Vertebral compression fracture

- Spinal Instability Neoplastic Score as a Predictor of Vertebral Fracture in Patients Undergoing Radiation Therapy for Spinal Metastases: A Single-Institution Study
- Enabling Early Identification of Malignant Vertebral Compression Fractures via 2.5D Convolutional Neural Network Model with CT Image Analysis
- An Assessment of the World's Contribution to Osteoporotic Vertebral Compression Fractures: A Bibliometric Analysis of Surgical Management; An AO Spine Knowledge Forum Trauma and Infection Initiative
- The value of a deep learning image reconstruction algorithm for assessing vertebral compression fractures using dual-energy computed tomography
- Clinical and therapeutic analysis of 22 patients with traumatic spinopelvic dissociation
- Predicting the Nonunion of the Acute Osteoporotic Vertebral Compression Fracture Following Low-Energy Injuries by Quantifying Vertebral Marrow Fat Fraction on T(2)-Weighted Dixon Sequences
- Generalizable model to predict new or progressing compression fractures in tumor-infiltrated thoracolumbar vertebrae in an all-comer population
- Fighting the Fracture Cascade: Early and Repeated Balloon Kyphoplasty as a Bridge Until the Effects of Osteoporosis Treatment Become Apparent in a Super-Aged Patient

A vertebral compression fracture (VCF) is a type of spinal fracture that occurs when a vertebra in the spine collapses or is compressed due to osteoporosis, trauma, or other medical conditions. VCFs are most commonly seen in the thoracic and lumbar spine.

Symptoms of a VCF may include sudden onset of severe back pain, loss of height, stooped posture, and difficulty standing or walking. Some patients may not have any symptoms and the fracture may be detected incidentally on imaging studies done for other reasons.

VCFs can be diagnosed with imaging tests such as X-rays, CT scans, or MRIs. Treatment options depend on the severity and cause of the fracture. Mild VCFs may be managed with pain medication, rest, and activity modification, while more severe fractures may require bracing, vertebroplasty, or kyphoplasty.

Vertebroplasty and kyphoplasty are minimally invasive procedures that involve injecting bone cement into the fractured vertebra to stabilize and strengthen it. These procedures can provide rapid pain relief and restore spinal alignment and function.

Preventing VCFs involves maintaining good bone health through a healthy diet, regular exercise, and avoiding smoking and excessive alcohol consumption. If osteoporosis is the underlying cause, medications to prevent further bone loss and promote bone density may also be prescribed.

---

see Thoracolumbar compression fracture.

The most common type of compression fracture is a wedge fracture, in which the front of the vertebral body collapses but the back does not, meaning that the bone assumes a wedge shape. Sometimes, more than one vertebra fractures, a condition called multiple compression fractures.

Osteoporotic vertebral compression fracture

Osteoporotic vertebral compression fracture