

Osteitis Deformans (Paget's Disease)

Osteitis deformans is a chronic disease of the bones that are characterized by a disorder for the normal remodeling process of the bone. The other and more commonly used name for Osteitis deformans is Paget's disease. The disease is named after English surgeon Sir James Paget (1814-1899).

Normal bones have a balance of forces working to lay down new bone material and remove the old bone material. This relationship is imperative to maintaining normal calcium levels within the blood. In bones that are affected by this disease, the bone remodeling ends up being disturbed and isn't synchronized. The bone formed ends up being enlarged, abnormal, brittle, not as dense and susceptible to breakage.

The disease affects older bones in adults. Estimates indicate that 1 percent of adults in the US have the disease. Many people are completely unaware they have the disease. Certain genes have been attributed to the disease, including that of the Sequestrosome 1 gene on chromosome 5. Virus infections might be needed to trigger the disease in those who have an inherited genetic tendency to develop this condition.

Paget's disease is rare under the age of 40, its more common in the over-70s. In around 15 percent of sufferers, the condition is genetic so any family members who could be at risk of being affected could opt for an alkaline phosphatase blood test if they feel they are at risk or showing early symptoms as a screening mechanism for the disease.

Symptoms of Paget's disease are bone pain, headaches and hearing loss (if the disease affects the skull), nerve pain, increased head size, bowing of a limb, damage to cartilage and joint pain. Paget's disease can also cause kidney stones, heart disease (in severe cases), osteosarcoma (a bone cancer, in severe cases), loose teeth, arthritis, bone fracture, bone deformity, and loss of hearing.

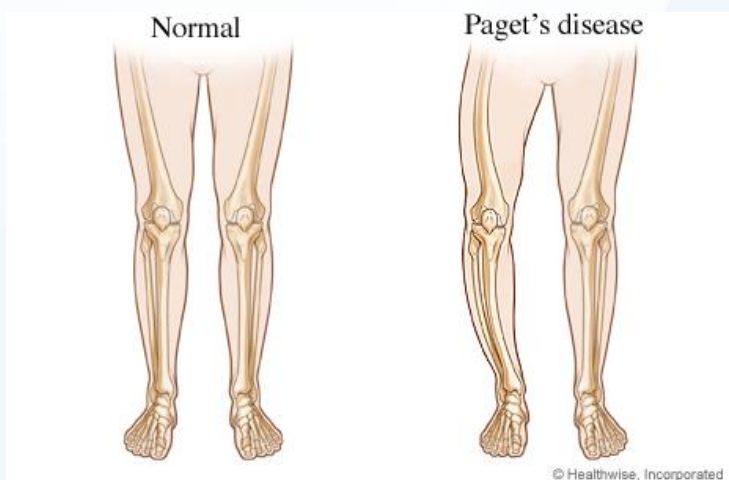
Paget's disease is not associated with osteoporosis which is a separate disease, although both can occur in the same person.

Paget's disease is best diagnosed by routine blood tests where alkaline phosphatase is tested, known as ALP. Alkaline phosphatase is an enzyme found in the blood. It's often performed to check for liver function, or to identify bony problems. If the figure is raised, it may confirm a diagnosis of Paget's disease.

Osteitis Deformans Anatomy

The skeletal system is made up of all the joints and bones in the body. All of the bones are a complex group of living organs that are composed of multiple cells, protein fibers and a range of minerals. The skeleton serves as a scaffold by delivering protection and support for the soft tissues that make up the remainder of the body. The system provides a series of attachment points that allow the muscles to move at the joints.

New blood cells are generated by the red bone marrow that is inside of the bones. The bones act as the warehouse for the body's calcium, energy and iron in the form of fat. The skeleton continues growing throughout childhood and serves as a framework for the remainder of the body to continue growing along with it.



How to Treat Osteitis Deformans:

1. Medication

Medical treatment for this disease often involves either bisphosphonates or an injectable calcitonin. These medications are used to treat those who have osteoporosis, but they tend to be a staple for treatment. Many are taken by mouth first thing in the morning with an empty stomach and eight ounces of water.

An anti-inflammatory medication might also be beneficial to those who are struggling with inflammation and pain.

2. Therapy

Osteopathy and other physical therapies can be very useful for sufferers of Paget's disease. Although the therapy will not cure the problem, it can offload stress on various joints and improve biomechanics to reduce pain. It can also aid in joint mobility and reduce inflammation.

3. Heel Lifts

A bone deformity often requires the use of specialized footwear or heel lifts. These can help to prevent any stress on the joints and bones within the body.

4. Surgery

For those who have damaged joints, severely deformed bones, fractures and pinched nerves from an enlarged bone, surgery might be the only option to correct the disease.

Tips:

- The disease often occurs in the skull, thighs, pelvis and lower legs. Symptoms tend to progress slowly and worsen over time.
- The disease isn't a cancer, and it doesn't spread into normal bones.
- Osteitis deformans often causes headaches, loss of hearing, pain in the joints or bones, increase in head size, limb bowing, spine curvature and an increased amount of pressure on the nerves.
- The disease can lead to other types of medical conditions.
- Blood tests, bone scanning and x-rays are used to treat the disease.