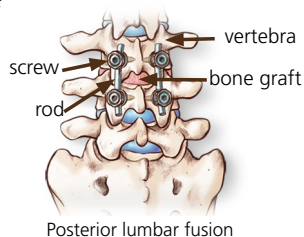


## Spinal fusion

② **Spinal fusion** joins two or more vertebral bones together with a bone graft to straighten the spine and stop the progression of the deformity. It is commonly combined with decompression to remove pressure on the nerves or spinal cord. The surgeon inserts small pieces of bone from your hip, a bone bank or synthetic material into the spaces between the vertebrae. Over time, the bones grow together or fuse. Wires, screws, rods, metal cages or plates may also be used to increase stability.



Posterior lumbar fusion

Sometimes, minimally invasive surgery, called MIS, can be used. The surgeon uses an endoscope, a lighted tube with an attached camera, and passes surgical instruments through small incisions. MIS may cause less postoperative discomfort than standard fusion. Talk with your surgeon about whether MIS is an option for you.

It is important not to return to normal activity until your bones begin to heal and fuse together. That can take 6 weeks to begin and as long as several months before you can return to more normal activity.

## Surgical risks

Adult spinal deformity surgery carries the same risks as any major surgery. Complications such as infection, pain, nerve damage and disc inflammation can occur. Talk with your surgeon to make sure you understand the risks and benefits of the recommended spinal deformity treatment for you.

For more information go to:

[www.AllAboutBackandNeckPain.com](http://www.AllAboutBackandNeckPain.com)

*As your doctor, I look forward to answering any questions you have about your back and neck.*



*never stop moving®*

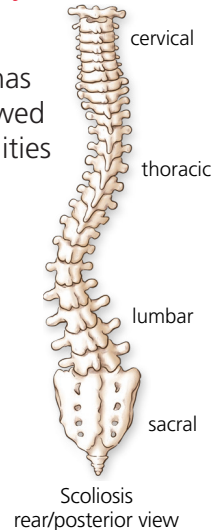
© DePuy Spine, Inc. 2010-2012  
All rights reserved. SS-ASD-02 5/12  
ADDB / RPI



*Understanding  
Adult Spinal Deformity*

## Q What is adult spinal deformity?

**A** Normally, the spine is straight when viewed from the front and has a series of gentle curves when viewed from the side. Adult spinal deformities are abnormal curves in the spine. These changes can develop as a result of aging or injury. Spinal deformities can be a combination of curve problems and spinal rotation. Mild spinal deformities are quite common and usually do not cause problems. However, larger deformities can lead to pain and other problems.



## Causes of adult spinal deformity

- Majority are of unknown or “idiopathic” cause
- Age-related degeneration
- Inherited conditions or developmental problems
- Poor posture
- Injury and spinal fractures
- Surgery
- Other conditions like obesity and osteoporosis can contribute to deformities

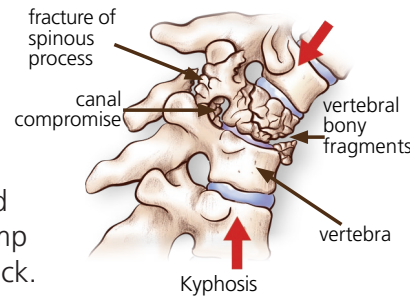
## TERMS TO KNOW

- **Decompressive laminectomy** — surgical procedure that removes the “roof” of the vertebrae to relieve pressure on the spinal cord and/or the nerves.
- **Spinal fusion** — surgery that joins together two or more vertebral bones to stabilize the spine.
- **Spinal stenosis** — narrowing of the normal spaces needed for the spinal cord and other nerves.

## Q What are the symptoms of adult spinal deformity?

**A** Spinal curves and rotation of the spine are due to:

- **Scoliosis** — the spine curves sideways and develops an S- or C-shaped curve. Signs of scoliosis include uneven shoulders/waist/hips, prominent shoulder blades, or leaning to one side.
- **Kyphosis** — a condition where the upper back curves forward creating a hump or rounded back.
- **Lordosis** — also known as “swayback,” the lower back curves inward more than normal.
- **Spondylolisthesis** — a condition where one vertebrae slips forward on the one below it.



## Severe curve deformities and/or spondylolisthesis may cause:

- Back, leg, or neck pain
- Headaches
- Weakness and or numbness/tingling
- Loss of coordination/difficulty walking
- (Rarely) Loss of bowel or bladder control

## Q What are the treatment options?

**A** You may have tried many conservative treatments for your spinal deformity such as pain medication, physical therapy or a brace. Research shows that nonsurgical treatment cannot prevent progression of spinal deformity. Continued progression can lead to degeneration of the spinal structures, the growth of bone spurs and spinal stenosis. This narrowing of the spinal canal can create pressure on the spinal cord and nerves, which can cause numbness and other problems.

## Surgery may be an option

Your doctor has recommended surgery because your pain, nerve problems and other symptoms are not responding to conservative treatment or your deformity is progressing.

Two main types of surgery for spinal deformity include:

## Decompressive laminectomy

**1** **Decompressive laminectomy** removes the “roof” of one or more vertebrae, called the **lamina**, to create more space for nerves. More than 60,000 such surgeries are done in the U.S. each year on patients over age 60.

Laminectomy takes 1 to 3 hours and is performed under general anesthesia. The doctor will review an MRI or CT scan to determine how much bone to remove. A 2- to 6-inch incision is made in the back and later closed with stitches or surgical staples.

You should feel better and move more easily after laminectomy surgery. If you have a desk job, you may return to work generally within a few weeks; it may take 2 to 4 months for a more physical job.