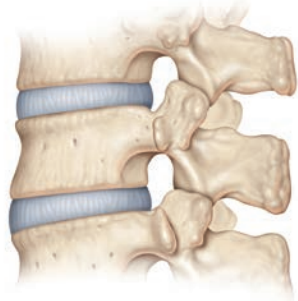
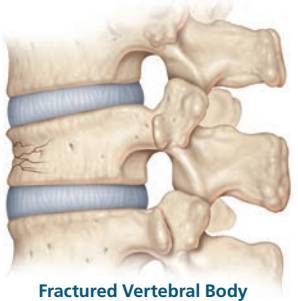

What is vertebroplasty?

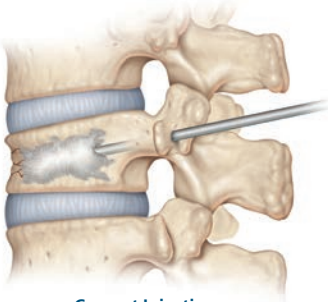
Vertebroplasty is a minimally invasive procedure to treat vertebral compression fractures in which medical-grade bone cement is injected through a needle into the vertebral body. The cement hardens quickly, stabilizing the fracture and strengthening the weakened bone. Most patients experience pain relief following this treatment.



Normal Vertebral Body



Fractured Vertebral Body



Cement Injection

Sources and additional information:

National Osteoporosis Foundation:
www.nof.org

All About Back and Neck Pain:
www.allaboutbackandneckpain.com

International Osteoporosis Foundation:
www.iofbonehealth.org

National Institutes of Health:
www.nih.gov

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UNDERSTANDING VERTEBROPLASTY



What is a vertebral compression fracture?

The spine is made up of many individual bones called vertebrae that stack together in a column. Just like other bones in the body, these vertebrae can fracture. A vertebral compression fracture is an injury that occurs when the main part of the vertebra, the vertebral body, experiences too much pressure and collapses in height. These fractures happen most often in the thoracic (upper back) and lumbar (low back) regions of the spine.

What causes vertebral compression fractures?

Compression fractures in the spine generally occur when a vertebral body has been weakened due to osteoporosis or cancer. When a vertebra is weakened, everyday activities such as lifting a child, bending down to pick something up, or even sneezing can cause a fracture. When these fractures occur, the vertebral body collapses into a wedge shape. Vertebral compression fractures may cause severe back pain, limited mobility, and/or a “hunched-over” appearance due to the change in shape of the vertebral body.

What are the treatment options?

A vertebral compression fracture may heal on its own over several weeks or months. Traditional treatments include bed rest, external bracing, and strong pain medications. However, some patients remain in pain after these therapies and may require further treatment, such as vertebroplasty.

Who is a candidate for vertebroplasty?

Vertebroplasty is indicated for painful compression fractures resulting from osteoporosis or tumor. A doctor will perform testing to determine whether a patient has a vertebral compression fracture that will benefit from treatment with vertebroplasty. This may include x-rays, magnetic resonance imaging (MRI) and/or bone scans.

What are the risks of vertebroplasty?

Potential complications following vertebroplasty should be discussed with your doctor prior to having the procedure. The risks can be higher in patients with additional medical conditions such as heart disease or other cardiovascular conditions.

What happens during the procedure?

During the procedure, the patient lays face down on a table and is given medications to provide mild sedation. The skin and underlying tissues are numbed and, under high quality x-ray imaging, a needle is passed carefully into the fractured vertebral body. Depending on the fracture, one or two needles may be used. When the needle is in the appropriate position, the cement is mixed and slowly injected during constant x-ray monitoring. When the open spaces within the vertebral body are filled, the needle is removed. For one fracture, the procedure usually takes less than one hour. Some patients have more than one vertebral compression fracture. In these cases, multiple fractures may be treated during the same session.

After the procedure, the patient is allowed to carefully test their mobility. Sometimes an overnight stay in the hospital is necessary, but many patients go home the same day. Most patients experience significant pain relief within the first 1-2 days following vertebroplasty. Medications may be prescribed following the procedure and should be used only as directed. These include:

- Pain medications – usually reduced over several days after the procedure
- Osteoporosis therapy medications – to prevent further bone loss and reduce the risk of future fractures