Southern Arizona Rad Associates (Sierra Vista Diagnostics) -- Radiology Report

Study: BD Bone Density axial skeleton
Study completion date/time: Thu May 13 2021 3:09 PM MST

EXAM: Bone Density axial skeleton 05/13/2021 15:09

CLINICAL INDICATION: ███████:Age-related osteoporosis without current pathological fracture

COMPARISON: 1/17/19

REPORT DATA: Bone mineral density (BMD) is measured in g/cm2 comparisons of the patient's bone density to the average bone density of a gender matched young adult. T scores are measured in standard deviations (SD). Each -1 SD corresponds to approximately 10% bone loss.
Normal T-score greater than -1 SD

Osteopenia T-score between -1 and -2.5 SD

Osteoporosis T-score less than or equal to -2.5 SD

The DEXA system used to obtain this data is a GE Lunar Prodigy

FINDINGS:

In the lumbar spine, this patient's T-score is -4.3. There has been statistically significant 18.2% increase in bone mineral density of the lumbar spine when compared to the prior exam.

The lowest femoral neck T-score is -4.6 on the left, with a correlating BMD of 0.4 g/cm2 (which may be used for the FRAX WHO Fracture Risk Assessment Tool).

Analysis of the proximal femurs reveals the lowest total T-score to be -5 on the left. For serial monitoring, the bilateral mean hip BMD is 0.426 g/cm2. There has been statistically significant 15.8% increase in bone mineral density of the bilateral hips and compared to the prior exam.

If there is significant variation between the hip and spine, this could be due to artifacts in the spine such as osteophytes, aortic calcifications and compression fractures which may falsely elevate the BMD in the spine. In such cases, the hip may be a more accurate indicator of low bone density.

10-year risk of fracture, based on the FRAX WHO Fracture Risk Assessment Tool:
Major Osteoporotic Fracture: 68.1%
Hip Fracture: 61.7%

IMPRESSION:

1. Measurements reveal osteoporosis per WHO criteria.

2. The risk of fracture is increased.