Understanding the Difference Between Osteoporosis and Osteomalacia

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Osteoporosis vs Osteomalacia

When you are dealing with new or worsening physical health symptoms, you want answers immediately. At times, the uncertainty surrounding your condition can be more stressful than the actual symptoms. With so many diseases and disorders sharing similar symptoms, it can seem impossible to know what ailment is responsible for your experience.

The debate between osteoporosis and osteomalacia is a great example of this struggle to identify the correct condition. These disorders of the bones are frequently mistaken for each other, resulting in misunderstandings and misdiagnoses.

To better understand your symptoms, it is valuable to gain an understanding of the conditions that could be affecting your life.

Osteoporosis Basics

Osteoporosis is a condition that causes your bones to become weak and brittle. Though they seem static, bones are constantly being broken down and rebuilt within the body. With osteoporosis, the body does not do a good job of replacing and repairing the bones that are broken down.

When bones are affected by osteoporosis, even the most minor bump or fall can lead to a break. The hips, wrists and spine are at the greatest risk for fractures as osteoporosis develops.

Osteoporosis is tricky to identify early on because the condition begins with few noticeable symptoms. As time goes on, you may experience signs of osteoporosis such as:

- Back pain
- Shrinking or loss of height
- Appears hunched or stooped over
- Numerous broken bones

Osteomalacia Basics

Osteomalacia, on the other hand, is a completely different condition that also affects the bones. In osteoporosis, the bones become brittle, while in osteomalacia, the bones become soft.

As the bones soften, they may begin to change shape and bow. This bowing is especially common in larger bones that support weight, like in the legs. In older people, the softening bones of osteomalacia can result in bone

breaks, just like in people with osteoporosis.

The main cause of this condition is vitamin D deficiency. When there is an extreme lack of vitamin D in the body, the bones cannot sustain the expected strength and durability.

Like with osteoporosis, people can have osteomalacia for some time without experiencing any obvious symptoms. The most common symptoms of osteomalacia include:

- Bowing legs
- A dull pain in the back, hips, legs or ribs
- Muscle weakness in the legs
- A changing way of walking that is slower and more difficult

Osteoporosis vs Osteomalacia Causes

These two conditions share many similarities, but the causes of each are quite different. With osteoporosis, the cause is linked to the natural breakdown of bone in the body associated with aging.

From birth until the early 20s, the body is making more bone than it breaks down, leading to thick, strong bones. Then, after age 30, the body begins to break down more than it can renew. Therefore, people who were unable to make sufficient bone in their early life, will have a greater risk of developing osteoporosis.

Osteomalacia, on the other hand, has more to do with your body's absorption of essential vitamins and minerals, or your body's ability to use them effectively. The most common causes of osteomalacia include issues that prevent the body from obtaining the needed levels of vitamin D:

- Stomach or digestive surgeries: when the normal flow of digestion is interrupted, the body cannot absorb and use the needed level of vitamin D.
- Celiac disease: having a sensitivity or allergy to gluten damages the walls of the intestine, making it impossible to absorb the vitamin D and calcium required to maintain bone health.
- Kidney and liver disorders: these organs are key to the body's ability to properly use vitamin D, so when they are not operating well, the key ingredient for bone health cannot be activated.
- Certain medications: some medications your doctor may prescribe to treat seizures can disrupt the body's ability to use vitamin D.

Osteoporosis vs Osteomalacia Treatments

Osteomalacia may be a complicated condition, but its treatment is straightforward. A simple vitamin D supplement can often be enough to combat the condition. Other times, your doctor may add calcium and phosphorus to make the vitamin D more effective.

Osteoporosis treatment is slightly more complex. Depending on your level of bone loss, your treatment team may offer options like:

- Biophosphonates: the most common and widely used group of medications for osteoporosis that includes drugs like Boniva, Reclast and Fosamax.
- Monoclonal antibody medications: a drug like Prolia or Xgeva is offered as an injection every six months and can improve bone density.
- Hormone therapy: bone loss is linked to a decrease in estrogen and testosterone, so starting hormone therapy as levels decrease can help maintain bone health.
- Other bone-building medications: for people who cannot use other treatments, there is a group of new medications that build bone in novel ways. Be sure to check with your doctor to see if any new medications are right for you.

Osteoporosis vs osteomalacia: these are two separate conditions, both with the ability to significantly impact your

bones and overall well-being. Do your best to understand the disorders and their ability to affect your life, and consult with your doctor to minimize their influence.