

**KYPHOPLASTY** 



# **Kyphoplasty**

Kyphoplasty is a minimally invasive spinal surgery procedure used to treat painful, progressive vertebral body collapse fractures (VCFs). The VCFs may be caused by osteoporosis or the spread of tumor to the vertebral body.

Osteoporosis is age-related softening of bones. It causes the building blocks of the spine to weaken and collapse. This results in severe pain and a progressive hunchback. Certain forms of cancer also weaken the bone and cause the same problems.

# Kyphoplasty is not appropriate for:

- Patients with young, healthy bones or those who have sustained a vertebral body fracture or collapse in a major accident
- Patients with spinal curvature such as scoliosis or kyphosis that is due to causes other than osteoporosis
- Patients who suffer from spinal stenosis or herniated discs with nerve or spinal cord compression and loss of neurological function not associated with a vertebral compression fracture

### How it works

The kyphoplasty procedure involves the use of a balloon to restore the vertebral body height and shape. Bone cement is used to strengthen the spine. The procedure may be performed under intravenous sedation, using either local or general anesthetic. The patient lies face-down on the operating room table. Two X-ray machines are used to show the collapsed bones.

The surgeon makes two small (less than 3mm) incisions and inserts a tube into the center of the vertebral body. Through this tube, balloons are placed in the center of the vertebral body. Then the balloons are inflated. This pushes the bone back towards its normal height and shape. It also helps create a cavity, which the surgeon will fill with the bone cement.

Once the cavity is created, the surgeon removes the inflatable balloon bone tamp, mixes the cement and fills the cavity in a slow and controlled fashion. The cement hardens. Then the surgeon takes out the tubes and closes the incisions with a single stitch. Patients usually go home the same day. Patients can return to all daily activities as soon as possible. They have no restrictions.

# Results and complications

Early results show kyphoplasty is a safe and effective method of vertebral reconstruction and stabilization in the treatment of osteoporotic VCFs. Like all surgeries, kyphoplasty does have risks. Complications may require additional treatments such as medications or surgery.

Kyphoplasty is associated with excellent pain relief caused by the vertebral body collapse. The large majority of patients rate their treatment a success. They are able to return to all of their pre-VCF function. Patients typically do not need any form of physical therapy or rehabilitation after a kyphoplasty procedure.

Occasionally, patients complain of persistent pain after kyphoplasty. This may be due to irritation of tissues involved in the procedure itself. It is more likely due to the underlying arthritis and degeneration of the spine.

- Pain due to the procedure will typically diminish within two weeks.
- If the pain is due to the arthritic degenerative changes in the spine, the usual treatment is medications and an ongoing exercise program.

### Possible risks

- The usual risks of local or general anesthetics apply. These risks depend on the patient's overall health.
- There is a small risk of the bone cement leaking from within the boundaries
  of the vertebral body. In most cases, this rare event does not cause any
  problems.
- In very rare circumstances the cement may irritate or damage the spinal cord or nerves. This can cause pain, altered sensation, or even, very rarely, paralysis. Should the cement leak further, more significant surgery may be needed to stop the irritation of the nerves or spinal cord.
- There is also a very small chance of the cement traveling to lungs, and an even smaller chance of the cement block becoming infected at the time of surgery or even years later.



# Discharge Instructions for Kyphoplasty

Fractures in the bones of the spine (vertebrae) can cause severe back pain and loss of movement. You had a procedure, called kyphoplasty, to cement the fractures in your spine, restore the height of the vertebrae, and help relieve pain. Using image-guided X-rays, your doctor made two small incisions in your back for each vertebra treated. The doctor inserted a balloon on each side of the broken vertebra and inflated them until they expanded to the desired height. Then the balloons were removed. The spaces created by the balloons were filled with orthopedic cement, giving strength and stability to your vertebra. The following are instructions to help you care for your back when you are at home.

- Take your medication exactly as directed.
- Remove the small bandages on your incision 24-48 hours after the surgery.
- Don't shower or soak in a bathtub for 1-2 days after the surgery.
- Use an ice pack or bag of frozen peas—or something similar—wrapped in a thin towel to reduce the swelling and pain around incision sites. Apply the ice pack for 20 minutes; then remove it for 20 minutes. Repeat as needed.
- For the first 1-2 days after the surgery, keep your head elevated when lying down.
- Take short walks. Start by walking for 5 minutes at a time. Then gradually build up your time and distance.
- Don't drive for 2 days after surgery. And never drive while taking opioid pain medication.



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