

DEXA BONE DENSITY - Details

Study Result

Sutter Medical Foundation

Message Date and Time: December 16, 2020 at 14:29

Result Status: FINAL

Ordering Provider: ROBERT DEBRUIN

Referring Provider: ROBERT DEBRUIN

DIAGNOSIS: Post-menopausal

Other specified disorders of bone density and structure, unspecified site

PROCEDURE: DEXA BONE DENSITY AXIAL SKELETON HIPS PELV SPINE, 12/16/2020 10:18 AM

COMPARISON: 12/12/2018 done on Lunar Prodigy system.

CLINICAL INDICATION: Postmenopausal. Osteopenia. Vitamin D deficiency. History of T12 compression fracture. *from housecleaning wet tile*

TECHNIQUE: Using dual energy x-ray bone densitometry, LUNAR PRODIGY system, the bone mineral density (BMD) in the spine, hips and left forearm was measured and computer analysis was performed comparing the patient's measurements with age-matched controls and normal young adults.

FINDINGS:

PREVIOUS STUDY 12/12/2018

(Region: BMD; Young Adult %; T SCORE; Age-matched %; Z score)

L-spine, L2-L4 level: 1.005; 84%; -1.6; 101%; 0.1

Left total femur: 0.775; 77%; -1.8; 93%; -0.4

Right total femur: 0.800; 79%; -1.6; 96%; -0.2

CURRENT STUDY 12/16/2020

(Region: BMD; Young Adult %; T SCORE; Age-matched %; Z score)

L-spine, L2-L4 level: 0.995; 83%; -1.7; 100%; 0.0

Left total femur: 0.807; 80%; -1.6; 99%; -0.1

Right total femur: 0.801; 79%; -1.6; 98%; -0.1

Left radius 33%: 0.613; 70%; -3.0; 86%; -1.2

World Health Organization densitometric classification: Osteoporosis = T-score at or ≤ -2.5 ; Osteopenia = $-1 > \text{T-score} > -2.5$; Normal = T-score at or ≥ -1 .

IMPRESSION:

Based on the above stated WHO classification, bone mineral density measurements in the left forearm show osteoporosis.

According to ISCD guidelines, T-scores are preferred for analyzing bone mineral density in postmenopausal women.

COMPARISON: In comparison to the prior study, there has been a 4.1% increase in bone mineral density in the left hip, with no significant interval change in the lumbar spine or in the right hip. Assessment of the left forearm was not performed on the prior examination.

10 YEAR FRACTURE RISK PROBABILITY is not reported due to T score indicate osteoporosis. The patient is at increased risk for atraumatic fracture.

Body Mass Index is 24.0 kg/meter squared which is in the normal range according to the World Health Organization BMI classification system. Estimated total body fat is 46.4%; this is compared to 45.8% on 12/12/2018 and 45.5% on 12/14/2016. Estimated android fat tissue is 49.0%; estimated gynoid fat tissue is 54.3%.

Based on precision testing performed at Sutter Imaging DXA facilities, the least significant change (LSC) is 3.2%. Precision Error (PE) is 1.2%. These findings are in accordance with standards set by the International Society for Clinical Densitometry (ISCD).

Dictated by: Olga Rodgers, PA 12/16/2020 2:14 PM

Electronically Signed by: Fred Weiland, MD, FACNM 12/16/2020 2:25 PM