



Understanding Kyphoplasty

What Is Kyphoplasty?

Kyphoplasty is a minimally invasive procedure designed to treat vertebral compression fractures (VCFs), which are breaks or cracks in the vertebral bones of the spine. The primary purposes of kyphoplasty are to alleviate the debilitating pain caused by these fractures, restore the height of the collapsed vertebra, correct the deformity known as kyphosis which creates a hunched over posture, and provide a quick return to daily activities.

This procedure offers several key benefits, including rapid pain relief, spinal deformity correction, and a relatively quick recovery time. At Desert Spine and Sports Physicians, we strive to help patients overcome pain and functional limitations through advanced [nonsurgical procedures](#) such as kyphoplasty.

Vertebral Compression Fractures Explained

The human spine consists of a series of vertebral bones or vertebrae stacked on top of one another, creating a strong yet flexible column that protects the spinal cord and nerves. A vertebral compression fracture occurs when the vertebral body, the thick block of bone that forms the front of the vertebra, becomes weakened due to osteoporosis and collapses under the weight and pressure of the body. These fractures can cause significant pain, loss of height, and an abnormal curvature of the spine known as kyphosis, which can lead to breathing difficulties and other complications if left untreated.

Causes and Symptoms of Vertebral Compression Fractures

Understanding the Causes

Osteoporosis, a condition characterized by the loss of bone density and weakened bone, is the primary culprit behind vertebral compression fractures. As bones become more porous and fragile due to [osteoporosis](#), even everyday activities such as lifting, bending, or twisting can put excessive stress on the vertebrae, leading to cracks or fractures in the weakened bones.

Recognizing the Symptoms

- **Acute, severe back pain:** This pain arises suddenly, often after a routine activity or minor falls, and can be severe.
- **Change in posture or hunched-over appearance:** A kyphotic deformity, characterized by the spine rounding forward, can result from the collapsed vertebrae.
- **Long-term consequences if left untreated:** Issues resulting from vertebral fractures include chronic back pain, difficulty with walking and everyday activities such as lifting, reaching, pushing and pulling, and in some cases - significant respiratory issues.

Kyphoplasty Procedure: What to Expect

Preparing for Kyphoplasty

Before a [kyphoplasty procedure](#), patients undergo a thorough medical examination and diagnostic testing such as an MRI scan, to determine the extent and location of the vertebral compression fracture. Imaging is also important to make sure the fracture is acute or new, and not old. Patients will also receive pre-procedure instructions regarding medication adjustments and fasting requirements.

The Kyphoplasty Procedure Step by Step

The kyphoplasty procedure takes about an hour. During this time, the patient is given conscious sedation and a local anesthetic. The procedure is performed under fluoroscopy or x-ray guidance.

1. After numbing the skin, a hollow needle is inserted into the vertebra and a small drill is then used to create a channel in the bone.
2. A specialized balloon is then inserted into the channel and carefully inflated within the vertebra, creating a cavity and restoring the vertebra's height and shape.
3. Once the desired height and shape are achieved, the balloon is deflated and removed.
4. Bone cement is then injected slowly into the cavity, stabilizing the fracture and providing long-lasting support as the cement hardens.

After the Procedure: Recovery and Care

Immediately after the kyphoplasty procedure, patients should remain immobile for a short period to allow the bone cement to set fully. Pain relief is often immediate, though some residual discomfort may persist for a few days. Patients will receive specific instructions regarding medication management and appropriate bracing to aid recovery.

Most patients can return to normal activities within a few days, although strenuous activities may need to be limited for several weeks. We will schedule regular follow-up appointments to monitor your progress and provide any necessary long-term care recommendations.

Risks and Complications of Kyphoplasty

While kyphoplasty is generally considered a safe and minimally invasive procedure, there are potential risks and rare complications that patients should be aware of and should discuss with the doctor. These may include:

- Infection or bleeding
- Allergic reaction to the bone cement or other medications used
- Cement leakage into surrounding areas
- Nerve or spinal cord damage (rare)

Life Post-Kyphoplasty

After the initial recovery period, patients who have undergone kyphoplasty can gradually resume their daily activities and significantly improve their quality of life. However, it is essential to follow the doctor's recommendations for a gradual return to physical activities and to attend all scheduled follow-up appointments.

To prevent future vertebral compression fractures and maintain the benefits of the kyphoplasty procedure, patients may need to receive ongoing treatment for underlying conditions like osteoporosis. This may involve supplements like Calcium and Vitamin D, medication, and lifestyle changes.

Where Can I Get Kyphoplasty?

Desert Spine and Sports Physicians in Arizona offers kyphoplasty procedures performed by experienced [interventional pain management specialists](#). With multiple locations across the state, DSSP provides comprehensive and individualized care for patients suffering from vertebral compression fractures as well as other spine and musculoskeletal conditions.

[Desert Spine and Sports Physicians - Phoenix Office](#)

3700 N. 24th Street
Suite 210
Phoenix, AZ 85016

[Desert Spine and Sports Physicians - Mesa Office](#)

6634 E. Baseline Rd.
Suite 101
Mesa, AZ 85206

[Desert Spine and Sports Physicians - Scottsdale Office](#)

8670 E. Shea Blvd.
Suite 102
Scottsdale, AZ 85260

[Desert Spine and Sports Physicians - Peoria Office](#)

13128 N. 94th Drive
Suite 200
Peoria, AZ 85381

[Desert Spine and Sports Physicians - Gilbert Office](#)

3615 S. Rome St.
Gilbert, AZ 85297