Osteoporosis: The Silent Disease

What is Osteoporosis?
Osteoporosis is a condition in which bones become porous, and thus brittle and fragile, generally as a result of calcium deficiency or hormonal changes. Once total bone mass has peaked – around age 35 – all adults start to lose it. Over time losing bone mass weakens the bones and makes them more likely to break. Osteoporosis is often referred to as a “silent disease” because many individuals are unaware they have the condition until a painful fracture occurs.

What are the signs of Osteoporosis?
You may not know you have osteoporosis until you have serious signs. Signs include broken bones, low back pain, or a hunched back. You may also get shorter over time because osteoporosis can cause your vertebrae (the bones in your spine) to collapse. These problems tend to occur after a lot of bone calcium has already been lost.

What are risk factors for Osteoporosis?
Osteoporosis is much more common in women than in men. This is because women have less bone mass than men, tend to live longer and take in less calcium, and need the female hormone estrogen to keep their bones strong. If men live long enough, they are also at risk of getting osteoporosis later in life.

Other factors:
- Sedentary lifestyle
- Cigarette smoking
- Family history of osteoporosis
- Excessive alcohol intake
- Being thin or having a small frame
- Being Caucasian or Asian
- Hyperthyroidism
- Use of certain medications
- Calcium deficiency
- Advanced age
- Estrogen deficiency as a result of menopause, especially early or surgically induced

How is Osteoporosis diagnosed?
A bone density test is often used to screen for and detect the early stages of osteoporosis. This test takes a picture of the bones to see if they are becoming porous.

How can Osteoporosis be prevented or treated?
Hormone Replacement Therapy (HRT) is one way to prevent osteoporosis or keep it from getting worse. In HRT, you take hormones (estrogen and progestin together, or estrogen alone) to counteract the drop in estrogen that happens at menopause or when the ovaries are removed by surgery. Women who take HRT are at an increased risk for breast cancer, heart attack, stroke, serious blood clots, and Alzheimer’s disease. Factors such as your health history and your family’s health history will be important when weighing the risks and benefits of HRT.

Calcitonin is a hormone that helps prevent further bone loss and reduces the pain some people have with osteoporosis. It can be taken as a shot or as a nasal spray. Its most common side effect is nausea.

Alendronate and Risedronate are not hormones but are used to help prevent and treat osteoporosis. These drugs help reduce the risk of spine fractures by decreasing the rate of bone loss. Their most common side effect is an upset stomach.

Raloxifene is a drug used to prevent and treat osteoporosis by increasing bone density. It is not a hormone, but it mimics some of the effects of estrogen. Side effects may include hot flashes and a risk of blood clots.

Teriparatide is a new injectable synthetic hormone used once a day for the treatment of osteoporosis. It causes new bone growth. Common side effects may include nausea, dizziness, and leg cramps.

How much calcium do I need?
Before menopause, you need about 1,000 mg of calcium per day. After menopause, you need 1,500 mg of calcium per day if you’re taking estrogen or 1,000 mg of calcium per day if you’re not taking estrogen. It’s usually best to try to get calcium from food. Nonfat and low-fat dairy products are good sources of calcium. Other sources include dried beans, sardines, and broccoli. If you don’t get enough calcium from the food you eat, your doctor may suggest taking a calcium pill. Take it at meal time or with a sip of milk. Vitamin D and lactose help your body absorb the calcium. Calcium isn’t just important for your bones. It’s also important for your teeth, nerves, and muscles.

Tips to keep bones strong:
- Exercise
- Eat a well-balanced diet with at least 1,000 mg of calcium a day
- Quit smoking. Smoking makes osteoporosis worse.
- Talk to your doctor about HRT or other medicines to prevent or treat osteoporosis.