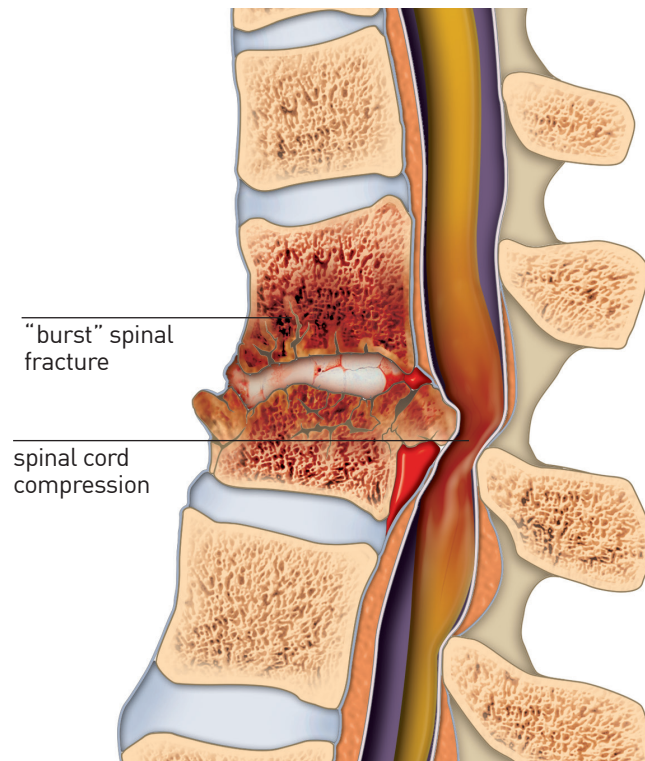


Overview

Even minor falls or trauma can produce a *spine fracture*. Many of these injuries will never require surgery, but major fractures can result in serious long-term problems unless treated promptly and properly. Spine fractures range from painful compression fractures, often seen after minor trauma in *osteoporotic patients*, to more severe injuries such as *burst fractures* and *fracture-dislocations* that occur following automotive accidents or falls from height. These severe injuries frequently result in spinal instability, with a high risk of spinal cord injury and pain.

Osteoporosis, or weakening of the bones, can lead to painful vertebral compression fractures. Until recently, the only treatment was bracing and narcotic medications which frequently lead to ongoing pain and progressive deformity.



Causes & Symptoms

When an external force is applied to the spine, such as from a fall, the forces may exceed the ability of the bone within the vertebral column to support the load. This may cause the front part of the vertebral body to crush, resulting in a *compression fracture*. If the entire vertebral column breaks, it results in a *burst fracture*.

If the compression is mild, you will experience only mild pain and minimal deformity. If the compression is severe, affecting the spinal cord or nerve roots, you will experience severe pain and a hunched forward deformity (*kyphosis*).



If you experience weakness, sensory loss, or a loss of bowel or bladder control this is an emergency and you should call your physician immediately or go to the emergency room.

Risk Factors

Osteoporosis is the most common risk factor for fractures, as the disease causes bones to weaken.



Treatment

Medical Treatment – Most fractures are treated with immobilization in a brace or corset for up to 12 weeks. Bracing helps to reduce pain and prevent deformity.

Often interventional procedures are used to treat these fractures. Common techniques such as **kyphoplasty** — where our interventional radiologists use a technology to re-expand the vertebral body and augment its strength by injecting bone cement. This can be done as an outpatient procedure in a minimally invasive fashion. Other procedures include **vertebroplasty** — in this procedure, the surgeon inserts a catheter into the compressed vertebra. The *catheter* is used to inject the fractured vertebra with bone cement, which hardens, stabilizing the vertebral column. This procedure can help alleviate fracture pain and enables a rapid return to mobility. However, it does not correct the actual spinal deformity.

Surgical Treatment – Severe cases may require surgery. Should you require surgical treatment our providers will discuss this option in detail.

Follow Up & Care Information

The prognosis for recovery is very good. Most people with spinal fractures respond well to treatment. But successful long-term treatment will involve effort from the patient to change his or her lifestyle, occupation or activities. In addition, improving health through weight loss or exercise is usually an aspect of treatment.