



Development of bone mineral density scanning

Ferro Elisa*

Department of Clinical and Experimental Medicine, University of Magna Grecian, Catanzaro, Italy.

ABOUT THE STUDY

Bone densitometry scanning

Bone densitometry scanning is also known as Bone Mineral Density (BMD). It is the amount of bone densitometry in bone tissue. The concept of mass of mineral of bone, even though medically it is measured through proxy according to optical density per square centimeter of bone surface upon imaging. Bone Mineral Density measurement is used in medical treatment as an indirect indicator of osteoporosis and fracture risk.

Bone mineral density is measured through a technique is known as densitometry, frequently performed in the nuclear medicine or clinical departments of hospitals or medical clinics. The measurement is painless and non-invasive and which includes low radiation exposure. Measurements are most typically made over the lumbar spine and upper part of the hip. The forearm can be scanned if the upper part of the hip and lumbar spines is not accessible.

There is a statistical association among poor bone densitometry and better possibility of fracture. Fractures of the legs due to falls are a significant for public health problems, specifically in elderly women, leading to much clinical cost, inability to live independently and even risk of death.

Bone Mineral Density measurements are used to display screen humans for osteoporosis risk and to identify those who may benefit from measures to improve bone strength.

Testing

Bone density tests are not recommended for humans without risk elements for weak bones, Which are much more likely to result in unnecessary therapy instead of discovery of true problems.

Indications for testing: The risk elements for low bone densitometry and primary considerations for a bone densitometry test which includes: females age 65 or older, males age 70 or older, humans over age 50 with previous bone fracture from minor trauma, low body weight, people with vertebral abnormalities, Individuals or planning to receive, long-term glucocorticoid treatment, individuals with primary hyperparathyroidism, people being monitored to evaluate the response or efficacy of an accepted osteoporosis drug therapy, when androgen deprivation therapy is being deliberate for prostate cancer, individuals with a history of consuming disorders.

Other considerations that are related to risk of low bone densitometry and the need for a test include smoking and drinking habits, the long-term use of corticosteroid drugs, and vitamin D deficiency.

Test result terms of bone mineral density

While there are many different types of bone mineral density tests, all are non-invasive. Most tests according to which bones are measured to determine the bone mineral density result.

These tests includes Dual-energy X-ray absorptiometry, Dual X-ray Absorptiometry and Laser, Quantitative computed tomography, Quantitative ultrasound, Single photon absorptiometry, Dual photon absorptiometry, Digital X-ray radio grammar, and Single energy X-ray absorptiometry.

Interpretation of bone mineral density

Results are generally scored by 2 measures, the T-score and the Z-score. These two scores indicate the amount one's bone densitometry varies from the mean. Positive scores indicate higher bone density and negative scores indicate lower bone density.

Prevention of bone mineral density

To control low bone densitometry it is recommended to have sufficient calcium and vitamin D. Especially weight-bearing and resistance exercises are most effective for building bone.