Understanding Your Bone Densitometry Results

Bone densitometry is used to show if your bones have lost density or strength. Osteoporosis occurs when bones lose their strength and density; they become fragile and fracture more easily. Moderate bone loss is called osteopenia, severe bone loss is osteoporosis.

The scan areas that provide the most information about patterns of bone loss are:
1. Lumbar spine
2. Proximal femur
3. Forearm ~ done if one of the other two areas cannot be scanned.

The two areas that we routinely evaluate are the lumbar spine and the proximal femur. They are both weight bearing areas and sites that are at risk for debilitating fractures. These areas provide reproducible results for follow-up scans.

You will have results for three areas, the L-Spine, Femoral Neck, and Total Hip. (or Forearm) There are three numbers for each area:

BMD – bone mineral density. The lower the BMD the greater the risk for fracture.

T-Score – a measure of the difference between the patients BMD and that of a young adult population of the same sex and ethnicity.

Z-Score – a measure of the difference between the patients BMD and that of a healthy population of the same age, sex, and ethnicity.

Bone Densitometry may be of limited use in people with a spinal deformity (scoliosis) or arthritis. In these cases the BMD and T-Score can be falsely elevated.

On the report, under the heading “Interpretation”, you will find your T-Score for the areas scanned. You will use the T-Score to find the category you fit into.

<table>
<thead>
<tr>
<th>Categories</th>
<th>T-Score</th>
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<tbody>
<tr>
<td>Normal</td>
<td>0 to -1</td>
</tr>
<tr>
<td>Osteopenia</td>
<td>-1 to -2.5</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>-2.5 and lower</td>
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If you are having a follow-up Bone Densitometry, under the heading “Impression”, you might find the statement 95% confidence level for significant change: this is how confident one can be that a real change has or has not occurred.

* This test only gives us information about the BMD. It is not a diagnostic tool for any other type of bone health.