

12/27/2018 - Imaging Appointment in Utah Diabetes Center Bone Density
Imaging - Results Only
MEDICAL IMAGING
DXA Axial Skeleton 1 or more Sites (Final result)
DXA Axial Skeleton 1 or more Sites

Resulted: 12/27/18 1726, Result status: Final result

Ordering provider: Saundra S Buys, MD 12/27/18 1033

Order status: Completed

Resulted by: Heather Spencer Johnson, APRN

Filed by: Heather Spencer Johnson, APRN 12/27/18 1732

Performed: 12/27/18 1124 - 12/27/18 1129

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Acknowledged by

Saundra S Buys, MD on 12/31/18 1054

Sharon Starkie, RN on 01/02/19 1609

Virginia Ann Brinkerhoff, RN on 01/03/19 0853

Chanteel A Ballard, APRN on 01/03/19 0905

Anurag Reddy, MD on 06/23/20 0832

Components

Component	Value	Reference Range	Flag	Lab
T Score, L1-L4	-1.1	—	—	—
L Spine BMD	0.860	g/cm ²	—	—
Comment: L3 and 4 are excluded due to sclerosis				
Z Score, L1-L4	1.1	—	—	—
T Score, Hip RT	-1.7	—	—	—
T Score, Hip LT	-1.7	—	—	—
Hip BMD RT	0.729	g/cm ²	—	—
Hip BMD LT	0.731	g/cm ²	—	—
Z Score, Hip RT	0.0	—	—	—
Z Score, Hip LT	0.0	—	—	—
Femoral Neck BMD RT	0.592	g/cm ²	—	—
Femoral Neck BMD LT	0.607	g/cm ²	—	—
T Score, Hip Femoral Neck RT	-2.3	—	—	—
T Score, Hip Femoral Neck LT	-2.2	—	—	—
Z Score, Hip Femoral Neck RT	-0.3	—	—	—
Z Score, Hip Femoral Neck LT	-0.1	—	—	—

Indications

History of breast cancer [Z85.3 (ICD-10-CM)]

Senile osteoporosis [M81.0 (ICD-10-CM)]

Findings

Imaging - Results Only (continued)

Title BONE MINERAL DENSITY REPORT

INSTRUMENT: Hologic Horizon W

RELEVANT MEDICAL HISTORY: This is the 3rd bone density determination on this machine.

LOCATION: Utah Diabetes and Endocrinology Center

RACE: Caucasian

RELEVANT HISTORY:

PERSONAL history of fracture

No

Parental History of Hip Fracture

No

ALCOHOL usage (3 drinks per day)

No

Current SMOKER

No

Prior or current chronic glucocorticoid use

No

RHEUMATOID arthritis

No

Medical conditions that impact bone health

No

170 lbs 0 oz

5' 5.6"

Body mass index is 27.86 kg/m².

MEDICAL CONDITIONS CONTRIBUTING TO BONE LOSS:

Cancer; breast carcinoma

Breast treatment includes aromatase inhibitors.

MEDICATIONS FOR MANAGEMENT OF BONE LOSS:

No current prescription medications for osteoporosis or osteopenia

OTHER HISTORY:

Women; natural menopause

Menopause age: 54

TECHNICAL QUALITY: Good

LIMITATIONS OF STUDY:

L3 and L4 excluded secondary to sclerosis.

No limitations of study.

FRAX:

Using the World Health Organization FRAX® algorithm, the 10 year absolute risk for any major osteoporotic fracture is 14%, and the risk for hip fracture is 3.8%.

ASSESSMENT:

Low bone mass (osteopenia).

Compared to bone density study obtained 9/27/2016, there has been a statistically significant decrease in BMD at the lumbar spine of 3.3%.

Compared to bone density study obtained 9/27/2016, there has been no statistically significant change in BMD at the total hip.

FRACTURE RISK:

Fracture risk: high (based on 10 year absolute risk using FRAX calculator)

GENERAL MEASURES FOR BONE HEALTH:

12/27/2018 - Imaging Appointment in Utah Diabetes Center Bone Density (continued)

Imaging - Results Only (continued)

- Daily calcium intake should equal 1000 to 1200 mg. Dietary intake averages 600 mg/day. Supplemental calcium should be taken to make up the difference.
- Recommended range for Vitamin D intake is 800-2000 IU/day in patients over 70, and 600-2000 IU/day in patients less than 70.
- Reasonable weight bearing exercise should be encouraged.
- Smoking cessation should be encouraged in patients with a history of chronic tobacco use.

RECOMMENDATIONS:

The National Osteoporosis Foundation recommends initiation of therapy in postmenopausal women or men over the age of 50 with:

- Prior low-trauma hip or vertebral fracture
- T-score of -2.5 or less at the femoral neck or spine after evaluation to exclude secondary causes.
- BMD T-score between -1.0 and -2.5 at the femoral neck or spine and a 3% or greater 10-year probability of hip fracture or 20% or greater 10-year probability of major osteoporosis-related fracture based on the US-adapted WHO fracture risk algorithm (www.shef.ac.uk/FRAX).

***PRESCRIPTION TREATMENT IS RECOMMENDED.**

EVALUATION:

Metabolic evaluations should be considered in all patients with osteoporosis. If not previously performed, a metabolic evaluation might be appropriate for this patient. One study has shown that 32% of postmenopausal women with osteoporosis will be found to have a secondary causes of osteoporosis by laboratory evaluation. The following laboratory evaluation will detect 98% of these patients: 24 hour urine calcium, 25 (OH) vitamin D level, iPTH, serum calcium and TSH (if patient is on thyroid hormone). (J Clin Endocrinol Metab 87:4431-4437, 2002).

FOLLOW-UP DXA:

Follow-up bone density measurement could be considered in greater than 24 months, or sooner if clinically indicated, to assess the need for therapy and/or the effectiveness of current therapy.

Clinical correlation is required, because no specific bone disease can be diagnosed or excluded on the basis of these findings.

Signed

Electronically signed by Heather Spencer Johnson, APRN on 12/27/18 at 1732 MST

All Reviewers List

Anurag Reddy, MD on 6/23/2020 08:32
Chanteel A Ballard, APRN on 1/3/2019 09:05
Virginia Ann Brinkerhoff, RN on 1/3/2019 08:53
Sharon Starkie, RN on 1/2/2019 16:09
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