

# The "silent disease" - Osteoporosis



*Dr. Larry Lake is a licensed psychotherapist and the CEO of BayView Healthcare, as well as its parent organization, the St. Johns Welfare Federation. Lake says "as a local non-profit healthcare provider, we are excited about how*

*this FORUM can help share the knowledge and expertise of the more than 288 healthcare professionals at BayView and across our continuum of care. In each issue we will address an area of interest to help consumers be even more informed about their health and wellness".*

*This FORUM focuses on bone health and the diagnosis of osteoporosis. Millions of Americans are affected by this bone disorder and osteoporosis is often not diagnosed until a fracture occurs. This FORUM introduces a physical and occupational therapists role in the treatment of osteoporosis*

*using the advanced training of the MEEKS Method and stressing that one of the most parts in the treatment is education. It is never too late to get involved with your bone health.*

*Lee Spannhake MPT is a physical therapist for BayView Home Health and has advanced training in the treatment of osteoporosis. She answers many important questions in this FORUM helping us better understand the diagnosis of osteoporosis and osteopenia, that treatment is available, how you can get involved in you bone health and that the best treatment is the prevention of a fracture.*

## First Signs of Osteoporosis

1. Height loss
2. Fractures
3. Loss of teeth
4. Dowager's Hump
5. Pain
6. Protruding abdomen

## How is osteoporosis diagnosed?

The only non-invasive diagnostic test currently available for osteoporosis is a bone mineral density scan. These radiological scans are typically done on the hips and spine. Bone mineral density scans are often confused with a bone mineral density screen. A bone mineral density screen is commonly done on the index finger and heel and is used to evaluate the risk of developing osteoporosis. It does not diagnose osteoporosis and is not used to monitor treatment. It is recommended that you keep copies of your bone mineral density scans to compare future scores and effectiveness of treatment. Ask your healthcare professional (physician, physical or occupational therapist) on how to read your results.

## How is osteoporosis treated?

Good news - you can improve your bone health! To effectively treat osteoporosis, there should be a multidisciplinary approach. Your physician may prescribe

## What is Osteoporosis?

Osteoporosis is a bone disorder where there is a decrease in bone strength, which places you at an increased risk for a fracture. Osteoporosis currently affects approximately 44 million people in the United States. In North America, osteoporosis-related fractures occur in half of all females and one quarter of all males. It is known as a "silent disease" as most people do not realize they have osteoporosis until they have a fracture. Osteopenia is the beginnings of osteoporosis. Neither osteoporosis nor osteopenia is a normal part of aging. It can affect anyone at any age.

## Where do these fractures occur?

Since osteoporosis is a systemic disease, fractures can occur anywhere. The three most common areas are

the spine, hips, and wrist.

The spine is the most common area for an osteoporotic fracture. These fractures are called compression fractures and may cause complications such as constipation, pneumonia, blood clots, prolonged pain and mortality. It is important to understand that these fractures occur in the **front** of the back. It is therefore crucial to avoid forward **bending** motions of the back. People should also avoid **rotation** and **side bending** motions of the back. Instead, keep the back straight while you bend from your hips and legs. A useful tool for picking up objects so you do not have to perform any adverse motions is a reacher. A reacher is a long stick with a pincer-like claw on one end and a trigger mechanism on the handle. It can be purchased

at local medical equipment stores and pharmacies.

The second most common area for a fracture is the hip. Often these fractures are caused by a fall; however, the hip may fracture first which then causes a fall. Fractures of the hip can have the most devastating consequences. It is estimated that there is up to a 24% death rate the first year following a hip fracture. Of those who survive, approximately only 20% regain their prior quality of life. People with osteoporosis of the hip should avoid extreme inward and outward rotation of the hip.

The wrist is the third most common area for a fracture. These fractures often occur due to an outstretched arm during a fall. Fortunately, this type of fracture heals well.

medication to slow down the removal of bone. Your physician or a nutritionist can show you the best way to get vitamin D, calcium, and other nutrients important to bone health. Physical and occupational therapists educated in treating osteoporosis should be utilized to further improve bone health in a safe manner.

## RISK FACTORS

1. Advanced age
2. Female
3. Caucasian or Asian ethnicity
4. Family history
5. Poor diet
6. Smoking
7. Alcohol abuse
8. Low estrogen
9. Low testosterone
10. Inactive lifestyle
11. Caffeine
12. Diseases such as Rheumatoid Arthritis, Lupus, Leukemia, Parkinson's Disease, Multiple Sclerosis
13. Medications such as Cortisone, prednisone, heparin, chemotherapy drugs, anti-seizure medications and antacids

## How can therapists help improve your bone health?

The key is to avoid a fracture from occurring in the first place. The Meeks Method is a specific approach in the treatment of osteoporosis in which therapists with advanced training utilize a comprehensive treatment program to achieve beneficial results. The therapists utilize this thorough approach to assist patients in avoiding fractures and building bone strength.

## The Meeks Method

A therapist using the Meeks Method will initiate exercises with the patient lying on their back. This is the position of least compression on the front of the spine. We begin with postural realignment exercises. Therapists focus on getting people out of their hunched forward postural positions and back to a neutral posture. First we work on muscle strengthening. Then we focus on appropriate and safe flexibility exercises. It is important to understand that someone with osteoporosis or osteopenia can actually be harmed by certain exercises and movements. For the strengthening exercises, we use heavier weights and fewer repetitions. This is necessary not only to increase strength of the muscles but to increase the strength of the bones.

Low impact weight bearing activities are another way to build bone strength. This means get on your feet! Walking is a wonderful low impact activity. In therapy, we teach our patients the correct way to walk to optimize weight bearing



Lee Spannake, MPT

through the hip joints. If balance is not a problem, it is best to change the surfaces you walk on, such as grass, sand and hills. Bones do best when changing the forces placed on them. To affect bone density, frequently change the direction and intensity of your movements. For instance, walk sideways, backwards and forwards. Walk slower then faster. You can even use a specialized weighted vest

while walking to further increase your intensity.

With the Meeks Method, other activities we work on include balance, fall prevention, breathing relaxation, body mechanics, bracing and pain management such as heat and ice.

One of the most important parts of an osteoporosis program is education. Education begins on the first visit and continues throughout the treatments. We want people to understand how to move safely and why. Remember the bottom line is prevention of a fracture.

Osteoporosis is an epidemic which is greatly under diagnosed and treated. If you have any questions regarding your bone health, please speak with your physician. No matter how old you are, get involved in your bone health. It is never too early or too late. *ry*



## Health & Wellness Forum

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BayView Healthcare, also known to many as the St. Johns Welfare Federation, is a private not-for-profit comprehensive continuum of healthcare provider founded in 1920. Our superior level of services includes short-term inpatient and outpatient rehabilitation, skilled nursing (Samantha Wilson Care Center), BayView Home Health, and assisted living (Pavilion at BayView and Buckingham Smith) and the Emergency Charitable Assistance Program. Caring Hands - Caring Community is a separate 501(c)3 charitable organization founded in 2004 by our parent organization. It was formed to support the exceptional services and continuum of care provided to people in need of healthcare services and financial assistance.