

You or a member of your family has been referred to an interventional radiologist for treatment. This brochure will answer some of the questions about the medical specialty and how an interventional radiologist can help you.

For more information on interventional radiology, please contact the Society of Interventional Radiology at (800) 488-7284 or visit www.SIRweb.org.

INTERVENTIONAL RADIOLOGY

Vertebroplasty: Treating Spinal Fractures Caused by Osteoporosis




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Questions and Answers about Treating Osteoporotic Spinal Fractures with Vertebroplasty

Q. What is osteoporosis?

A. Osteoporosis is a condition in which bones become thin and fragile. It is called a “silent disease” because bone loss occurs without symptoms. People may not know that they have osteoporosis until their bones become so weak that a simple strain, twist of the body, bump or fall causes a bone fracture. Fractures may occur in the hip, wrist, ribs or elsewhere, but one of the more common sites is in the vertebrae, the bones that make up the spinal column.

Q. How common are spinal fractures caused by osteoporosis?

A. Forty-four million Americans have thinning bones and are at increased risk for the disease. Of these 44 million, 10 million suffer from osteoporosis. Eighty percent of those who are at risk or affected by the disease are women. Osteoporosis causes more than 1.5 million fractures a year, of which 700,000 are spinal (vertebral) fractures.

Q. Who is at risk?

A. Factors that increase the likelihood of developing osteoporosis include:

- Being female
- Being thin or having a small frame
- Advanced age
- A family history of osteoporosis
- Being postmenopausal
- Abnormal absence of menstrual periods
- Anorexia or bulimia
- A diet low in calcium
- Long-term use of medications such as corticosteroids or anticonvulsants
- Lack of exercise
- Smoking
- Excessive use of alcohol

Q. How are spinal fractures treated?

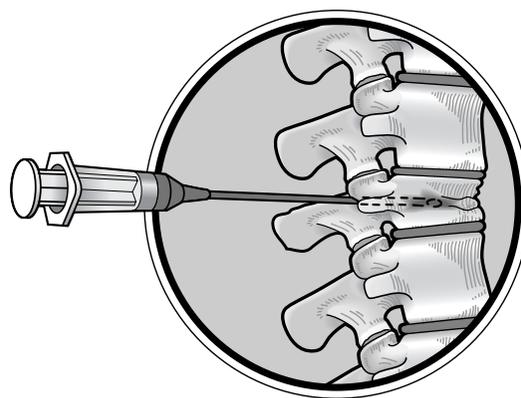
A. Fractures of the vertebrae have traditionally been much more difficult to manage than broken bones in the hip, wrist or elsewhere that can often be treated successfully with surgery. Surgery on the spine has not typically been used to treat vertebral fractures associated with osteoporosis, except as a last resort. Until recently, reduced activity and pain medications were the only treatments available. For those patients who have unresolved chronic pain, there is a safe, minimally invasive treatment called vertebroplasty (ver-TEE-bro-plasty). Studies show that about 90 percent of people treated with vertebroplasty have complete or significant reduction of their pain.

Q. What is vertebroplasty?

A. In the procedure, a needle is inserted through the skin and into the crushed vertebra. A special bone cement used for medical purposes (called polymethylmethacrylate) is injected into the bone to stabilize it. Often, more than one crushed vertebra can be treated in a single procedure. Open surgery is not required because the interventional radiologist is able to guide the needle to the spot using special X-ray equipment.

Vertebroplasty takes from one to two hours to perform, depending on how many bones are treated. Usually, the procedure is performed with mild sedation and local anesthesia that numbs the treated area.

Some patients experience immediate pain relief after vertebroplasty. Most report that their pain is gone or significantly better within 48 hours. Many people can resume normal daily activities within hours to days after treatment.



Q. What are the risks or complications?

A. Vertebroplasty is a very safe procedure with few risks. Complications are rare and should be discussed with your doctor. As with any medical procedure, the possibility of complications will depend on the individual patient. For example, patients with tumors in the spine or with other serious medical conditions may be at higher risk for complications from vertebroplasty. Your interventional radiologist will work closely with your primary care or other physician to be sure you receive the best possible care.

Q. Who is a candidate for vertebroplasty?

A. People who have suffered recent fractures that are causing severe back pain despite standard therapy with rest and pain medications, are the best candidates for vertebroplasty. Older fractures may be treated, but the procedure is most successful if it is performed within one year of when the fracture occurs. Chronically painful fractures causing pain for months to years are also very frequently treated with excellent results. The procedure is not used to treat arthritis or herniated disks.

Q. What is an interventional radiologist?

A. Interventional radiologists are board-certified doctors who specialize in minimally invasive, targeted treatments performed using imaging for guidance. They use their expertise in reading X-rays and using ultrasound, magnetic resonance imaging (MRI), and other diagnostic imaging equipment to guide tiny instruments, such as catheters, through blood vessels or through the skin to treat diseases without surgery. Interventional radiologists are certified by the American Board of Radiology in both Vascular and Interventional Radiology and Diagnostic Radiology. Your interventional radiologist will work closely with your primary care or other physician to be sure you receive the best possible care.