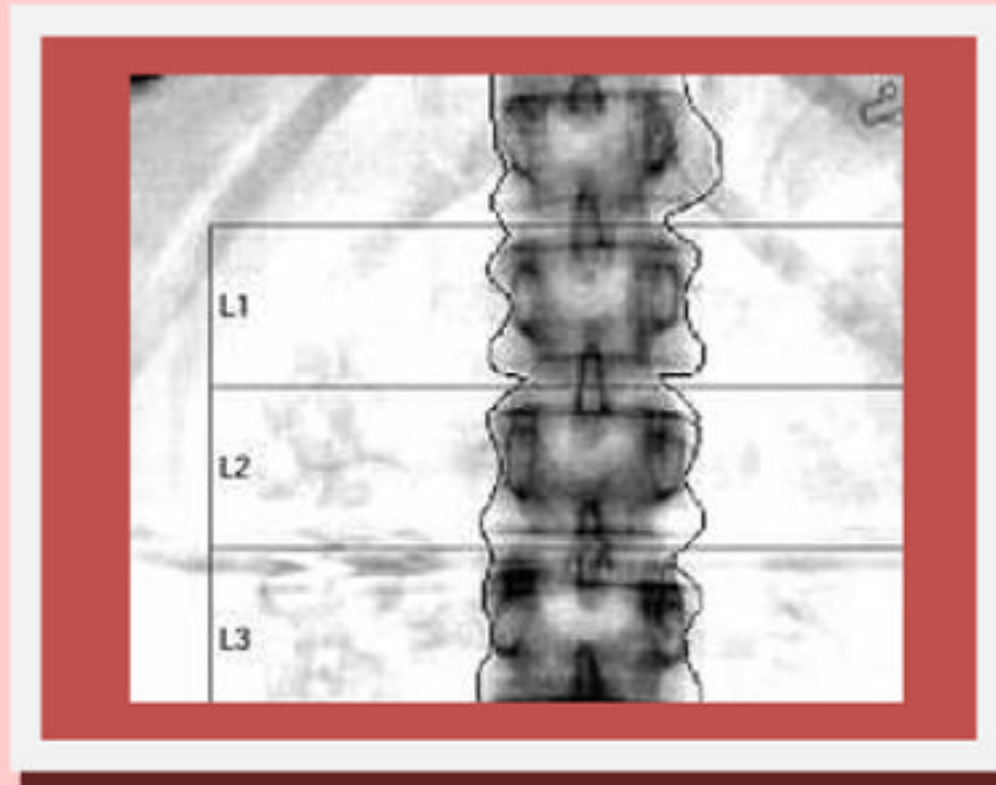
Normal Results

The results of your test are usually reported as a "T score" and "Z score"

- ✓ The T score compares your bone density with that of healthy young women
- ✓ the Z score compares your bone density with that of other people of your age, gender, and race

In either score, a negative number means you have thinner bones than the standard. The more negative the number, the higher your risk of a bone fracture

A T score is within the normal range if it is -1.0 or above



What Abnormal Results Mean

Bone mineral density testing does not diagnose fractures. However, along with other risk factors you may have, it helps predict your risk of having a bone fracture in the future. Your doctor will help you understand the results

A T score between -1 and -2.5 indicates the beginning of bone loss (osteopenia)

A T score below -2.5 indicates osteoporosis

Treatment recommendations depend on your total fracture risk

Risks

Bone mineral density uses a little bit of radiation. But most experts feel that the risk is very low compared with the benefits of spotting osteoporosis before you break a bone

Considerations

Simple bone density scans using portable machines may be available as part of health fairs or screenings. These portable scanners may check the density of your wrist or heel. However, keep in mind that hip and spine scans are more reliable

Alternative Names

BMD test; Bone density test; Bone densitometry; DEXA scan; DXA; Dual-energy x-ray absorptiometry; p-DEXA

For more information please contact
diagnostic imaging section
01 8011111 ex 12992 or 11428