Perspective

An Insight on Bone Mineral Density Test

Himabindhu Gude*

Department of Biotechnology, Osmania University College of Science, Osmania University, Hyderabad, Telangana, India

BONE MINERAL DENSITY TEST

A bone mineral density test, also called as bone density test, used to measure the calcium and other minerals in bone. It is also used to osteoporosis.

How it Works

The test of BMD (Bone Mineral Density) can be done in several ways. The bone density test is a quick and painless test. It estimates the thickness of bones.

The most common method to measure BMD is X-ray. The more minerals you have, considered as the bones are stronger, denser, and less likely to break. The lower mineral content is the greater chance of breaking a bone.

Another accurate and common test of BMD is DEXA (Dual Energy X-ray Absorptiometry) Scan. DEXA Scan is of two types. They are Central DEXA and Peripheral DEXA (p-DEXA).

Central DEXA is used to predict risk for fractures, especially of the hip. The scanner passes over lower spine and hip.

Peripheral DEXA or p-DEXA is used measure the bone density in wrist, fingers, legs, or heel. These are small machines mostly used in health care offices, pharmacies, shopping centers, and at health fairs. Types of peripheral tests are 1. pDXA (peripheral dual energy x-ray absorptiometry), 2. QUS (Quantitative Ultrasound) and 3. pQCT (peripheral quantitative computed tomography)

Who Should Get Tested

Anyone can get osteoporosis. It's more common among older women, but men can have it, too.

Discuss with the physician before going to the test. They may recommend it if the individual meet any of the following:

A woman 65 or older age

Postmenopausal woman 50 or older

A woman at the age of menopause and can have high chance of breaking bones

A woman who has already been through menopause, less than 65 years, and have other things that give you a higher chance of osteoporosis

A man 50 or older age with other risk factors

Loss of more than 1.5 inches of adult height

Posture has gotten more hunched

If having any back pain without any cause

If menstrual cycle have stopped or are irregular although you're neither pregnant nor menopausal

If an individual have gone through an organ transplant

Sudden drop in hormone levels

People with osteoporosis should repeat their bone density test by central DXA every one or two years. After starting a new osteoporosis medicine, many healthcare providers will repeat a bone density test after one year.

According to the World Health Organization (WHO) T Score means:

- A T-score of -1.0 or above is normal bone density. Examples are 0.9, 0 and -0.9.
- A T-score between -1.0 and -2.5 means you have low bone density or osteopenia. Examples are T-scores of -1.1, -1.6 and -2.4.
- A T-score of -2.5 or below is a diagnosis of osteoporosis. Examples are T-scores of -2.6, -3.3 and -3.9.
- The lower a person's T-score, the lower the bone density. A T-score of -1.0 is lower than a T-score of 0.5 and a T-score of -3.5 is lower than a T-score of -3.0.

Received: October 12, 2020; Accepted: October 24, 2020; Published: October 30, 2020

Citation: Gude H (2020) An Insight on Bone Mineral Density Test. Endocrinol Metab Syndr 2020; 9:320. doi: 10.35248/2161-1017.20.9.320

Copyright: ©2020 Gude H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

^{*}Correspondence to: Himabindhu Gude, Department of Biotechnology, Osmania University College of Science, Osmania University, Hyderabad, Telangana, India, Tel: +918143389651; E-mail: smily.bindu20@gmail.com