

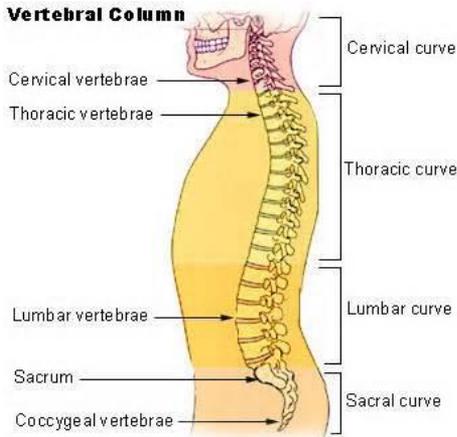
Balloon Kyphoplasty for Vertebral Compression Fractures



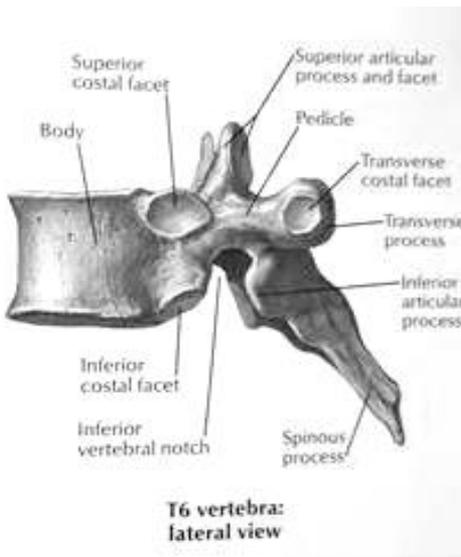
**PATIENT
EDUCATION**

Overview

Your backbone, or spine, is made up of bones called vertebrae that stack up, one upon the other. The vertebrae protect your spinal cord, which carries messages to and from the brain, and allows you to stand upright and bend.



A number of problems can change the structure of the spine or damage the vertebrae and surrounding tissue, including vertebral compression fractures.



Multiple spinal compression fractures may result in shorter stature and/or a hunched back (kyphosis). The loss of space may cause hip pain as well as breathing and stomach problems.

What is a vertebral compression fracture?



Fracture is the medical term for a broken bone. A **vertebral compression fractures** is a fracture in the body of a vertebra, which causes it to collapse. A **pathologic fracture** is when that fracture occurs because the bone has been weakened by a pre-

existing condition, such as osteoporosis, certain medications, or by the spread of cancer to the bone.

People with myeloma or lung, breast, kidney, prostate, or thyroid cancers that have spread to the bone have a higher risk of pathologic fractures than people with other types of cancer. Certain cancer therapies may weaken bone tissue and contribute to a higher risk of fracture.

Cancer that has spread to the bone can affect your quality of life. The earliest and most common issue is recurring bone pain. Other quality of life issues also may be affected including problems with appetite, sleeping, fatigue, nausea, bladder and bowel control, and movement. The spine is the most common site of cancer spreading to the bone.

What is balloon kyphoplasty?

Kyphoplasty is a minimally invasive procedure used to treat painful, progressive vertebral compression fractures.

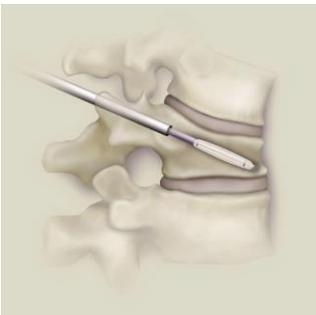
Balloons, attached to an instrument, are used to lift the fractured bone and put it back in place, thereby correcting the deformity. After the balloons are removed, they leave a space that is filled with bone cement. For the best results, kyphoplasty should be done soon after the fracture occurs. All patients must take bone strengthening medications during treatment.

How is it done?

Before the test, you will have imaging tests done to determine the exact location of the fracture.

This procedure is done under conscious sedation, medication that relaxes you, and may make you sleepy. We will use a local anesthetic to numb the area where we will insert the instrument.

This procedure is usually done on both sides of the fractured vertebral body. It takes about 1 hour for each fracture repair. You will be lying face down on the operating room table. The surgeon makes two small incisions in the back.



A hollow, tube-like instrument is inserted into the center of the vertebral body that is fractured.



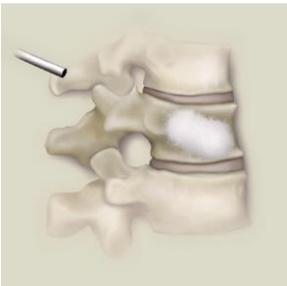
An instrument (balloon tamp) is inserted down the tube and the balloon is inflated. This pushes the bone back to its normal height and shape.



Once the vertebra is in the correct position, the balloon is deflated and removed, leaving behind a cavity.



The cavity is filled with special cement to support the bone and prevent further collapse.



The cement will hold the vertebra in place.

How do I prepare?

Before surgery, always tell your doctor or nurse:

- if you could be pregnant
- what drugs you are taking, even those you buy without prescription
- if you have been drinking a lot of alcohol

In the days before the surgery:

- You may be asked to stop taking aspirin, ibuprofen, Coumadin® (warfarin), and other drugs that make it hard for your blood to clot.
- Ask your doctor what drugs you should take on the day of the surgery.
- Stop smoking.
- Stop eating and drinking eight (8) hours before your procedure except for water. Stop drinking water 2 hours before your procedure.

On the day of the surgery:

- Take the medications your doctor told you to take the morning of surgery. Take them with a small sip of water.
- Your doctor or nurse will tell you when to arrive at the hospital.

After the procedure

- Typically, you go home on the same day of surgery.
- Before you are discharged, we will schedule you for a follow up visit and review what you should, and should not do, when you get home.
- You should be able to walk. However, it is best to stay in bed for the first 24 hours, except to use the bathroom.
- Apply ice to the wound area if you have pain where the needle was inserted.
- After 24 hours, slowly return to your regular activities.
- You should not drive, unless your doctor says it is OK.
- Avoid heavy lifting and strenuous activities for at least 6 weeks.
- Most people can return to their normal daily activities after the procedure.

What are the risks and benefits of balloon kyphoplasty?

Benefits

- Restores vertebral body height and corrects spinal deformity with low complication rate
- Reduction in back pain
- Improved ability to perform activities of daily living
- Improved mobility
- Improvement in quality of life
- Reduces number of days confined to bed and days when pain interfered with daily activities

Risks

Kyphoplasty is generally safe but complications may include:

- Bleeding
- Infection
- Allergic reactions to medicines
- Leakage of the bone cement into surrounding areas (may cause pain if it affects the spinal cord or nerves, infection if it leaks into the muscle and tissue surrounding the spinal cord, or damage to blood vessels or nerves)

Complications are uncommon, but as with any surgical procedure, there are risks - some of which can be fatal (heart attack, stroke, and embolism to lungs or heart).

Is kyphoplasty covered by insurance?

In most cases, Medicare and private insurance companies cover the procedure. (The procedure will be pre-certified by your insurer.) If you have questions about your policy or coverage, please contact your insurance company.