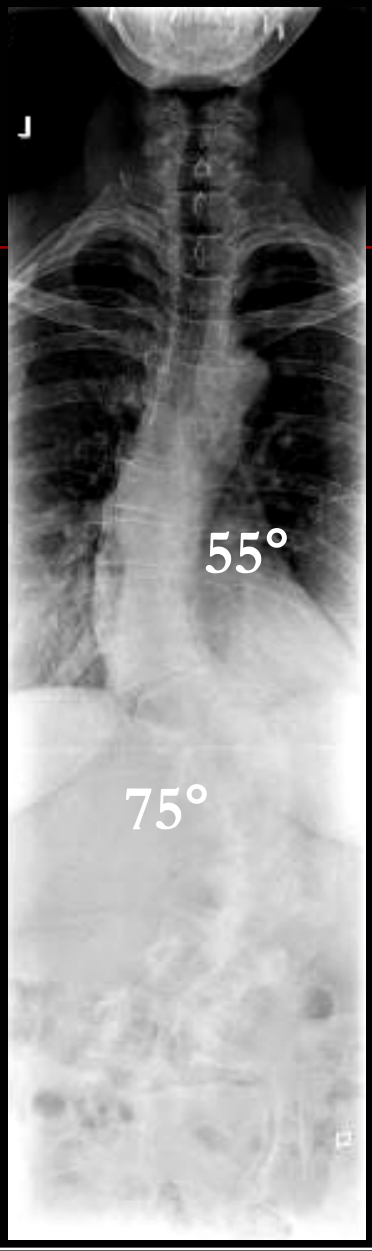

Case Review:

45 year old female with a 75° Progressive Adult Idiopathic Scoliosis.

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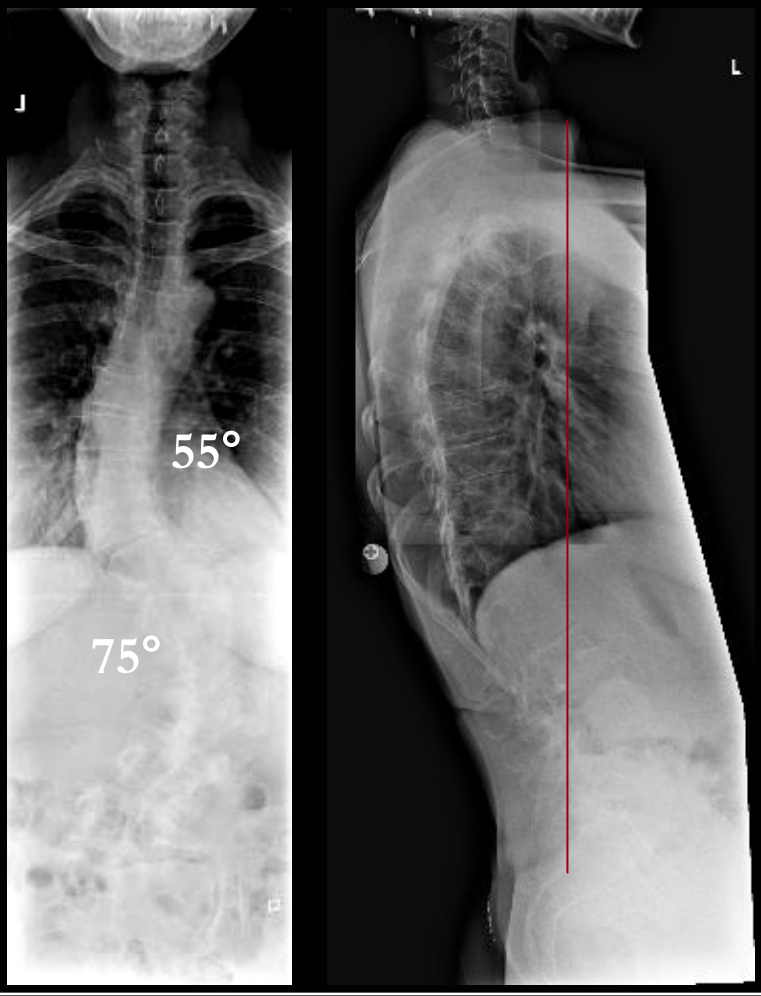
Patient History

- 45-year-old female.
- Adult Idiopathic Scoliosis.
- Curve progressed despite bracing as a child.
- 75° thoracolumbar curve.
- Patient reports an increasing deformity and significant low back pain.
- Patient reports a loss of 3” in height.

Pre-op X-rays



The patient has a 55° left thoracic, but a structural main 75° right lumbar curve, with significant lumbosacral obliquity.

The patient plumb lines approximately 3 cm to the right in the coronal plane and has good plumb line T1 down to the pelvis in negative sagittal balance.

Indications for Surgery

1. Adult idiopathic scoliosis, 75° right thoracolumbar progressive curve.
2. Coronal and sagittal plane decompensation with thoracolumbar kyphosis and decompensation to the left.
3. Severe low back and leg pain due to the above diagnoses.
4. Progressive deformity, failed conservative therapy.
5. Preoperative for T2 to the sacral pelvis fusion, staged procedure.

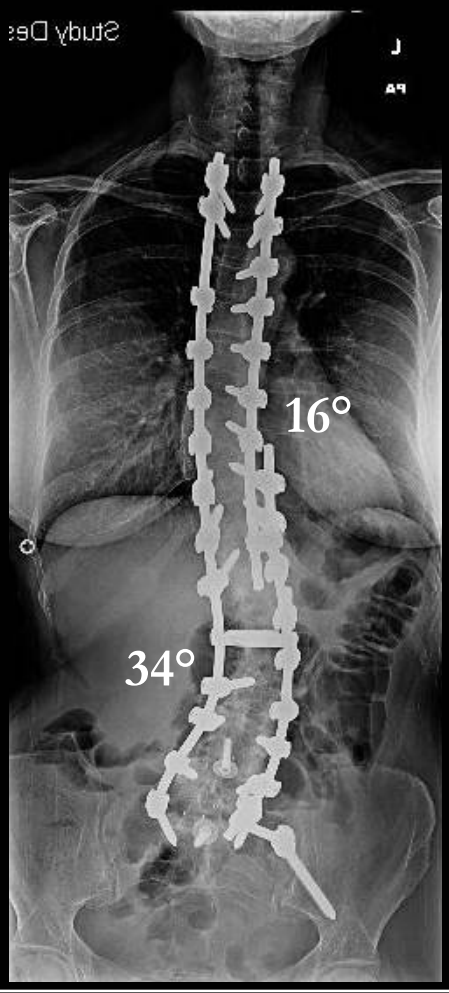
Surgical Strategy – Stage 1

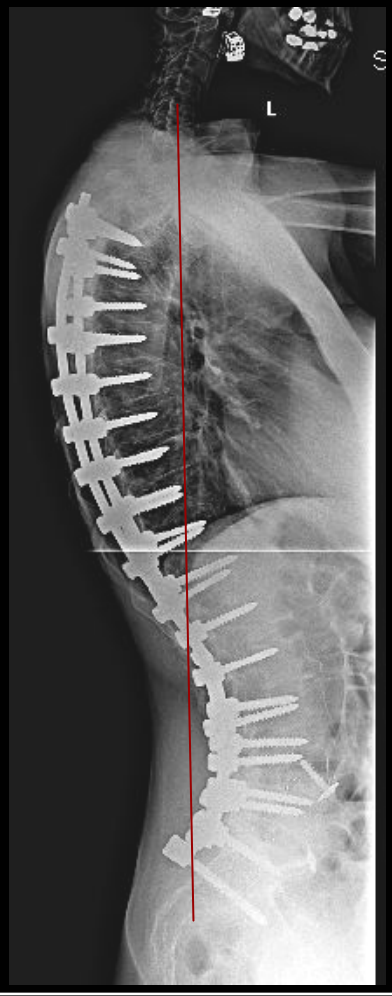
- Abdominal retroperitoneal approach to lumbosacral spine.
- Radical diskectomy, L5-S1 with epidural decompression under loupe magnification.
- Anterior interbody fusion with a PEEK 12-mm interbody spacer with rhBMP.
- Anterior interbody fusion with PEEK device, L4-5 with rhBMP, 14 mm.
- Radical diskectomy, L4-5 with epidural decompression for leveling of adult scoliosis.
- Anterior screw fixation, L4-5, L5-S1 with fully-threaded screw over washer.
- Intraoperative somatosensory evoked potentials.
- Intraoperative fluoroscopy.

Surgical Strategy – Stage 2

- Segmental spinal instrumentation, T3 to sacral pelvis using 1/4-inch stainless steel pedicle screw rod construct.
- Posterior spinal fusion, T3 to the sacral pelvis, with a locally harvested autogenous bone and RHBM-3.
- Interlaminar laminotomy, mesial facetectomy and lateral recess release for spinal canal and lateral recess compression, T12-L1, L1-2, L2-3, L3-4, L4-5 and L5-S1, bilaterally.
- Spinal osteotomy for posterior mobilization of spine, Smith-Peterson/Ponte osteotomy, T5-6, T6-7, T7-8, T8-9, T9-10, T10-11, T11-12, L1-2, L2-3, L3-4, L4-5.
- Sacral pelvic instrumentation through separate incision, left side iliac crest using 7.5 x 70 mm screw.
- Intraoperative somatosensory evoked potentials.
- Intraoperative motor evoked-potential interpretation.

Post-op Films





- The patient is well balanced in the coronal and sagittal planes. She is very happy with her outcome.

Pre-Op/Post-op Comparison