



Adult's Guide to Scoliosis Treatment

Many consider scoliosis to be a condition only found in children, but scoliosis can affect anyone at any age. Learn more about spinal deformities in adults and non-operative and surgical treatment options to correct spinal curves.

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Many adults remember standing in line in elementary school, waiting for the school nurse to check their back for scoliosis. But scoliosis isn't limited to children. Adults can have symptoms from scoliosis as the spine undergoes changes with age.



What is scoliosis and what causes it?

Scoliosis is a condition that causes your spine to curve abnormally from side to side. The curve forms an "S" or a "C" shape and the degree of the curve varies depending on its severity.

There are two types of adult onset scoliosis:

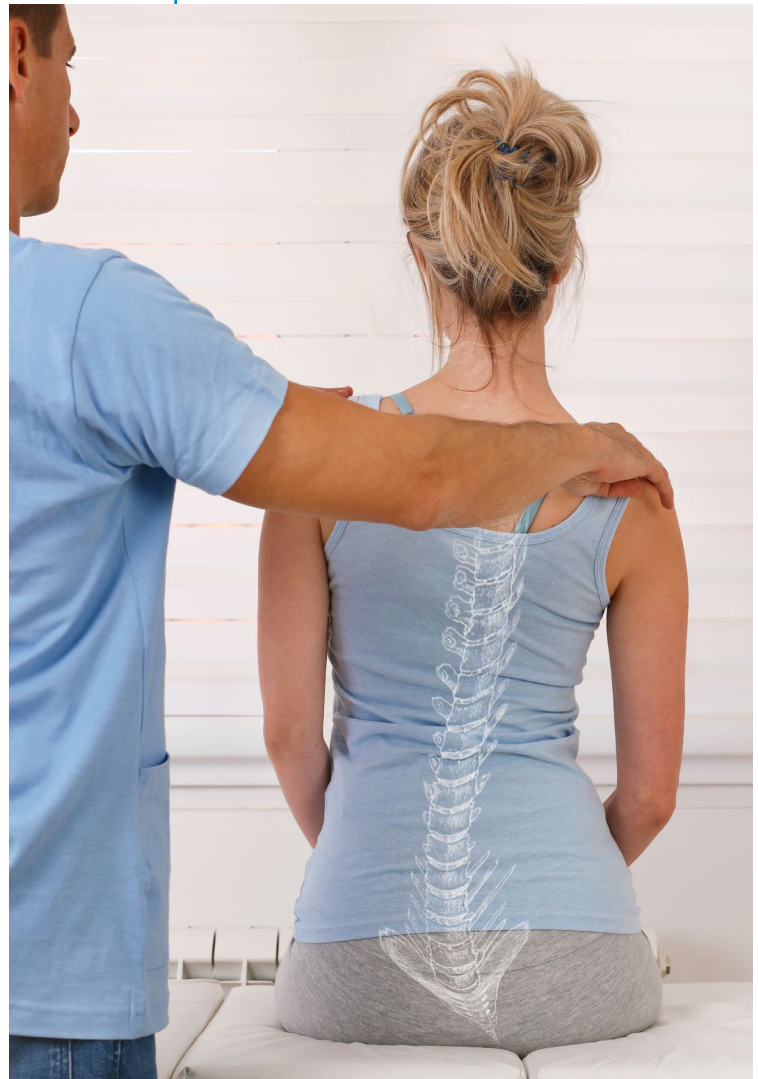
- **Adult Degenerative Scoliosis:**

This condition is the most common type of scoliosis in adults. Adult degenerative scoliosis develops when your spinal discs and joints age, causing them to collapse more on one side than the other. When this happens at multiple levels, it can cause a curve to form. This is prominent in your lower (lumbar) spine.

"Degenerative scoliosis occurs because of degenerative changes like arthritis or a degenerative disc where the spine collapses into a curved position," said OrthoIndy spine surgeon, [Dr. Kevin O'Neill](#). "This type of scoliosis develops over time and is usually found because the patient is in pain."

- **Adult Idiopathic Scoliosis:** Although this type of scoliosis is hereditary, "idiopathic" means the cause is unknown. Adults with idiopathic scoliosis either didn't notice or didn't treat the condition that began when they were a child. Sometimes, adult idiopathic scoliosis doesn't get worse until you reach adulthood, so there isn't a reason to treat it. Like idiopathic scoliosis in children, the spinal curve can be in the upper (thoracic) or lower (lumbar) spine.

Adult idiopathic scoliosis progresses from a patient's teenage years. If a child's curve is not severe, scoliosis may go unnoticed because it's usually painless. If the curve isn't substantial in your teens and it goes untreated into adulthood, it can cause pain as the curve worsens.



Scoliosis Symptoms in Adults

Unlike children with scoliosis, adults usually experience pain with the condition. The pain is often from another underlying condition. The curvature of your spine is an obvious symptom, but the pain you feel can stem from the degenerative disease causing your spinal curve.

Like children, scoliosis can affect your physical appearance. This may be uneven shoulders, hips or clothing that doesn't fit right. However, adults also commonly notice symptoms from other conditions they may have.

Some of these conditions include:

- Compressed nerves cause [sciatica](#) which may lead to pain down the legs, tingling, leg weakness or numbness
- Back pain from [disc degeneration](#) and arthritis
- Back pain that is worse when standing or walking from a condition called [spinal stenosis](#)
- A decrease in lung function with extreme curves of 90 degrees or higher

"More often than not, it's pain that drives adult patients in for medical treatment," said Dr. O'Neill. "That pain can be in the back from arthritic changes with or without stenosis, which is narrowing of the spinal canal. It can also be pain down the legs, or sciatica, caused by nerve compression."

Click on the image above to watch Ortho-Indy spine surgeon, Dr. Greg Poulter explain how to check for scoliosis at home.



Meet the OrthoIndy Spine Team

How to Know if You Have Scoliosis

If the pain from your scoliosis slows down your life, it may be time to seek treatment options from an OrthoIndy spine surgeon.

At OrthoIndy, our team of spinal experts are fellowship-trained to diagnose and treat injuries and conditions of the neck and back. The spine doctors perform both minimally invasive surgeries and complex cases, like scoliosis surgery.

When you arrive, your physician will:

- Ask you for your complete medical history
- Ask you to describe your pain and symptoms
- Examine your posture and conduct a full physical examination
- Take **X-rays** or an **MRI** to confirm if there is a spinal deformity
- Take a CT scan if you have a history for spinal fusions or are unable to have an MRI

If you are having significant pain in your back or down your legs and suspect scoliosis, make an appointment with an [OrthoIndy spine surgeon](#).



Can scoliosis be corrected in adults?

Scoliosis correction is available for adults, whether your pain is from adult idiopathic scoliosis or degenerative scoliosis.

Depending on your degree of curvature, your treatment will vary.

“Often, we attempt conservative treatments first,” Dr. O’Neill said. “That includes medication, injections and physical therapy. We try these options first before considering more invasive options like surgery.”

What are non-surgical scoliosis treatment options?

Many adults with scoliosis do not require surgery. Your spine surgeon will begin your treatment plan with nonsurgical techniques to treat your symptoms related to your scoliosis, not necessarily the curve itself. Since the pain you are feeling is likely caused by arthritis or another condition, these nonsurgical treatments are the same as treatment used for spine patients without scoliosis.

Treatments may include:

- Over the counter pain medication for muscle spasms, pain and inflammation
- Physical therapy for scoliosis to strengthen your spinal muscles and increase your flexibility
- Injections for leg pain
- Lifestyle modifications such as weight loss or stopping smoking
- Scoliosis brace for adults to relieve pain temporarily*

**Bracing is an effective conservative technique for children who are still growing to stop the curve of their spine. However, when you finish growing, it has not been effective to straighten the curve or prevent curve progression.*

Scoliosis Surgery for Adults:

Spinal Fusion Surgery

When conservative treatment has failed, your spine surgeon may suggest [spinal fusion surgery](#).

“The goal of surgery is to reduce the curvature degree of your spine, permanently stabilize your spine through fusion and alleviate nerve compression,” Dr. O’Neill said.

Spinal fusion surgery varies depending on where your pain is coming from and the severity of your scoliosis. However, because scoliosis curves extend across multiple vertebrae, the surgery generally involves fusion of several vertebrae.

“A spinal fusion involves a fusion to put implants into the spine, to help correct and straighten the scoliosis as well as to stabilize it and prevent it from worsening over time,” Dr. O’Neill said.

Like any surgery, scoliosis surgery comes with risks. Your spine surgeon will consider surgery when living life with scoliosis is not tolerable.

Possible scoliosis surgery risks include:

- Blood loss
- Nonunion – This is when the vertebrae fail to grow together, and the fusion fails.
- Nerve or spinal cord injury
- Pain
- Problems with the implants used to stabilize the spine
- Fractures of the vertebral bones at the upper vertebrae of the fusion
- Infection

What is a Spinal Fusion Surgery?

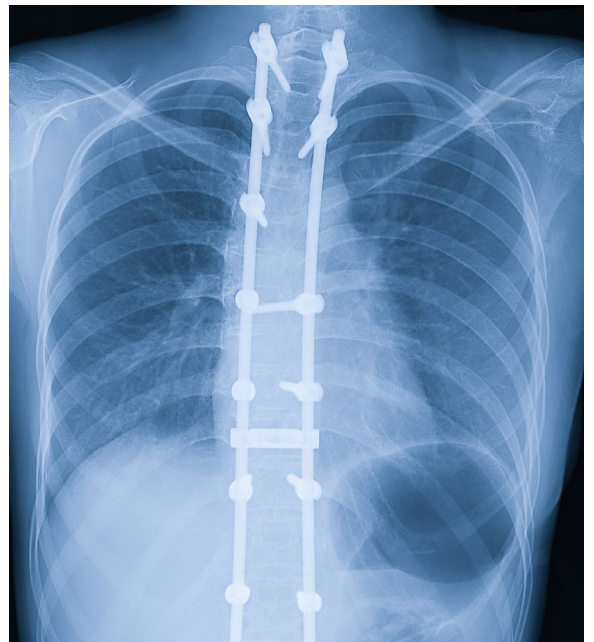
Spinal Fusion Surgery: What to Expect

1. When you arrive, an OrthoIndy anesthesiologist will place you under general anesthesia before surgery.
2. When the anesthesia takes effect, and you are in surgery position on the operating table, your OrthoIndy spine surgeon will make an incision. Your surgeon's approach will vary depending on the vertebrae that need fusion. The incision will either be in the back (posterior) of your neck or back right above your spine, on either side of your spine (lateral) or front (anterior) in your abdomen.
3. The spine is "loosened" in order to help straighten the scoliosis. This can be done by inserting cages or spacers between the vertebrae in place of the discs, and/or by cutting the vertebrae in certain places to allow correction – which are called osteotomies.
4. Your surgeon will put a bone graft from your body (usually your pelvis), a bone bank or a synthetic bone between the vertebrae. This graft allows the bone cells between the vertebrae to heal together like a fracture would heal.
5. Metal plates, screws or rods will hold the vertebrae together while the bone graft heals. This metal fixation provides all the structural support between the vertebrae until the bone can take over the load.

Your spine surgeon may use OrthoIndy's state of the art spine robotics technology, the Mazor X Robotics Guidance System for your surgery. This efficient tool decreases blood loss and decreases the size of the incision made, making your hospital stay shorter.

"The Mazor X is a tool that does not replace me as a surgeon but rather enhances my ability to safely and reliably perform surgery," said OrthoIndy spine surgeon, **Dr. Greg Poulter**. "Simply put, robotics is revolutionizing adult scoliosis surgery, and we are at the forefront of this technology."

Want to see how a spinal fusion is performed? Watch this surgery video. **Warning:** Some of the images in this video may be considered graphic.



***How Spine Robotics
are Used to Correct
Spinal Curves.***

Spinal Fusion Recovery

Because spine surgery for scoliosis involves fusion of several vertebrae, it is typically a longer recovery process compared to other more minimal surgeries. The initial recovery period is focused on safe mobilization while protecting the spine from injury. This involves avoiding any bending or twisting of the spine and along with any heavy lifting. The second period of recovery involves improving muscle strength and improving mobility even further. After three to six months, exercises can begin to focus on improving overall spine mobility. It can take 6 to 12 months before the vertebral bones permanently heal or fuse together.

Working with physical therapy is an important component of recovery from spine surgery.

Scoliosis exercises should:

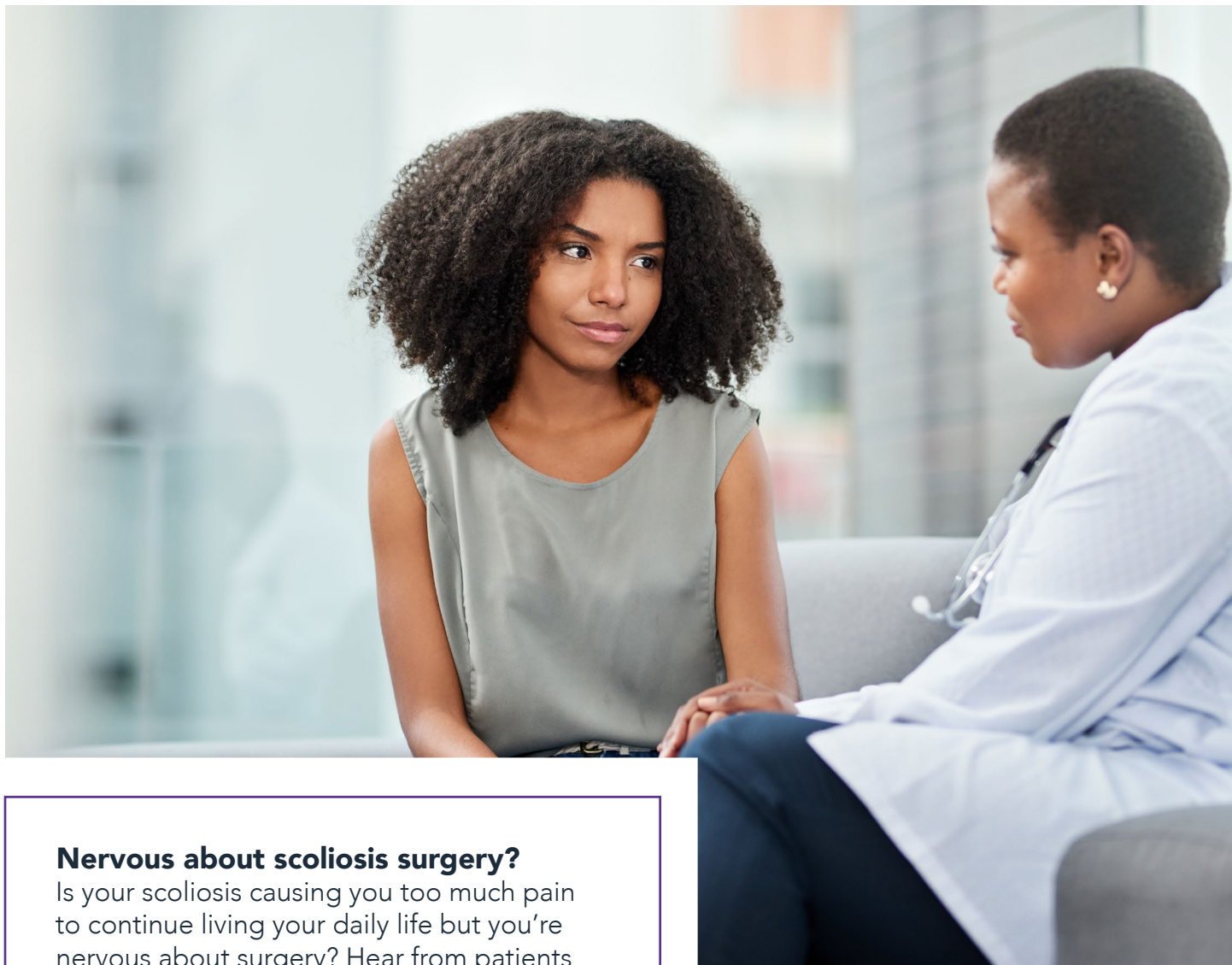
- Promote healing
- Increase your flexibility
- Tone your muscles
- Broaden your range of motion

Once you understand your exercises and have met your initial strength and mobility goals, you will continue your physical therapy at home.

“In physical therapy sessions, we make sure not only to work on neck, thoracic and lumbar stability and strength, but also make sure you have a safe long-term home exercise program to continue,” said Ortholndy physical therapist [Megan Boland](#). “This includes exercises on the mat, some standing, some use of TheraBand’s, swiss ball and possible balance equipment.”

A full recovery from spinal fusion surgery can take anywhere from six months to a year. After surgery, radiographs and X-rays are taken to make sure the surgery was successful.





Nervous about scoliosis surgery?

Is your scoliosis causing you too much pain to continue living your daily life but you're nervous about surgery? Hear from patients who underwent spinal fusion surgery for their scoliosis and other degenerative conditions.

"I never thought I would make such speedy progress in less than four months," Nancy said. "While this surgery is not one that I was looking forward to, I can honestly say that, while I still have months to go, this recovery is going very well and I am able to move about more freely than I expected."

– Nancy

"I feel absolutely wonderful compared to how I felt before surgery," said Celeste. "I have soreness from surgery, but not the chronic, debilitating back pain I felt before. I no longer have that pain at all. I feel like a new person." – Celeste

Learn more about Nancy's journey with adult scoliosis, spinal stenosis, degenerative discs and scoliosis and her road to recovery.

Learn more about Celeste's journey with adult scoliosis, degenerative disc disease and kyphosis and her road to recovery.

With years of experience and the most advanced technology, OrthoIndy neck and back doctors will give you the best chance possible to achieve your goals. Make an appointment and let OrthoIndy's team of experts help you get normal back, whatever your normal looks like.



To help you better understand adult scoliosis and how to treat it, view our view our [*Ultimate Guide to Scoliosis Treatment*](#).