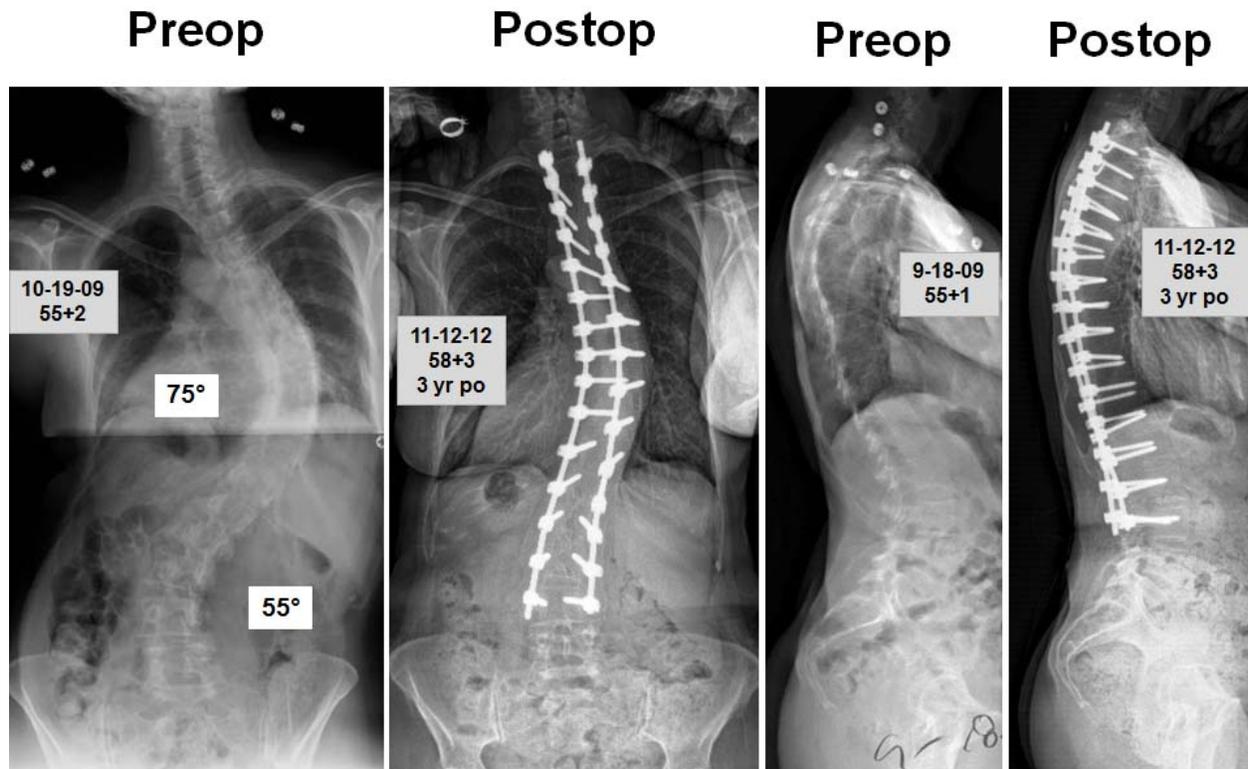


# Dr. Bridwell's Patient Cases

## Adult With Large Thoracic Curve



### Description

This is a middle aged female whose thoracic curve progressed 20° over a 2-year period. She was rapidly losing height and her rib cage was resting on her pelvis.

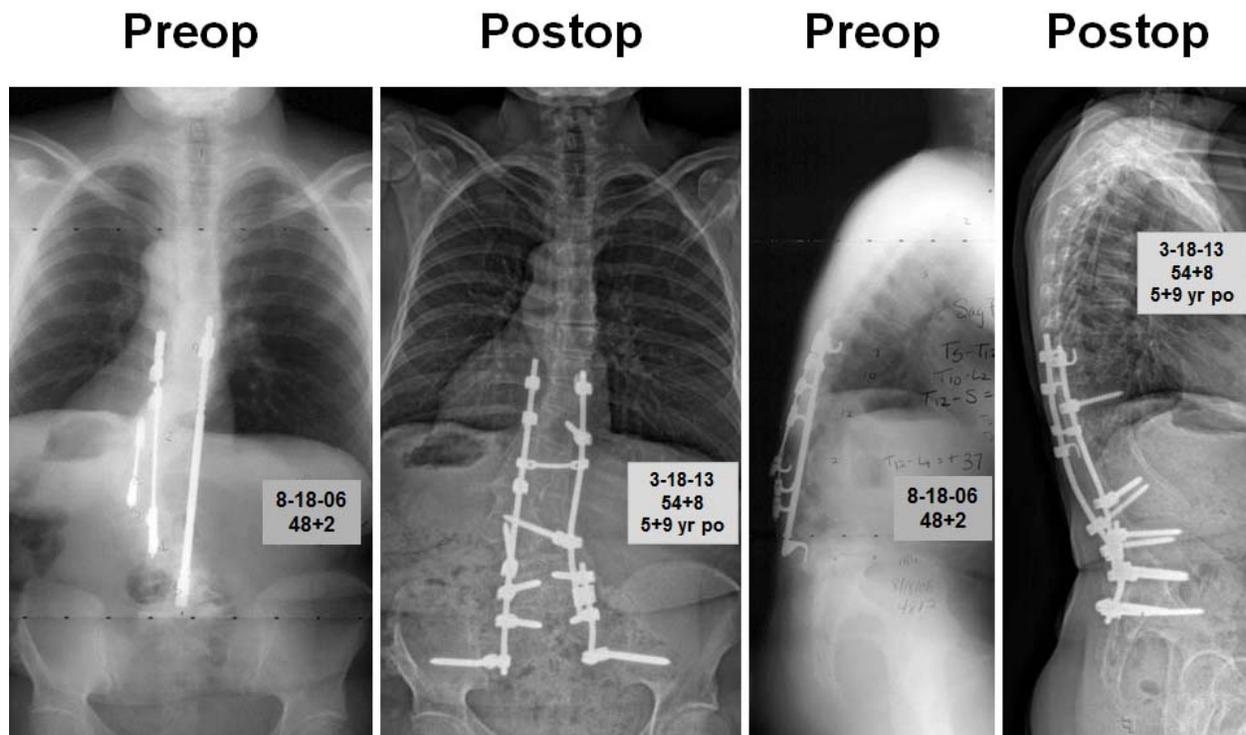
### Treatment

Dr. Bridwell treated her with halo traction for several days and then performed a posterior instrumented fusion.

### Result

**At 3 years postop**, see the very substantial correction of the rib cage deformity and the nice balancing of her shoulders.

## Fixed Sagittal Imbalance After Surgeries for Scoliosis and Kyphosis



### Description

This is an adult female who had several surgeries as a teenager for congenital scoliosis and kyphosis. She had anterior and posterior operations. She presented to Dr. Bridwell's office with fixed sagittal imbalance and severe disc degeneration at L4-L5 and L5-S1. Dr. Bridwell thought performing an anterior procedure at L4-L5 and L5-S1 was too risky because of her prior extensive anterior surgery.

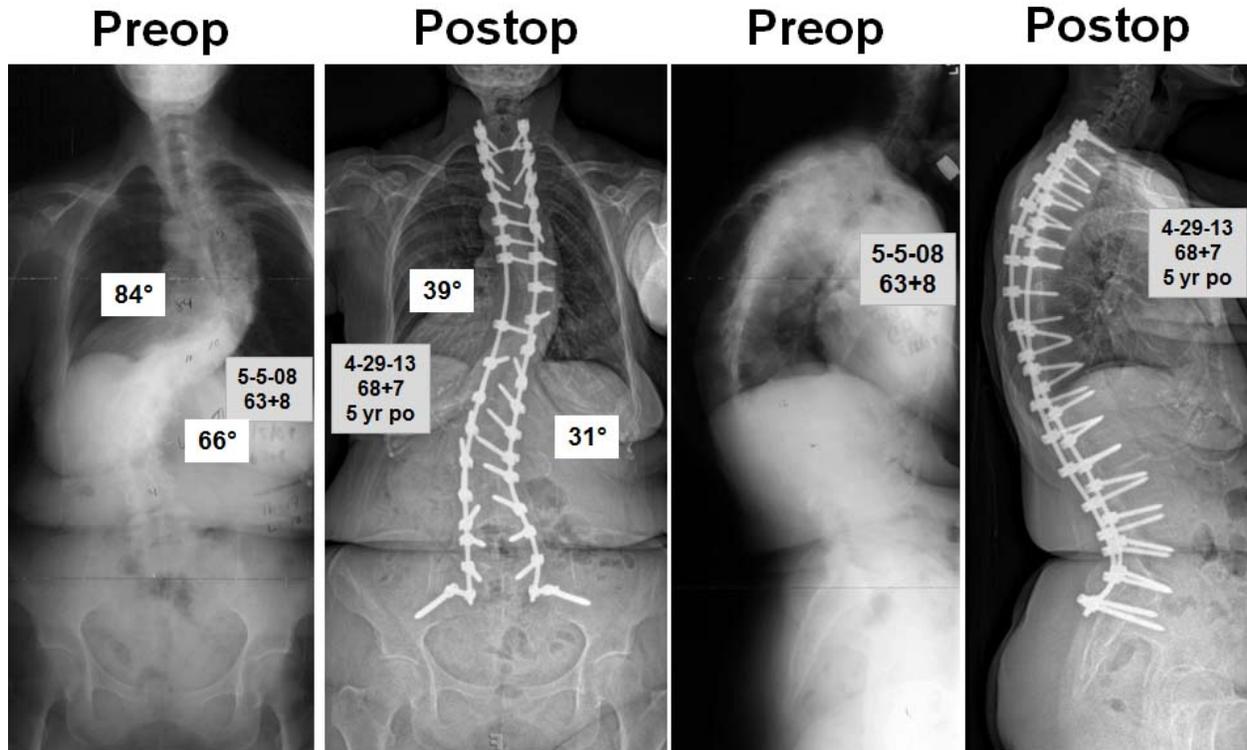
### Treatment

Dr. Bridwell treated her with a pedicle subtraction procedure at L4 and instrumented fusion and revision to the sacrum and pelvis. He used local bone and fresh frozen bone to stimulate the fusion.

### Result

**At almost 6 years postop** the patient is doing well and it appears she has a solid fusion down to the sacrum without having an anterior operation or ALIFs, TLIFs, or PLIFs.

## Adult Scoliosis and Kyphosis



### Description

This is an adult female who presented to Dr. Bridwell's office with increasing deformity and decreased height over the last 20 years.

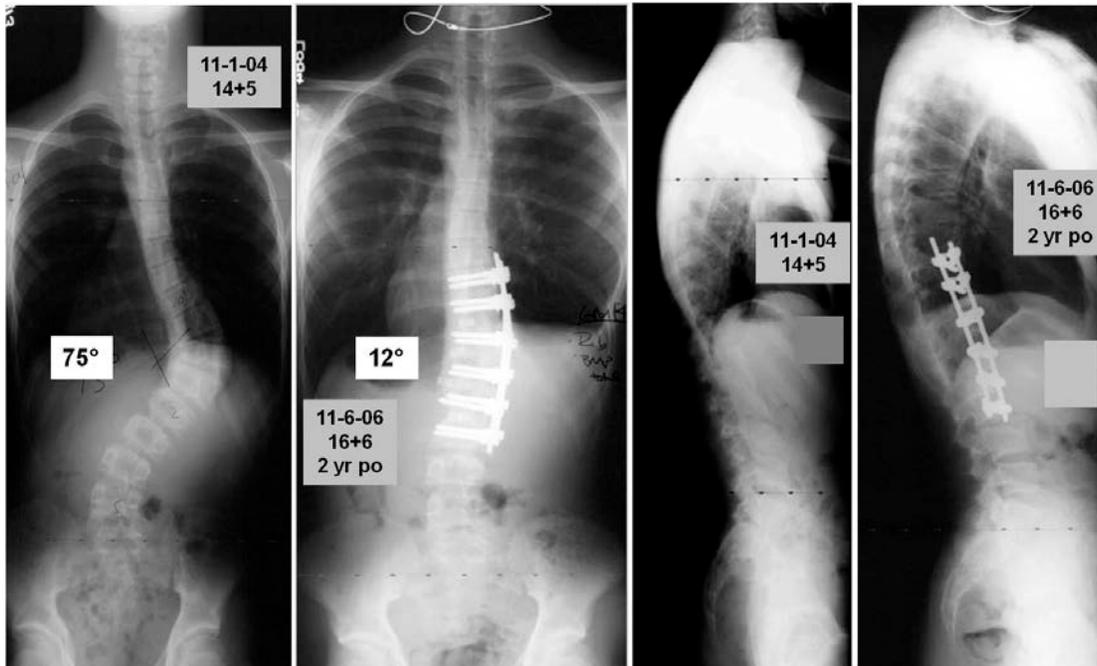
### Treatment

Dr. Bridwell treated her with posterolateral spinal fusion and posterior spinal instrumentation T1 to S1 and the ilium (the large bone in the pelvis).

### Result

**At 5 years postop**, the patient is 4" taller, has a solid fusion and is doing very well.

## Thoracolumbar Curve In A Golfer Who Is Still Highly Competitive Postoperatively



### Description

In 2006, this 14-year-old male from Mississippi presented to Dr. Bridwell with a fairly large, stiff, and progressive thoracolumbar curve. The curve was 75°. He and his family were interested in substantial correction, but they didn't want a long fusion. The patient had aspirations to be a Division I golfer and he was concerned about losing his ability to play well.

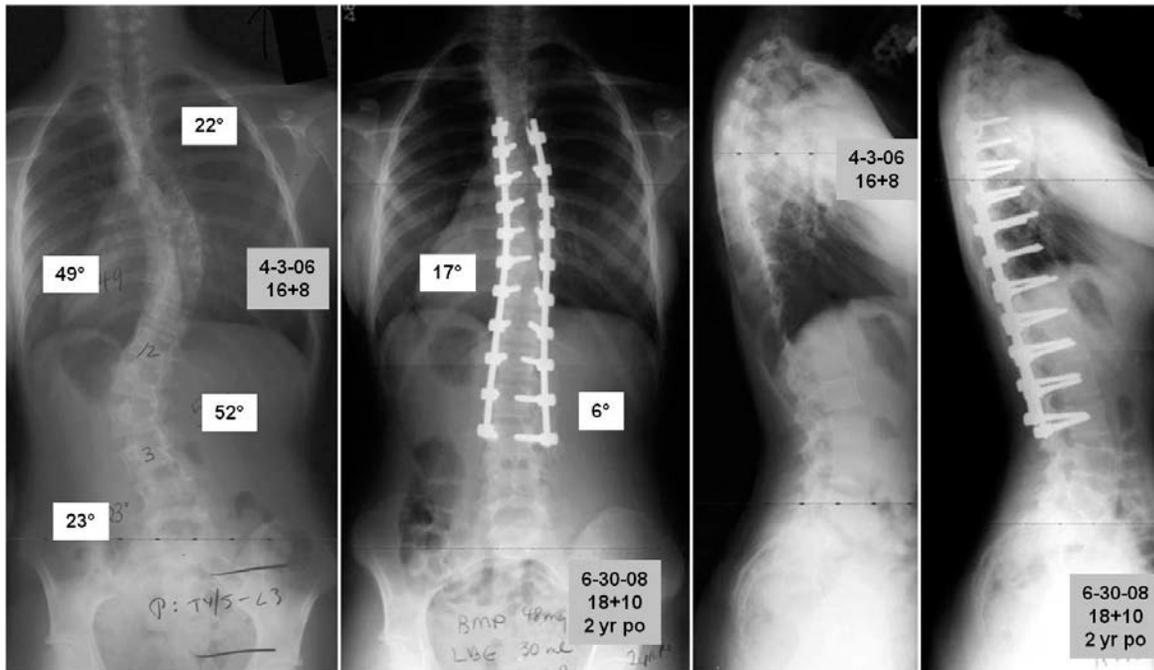
### Treatment

Dr. Bridwell treated him with an anterior approach—that means he approached the spine from the front of the body. Specifically, he performed a thoracoabdominal approach. This kind of approach is well tolerated in teenagers and young adults. Dr. Bridwell chose not to perform the surgery posteriorly because, even with pedicle screw implants, he would have had to fuse more vertebrae in order to get the same amount of curve correction he achieved with the anterior approach. Dr. Bridwell used a 2-screw/2-rod construct for this patient.

### Result

After surgery, the patient's curve was reduced to 12°. **At 2 years postop**, he is doing well and his golf score is better than it was before he had surgery. We have not formally seen him and gotten radiographs in some time, but we still hear from him and he has become a successful NCAA Division I golfer.

## Double Major Curve, But Still Possible To Do A Very Short Fusion And Obtain Close To 100% Correction



### Description

This is a 16-year-old female with adolescent idiopathic scoliosis and a double major curve pattern. Her thoracic curve was 49° and her lumbar curve was 52°. Usually when there is a thoracic and a lumbar curve, it is possible to identify one curve as primary and the other as secondary. The primary curve is the “driving” curve—it is actually forcing the other part of the spine to curve, creating a secondary curve. In that case, it is possible to just fuse and fix the primary curve. However, in this patient’s case, both curves were equally structural, so it was necessary to correct both curves.

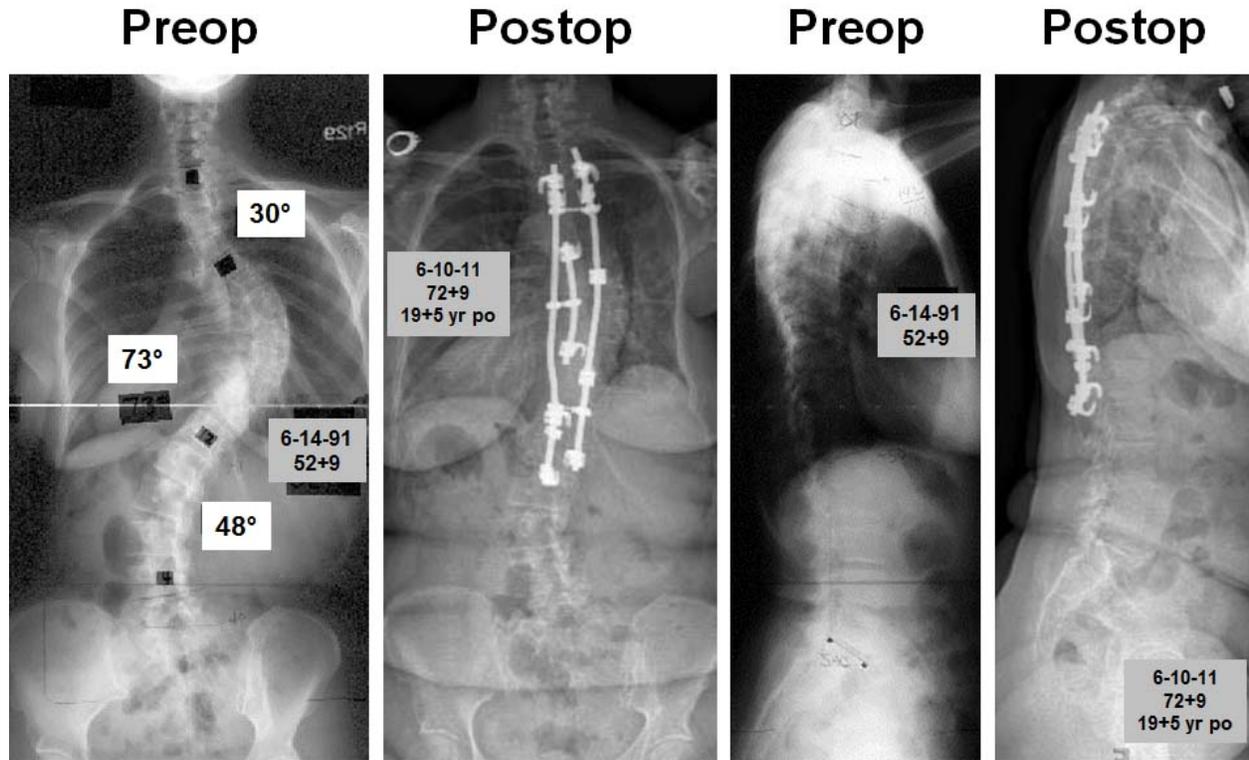
### Treatment

Dr. Bridwell treated her with a posterior spinal fusion with instrumentation. Dr. Bridwell and his team know, if at all possible, it is better to fuse to L3 rather than L4 (the third lumbar—waistline level between the rib cage and pelvis—vertebrae rather than the fourth). He used derotational and translational maneuvers to correct the curves. He used pedicle screws and rods to help hold the spine in a better alignment as the vertebrae fused and healed.

### Result

After surgery, the patient’s thoracic curve was reduced to 17° and her lumbar curve was reduced to 6°. **At her 2-year postop** appointment she was doing very well.

## Adult Scoliosis – Right Thoracic Curve



### Description

This is a 52-year-old female who presented to Dr. Bridwell with a progressive thoracic deformity in 1991. She had increasing pain in the thoracic spine and her thoracic curve had progressed substantially since her teenage years.

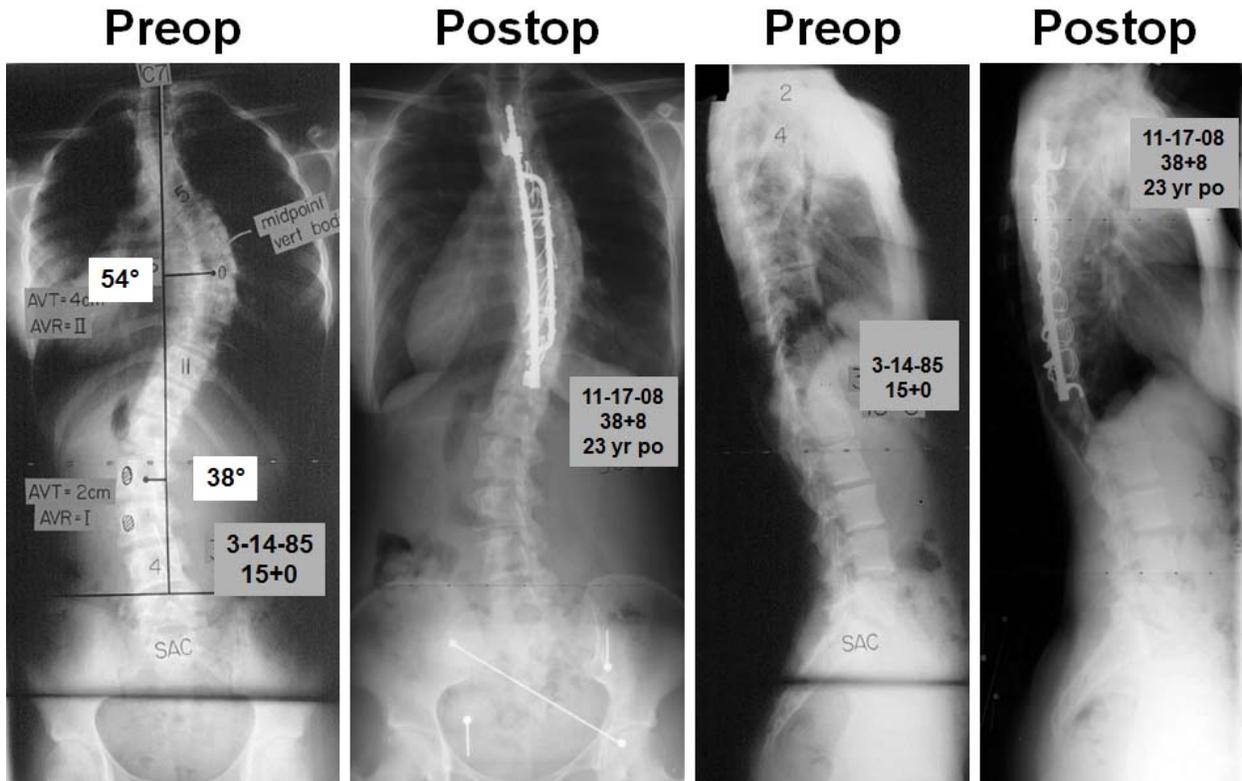
### Treatment

Dr. Bridwell treated her with posterior instrumented fusion T3 to T12 and thoracoplasty was performed to reduce the size of her rib hump.

### Result

**At almost 20 years postop** she is doing quite well. There has been no progression of the lumbar curve. Fixing the thoracic curve has had the effect of stabilizing the lumbar curve. She is extremely active, easily able to bend forward and touch her toes and can run in place and jump several times. She says "there is nothing I can't do".

## AIS: Patient Doing Great And Still Flexible 23 Years After Surgery



### Description

This is a 15-year-old female who had progressive scoliosis in spite of bracing. She had a bigger thoracic curve than lumbar curve. Because she had significant growth left, we anticipated both curves would progress.

### Treatment

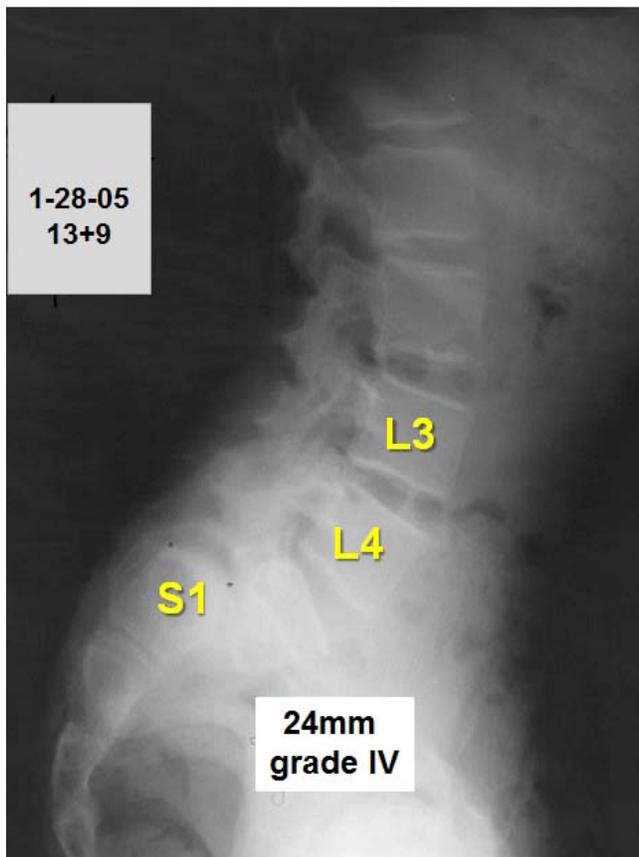
Dr. Bridwell treated her with posterior instrumented fusion of only the bigger thoracic curve. Many would have fixed both curves and performed a long fusion. We chose to do a shorter fusion. She has recovered from this surgery quite nicely.

### Result

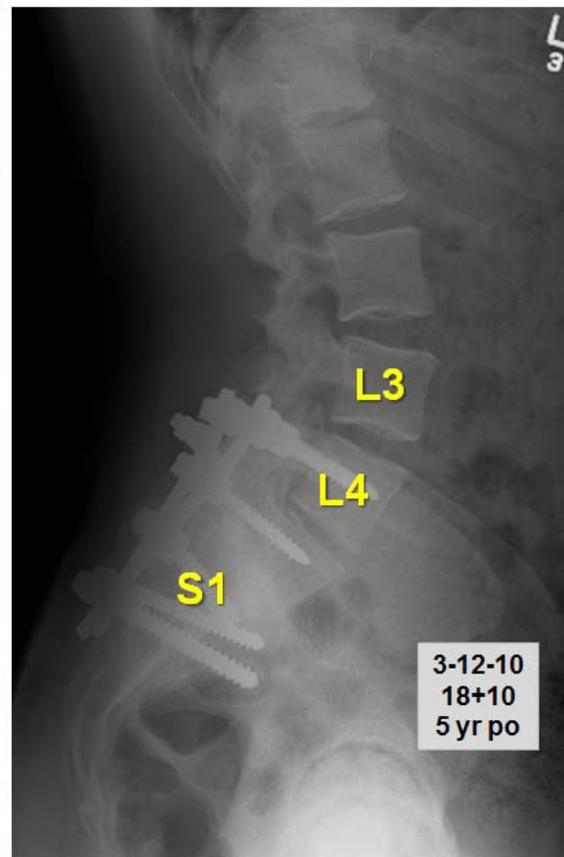
**At 23 years postop** the patient continues to do quite well. There has been no progression of the lumbar curve and she is able to easily bend over and touch her toes. She is very active and athletic and can run in place and jump. She has had several children without any problems.

## High-Grade Spondylolisthesis

Preop



Postop



### Description

This is a 13-year-old male with a grade IV spondylolisthesis. On presentation to Dr. Bridwell he had severe back and leg pain.

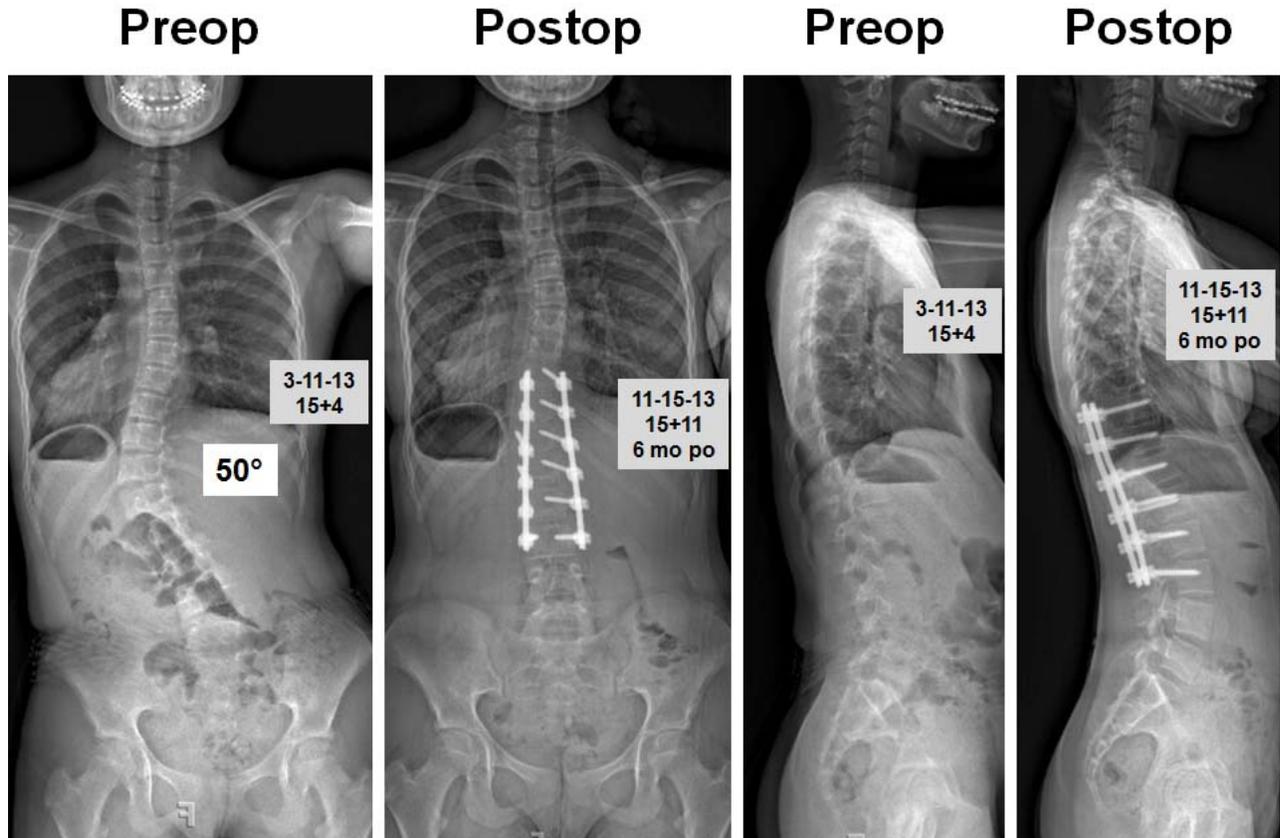
### Treatment

Dr. Bridwell treated him with reduction and fusion of the listhesis.

### Result

At 5 years postop he is doing very well. He plays all sports and has no back or leg pain.

## AIS: Progressive 50° Thoracolumbar Scoliosis



### Description

This is a 15-year-old female with progressive 50° thoracolumbar scoliosis. She had a very asymmetric waistline.

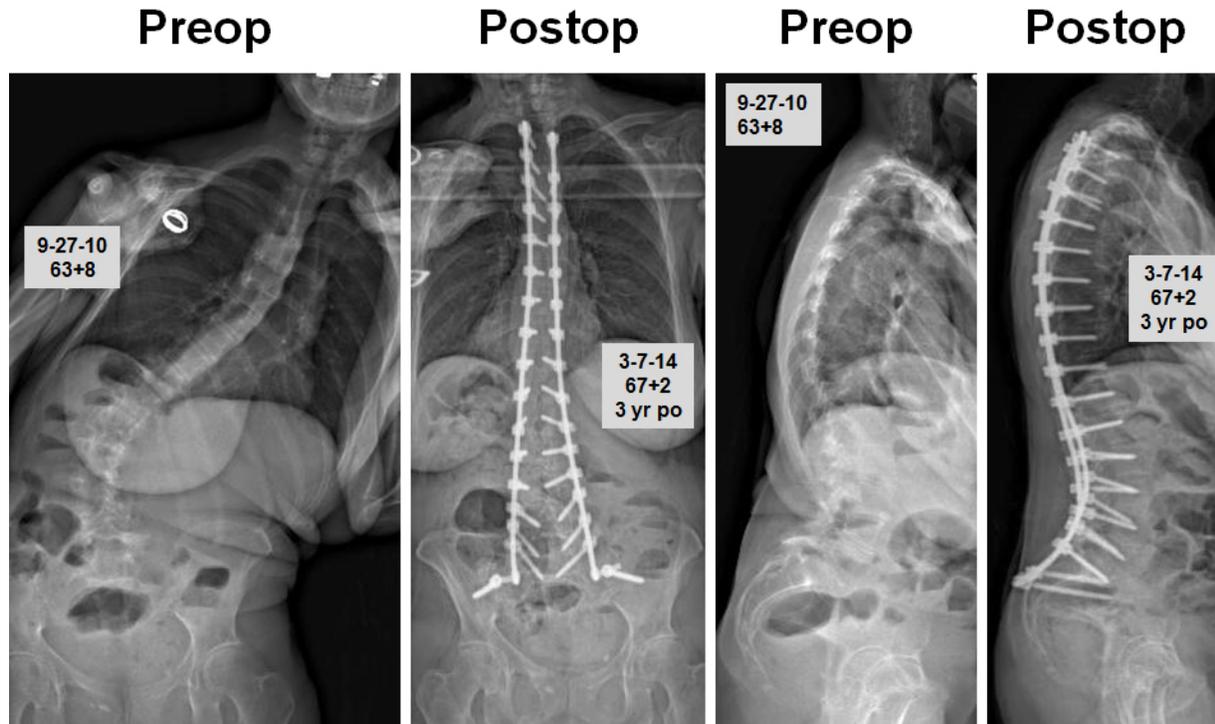
### Treatment

Dr. Bridwell treated her with a short posterior instrumented fusion and achieved close to 100% correction of the deformity.

### Result

At 6 months postop she is doing very well. Her waistline is very symmetrical now.

## Adult Scoliosis



### Description

This is a 63-year-old female who is healthy but has very severe Parkinson's. She presented to Dr. Bridwell with very severe coronal decompensation and a lesser sagittal decompensation. Standing, her rib cage was below her pelvis on the right side. She was unable to walk and function because of this severe deformity.

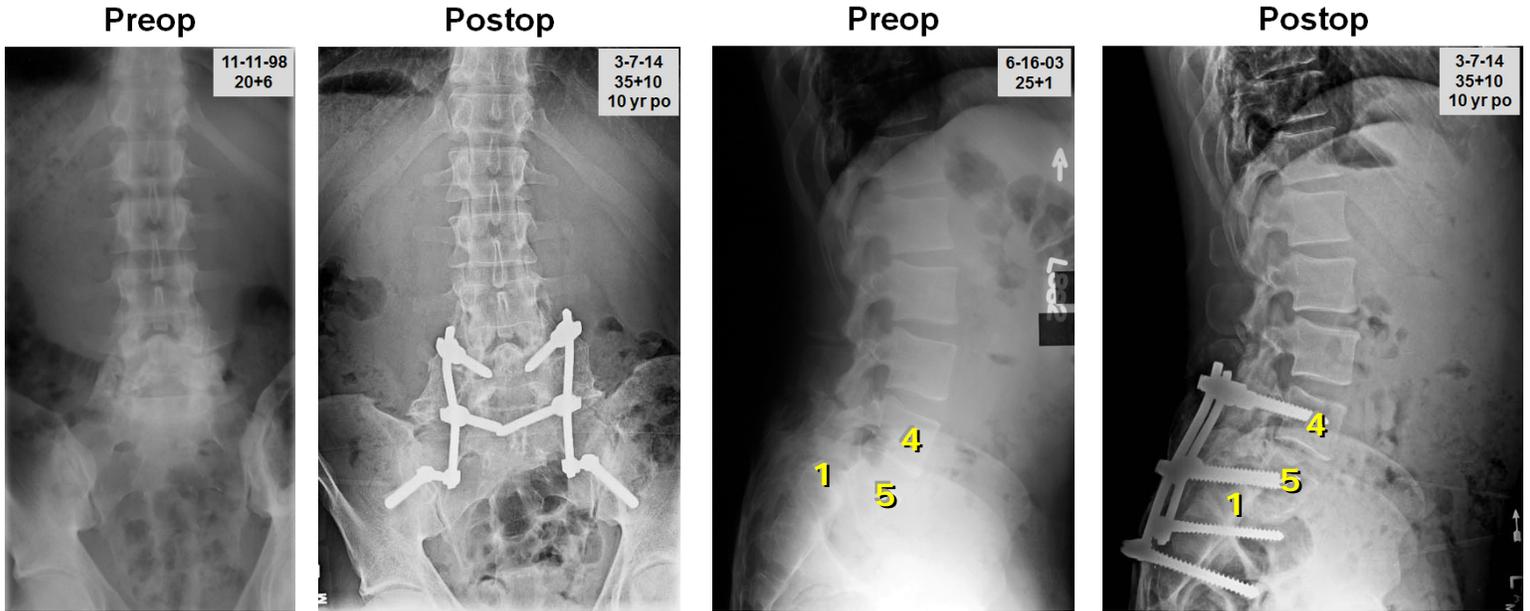
### Treatment

Dr. Bridwell treated her with a single-stage posterior instrumented fusion from T3 to the sacrum.

### Result

She is now 3 years postop and doing very well. She is fully ambulatory and much more functional than before surgery. Her coronal and sagittal deformities are close to being 100% corrected. She has very high satisfaction with the result of this procedure at this point.

# High-Grade Spondylolisthesis



## Description

This is a 20-year-old male who had fusion and casting without instrumentation for a high-grade spondylolisthesis several years ago in another state. He presented to Dr. Bridwell with nonunion at both L4-L5 and L5-S1. His fusion was not healed at either level and he was having increasing back pain unresponsive to all nonoperative treatments.

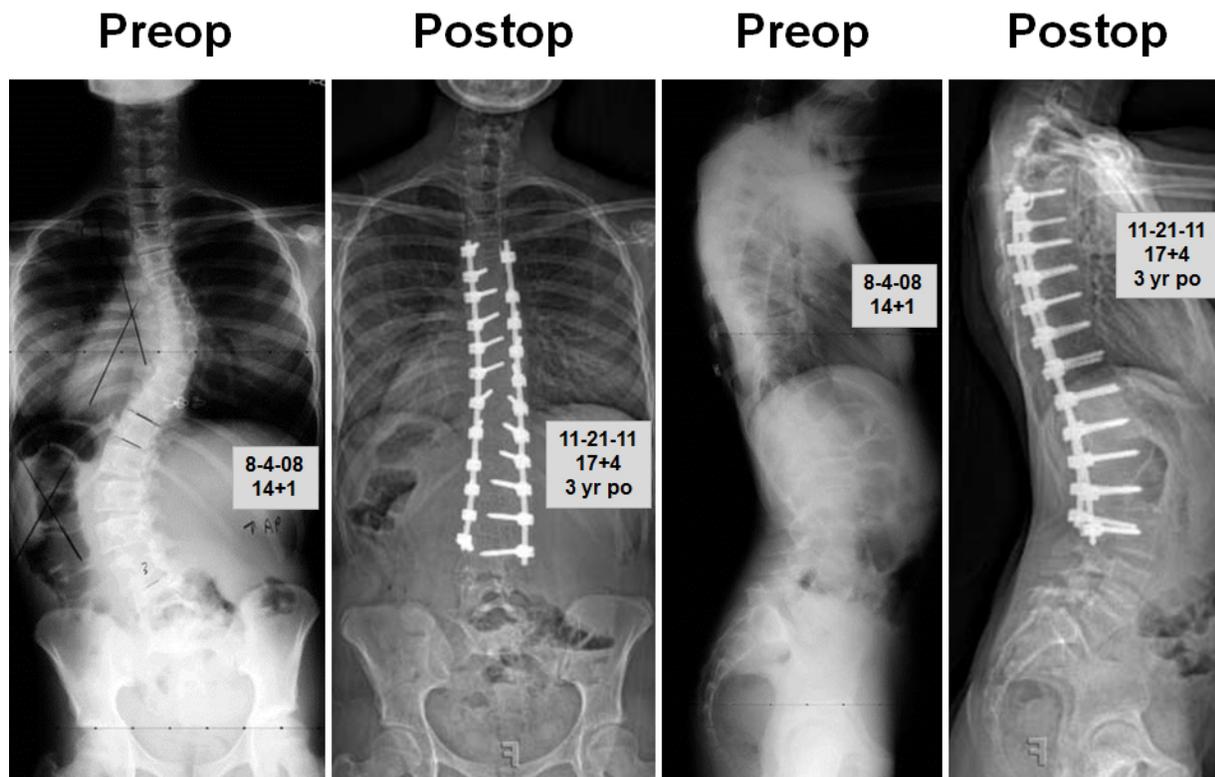
## Treatment

Dr. Bridwell treated him with a posterior fusion from L4 to the sacrum and instrumentation from L4 to the sacrum and pelvis with sacral screws fixing the sacrum and L5. He also performed an anterior dowel fusion at L5-S1.

## Result

At 10 years postop he has an unquestionably solid fusion at both L4-L5 and L5-S1. Back pain has entirely resolved. He is an electrician and is thriving in that profession.

## Idiopathic Scoliosis and Spondylolisthesis



### Description

This is a 14-year-old female who has substantial growth left and her deformities were progressing in spite of bracing. She had substantial thoracic and lumbar curves and a grade II lytic spondylolisthesis at L5-S1.

### Treatment

Dr. Bridwell treated her with posterior instrumented fusion from T4 to L3. Using several surgical tricks, Dr. Bridwell was able to get almost 100% correction of the lumbar curve and stop at L3 versus L4, which would be the more traditional distal stopping point with this type of curve pattern. Stopping at L3 provides more room between the instrumented fusion and the sacrum. When stopping at L3, it is important to get L3 horizontal and centered over the sacrum.

### Result

At 3 years postop she is doing quite well. She has no back or leg pain and is able to bend over and touch her toes.