PINEHURST SURGICAL CLINIC
Orthopaedic Surgery

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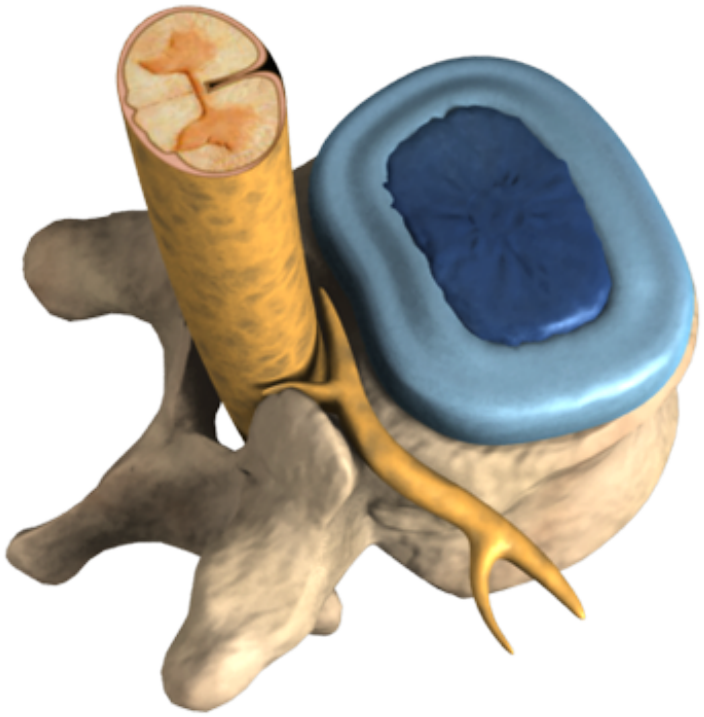
Osteoporosis

Osteoporosis is a condition in which bones lose their density and become more porous and fragile. The condition can occur in anyone, but is much more likely in older females, especially after menopause. Diminished bone strength from osteoporosis occurs particularly in the spine and hips.



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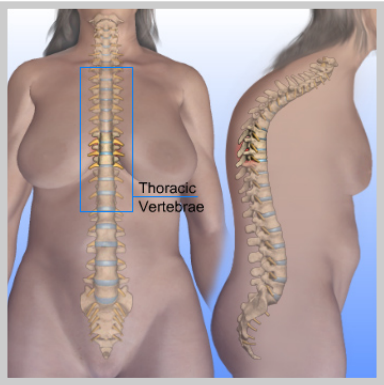
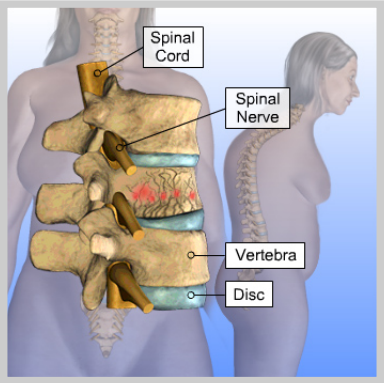


Introduction

Osteoporosis is a condition in which bones lose their density and become more porous and fragile. The condition can occur in anyone, but is much more likely in older females, especially after menopause. Diminished bone strength from osteoporosis occurs particularly in the spine and hips.



Symptoms

Osteoporosis by itself does not cause pain and many people will not know they have it until after it has progressed to a point that has severely weakened the vertebrae. In some cases, as the density of the spinal vertebrae decreases, they may lose their normal height. When this loss occurs, the front part of the vertebrae may take on a more wedged type of configuration, causing forward-leaning posture and increased curvature of the spine (kyphosis) that will sometimes cause back pain. Whether the posture is affected or not, the primary risk of osteoporosis is spinal fracture. When this happens, there is often a sudden onset of sharp pain at the fracture site. Mild trauma, such as light lifting or even a heavy sneeze may be enough to fracture the weakened vertebrae.

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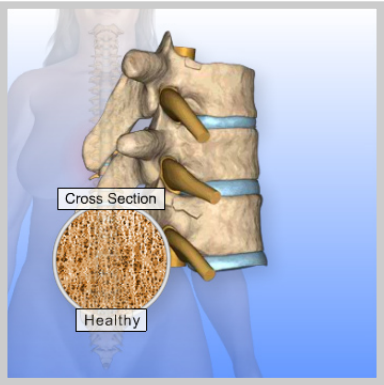
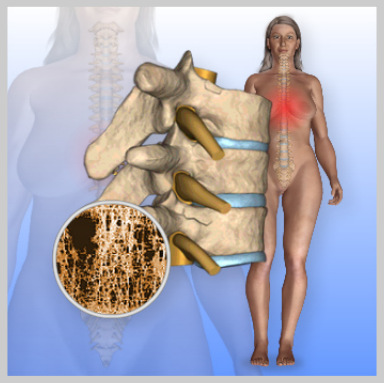


Causes

Bone is continually remodeled, and osteoporosis results from a reduction in bone mineral density as the bone renews itself. Calcium helps build strong bones and vitamin D helps bones absorb and retain calcium. A deficiency in either of these substances can slow the rate of bone growth to the point that the bones become porous and brittle. Estrogen also affects the rate at which bone renews itself, and post-menopausal women experience an increase in bone loss for several years following the rapid decrease in estrogen production. Other factors that may increase the risk of osteoporosis include a lack of exercise, alcohol abuse, some medications (steroids) and smoking.



Summary

Fortunately, osteoporosis can be avoided with preventative steps and responds well to treatment when diagnosed early. Prevention typically involves an adequate intake of calcium and vitamin D, exercising regularly, limiting alcohol consumption, stopping smoking, and periodic bone mineral density testing following menopause. Treatment may involve similar steps, often in conjunction with treatment for fractures that may have resulted and medications to slow bone loss or increase bone production.