



Case Review:

13 year old female, with
Adolescent Idiopathic Scoliosis

Robert S Pashman, MD
Scoliosis and Spinal Deformity
www.eSpine.com

Patient History

- 13-year-old female
- 52° ICN right thoracic curve from thoracic 4 to thoracic 11.
- Status post menarche
- Failed conservative therapy
- Recent growth spurt
- Has obtained several surgical opinions

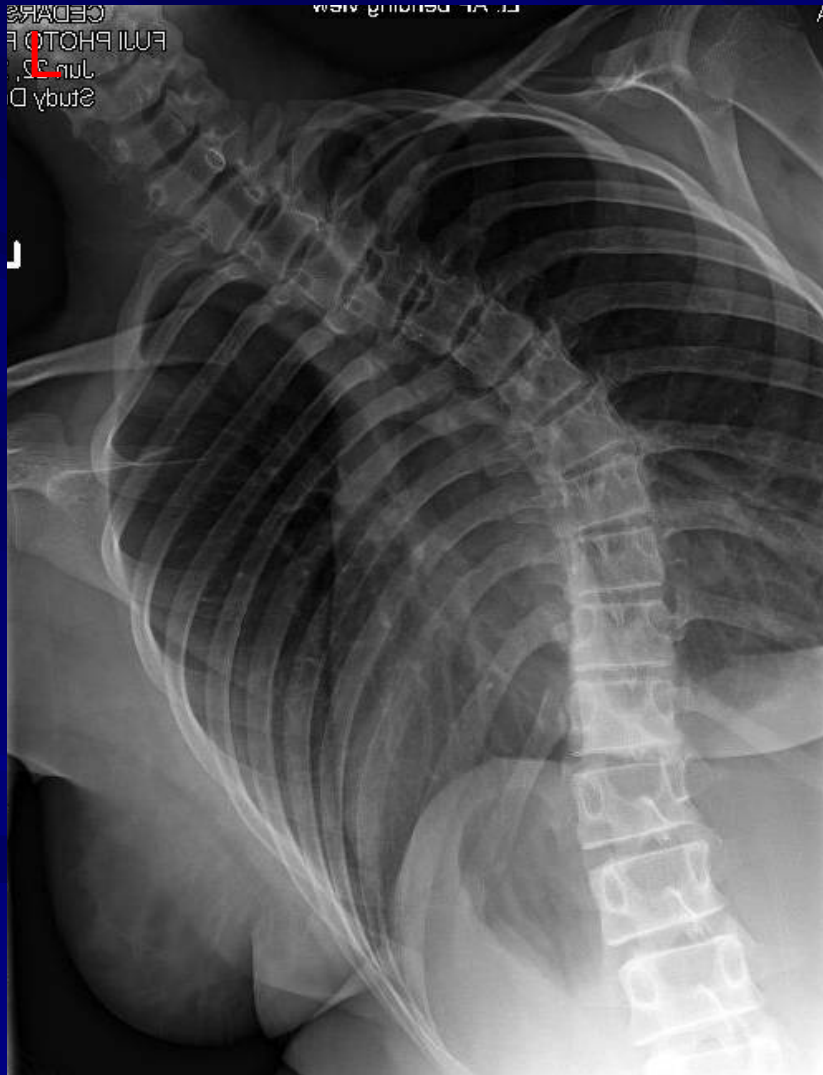
Pre-op X-rays



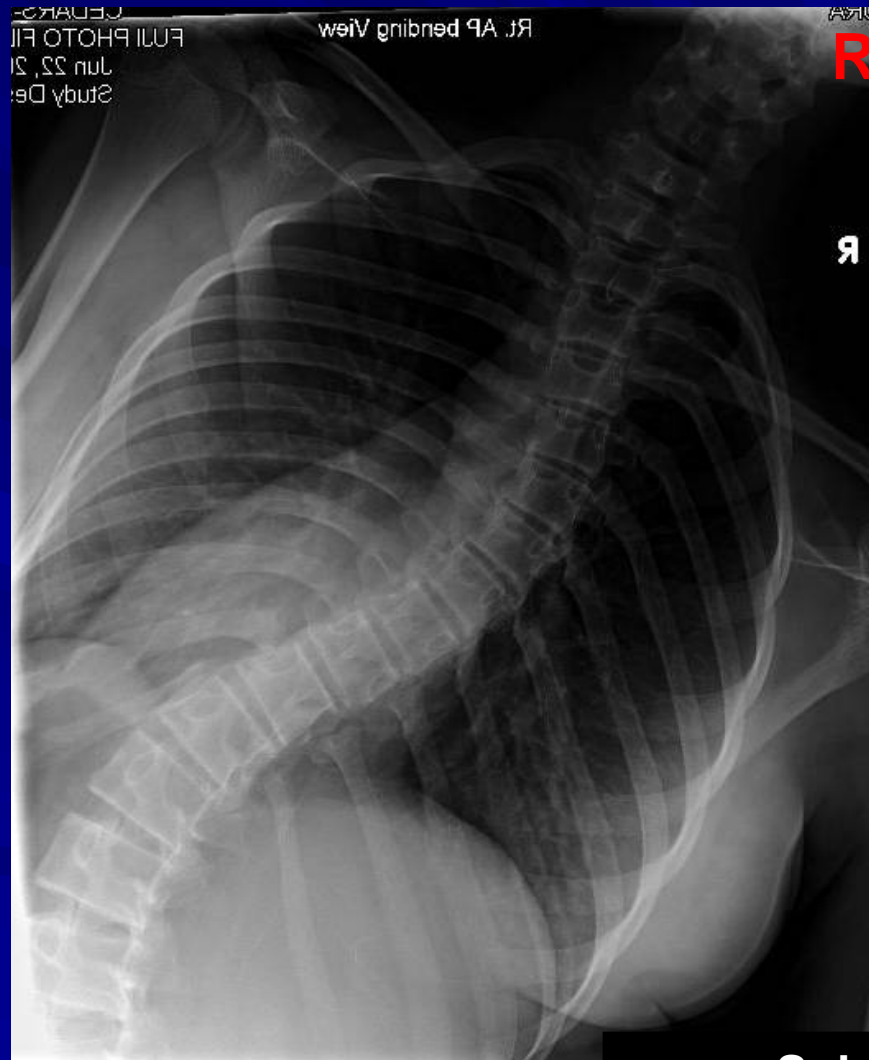
The patient is balanced through T3 through L1, has depression of the left shoulder with a 10° T1 tilt angle.

The patient has significant cosmetic deformity with a 2 cm right rib hump, but plumb line middle in its balance in the frontal and sagittal plane. There is no significant sagittal component

Bending X-rays



Bending X-rays



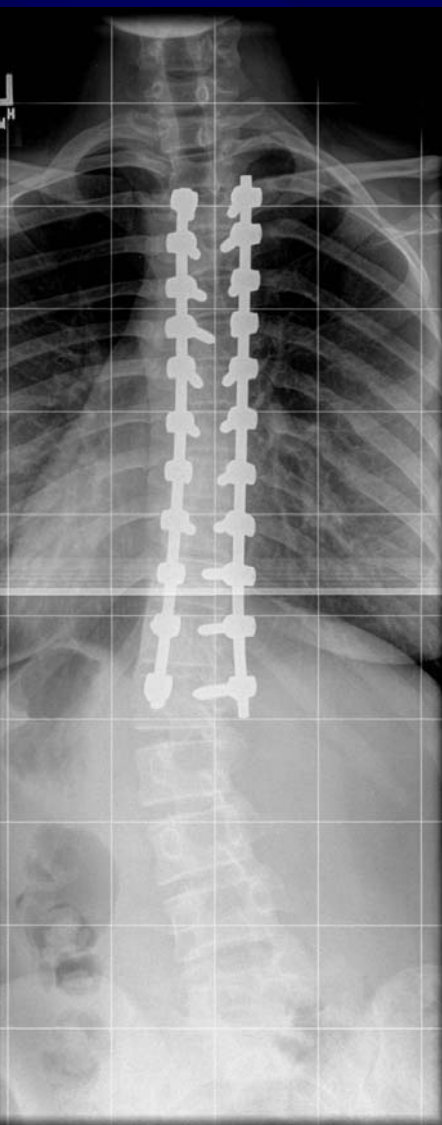
Indications for Surgery

- Progressive ICN adolescent idiopathic scoliosis.
- Severe cosmetic deformity with right rib hump.
- Failed conservative therapy.
- Mid thoracic and low lumbar pain.

Surgical Strategy

1. Segmental spinal instrumentation for correction of adolescent idiopathic scoliosis thoracic 3 to lumbar 1 using CD Legacy 5.5 rod, pedicle screw, rod UltraSteel construct.
2. Concave osteotomy with removal of ankylosed facet joints T7, T5 through T9 for mobilization of thoracic spine.
3. Posterior fusion T3 to L1 with locally harvested autogenous and rib bone.
4. Thoracoplasty right chest wall resection for reduction of cosmetic deformity 5 ribs.
5. Intraoperative motor evoked potential interpretation with pedicle screw stimulation.
6. Intraoperative fluoroscopy

Post-Op Films

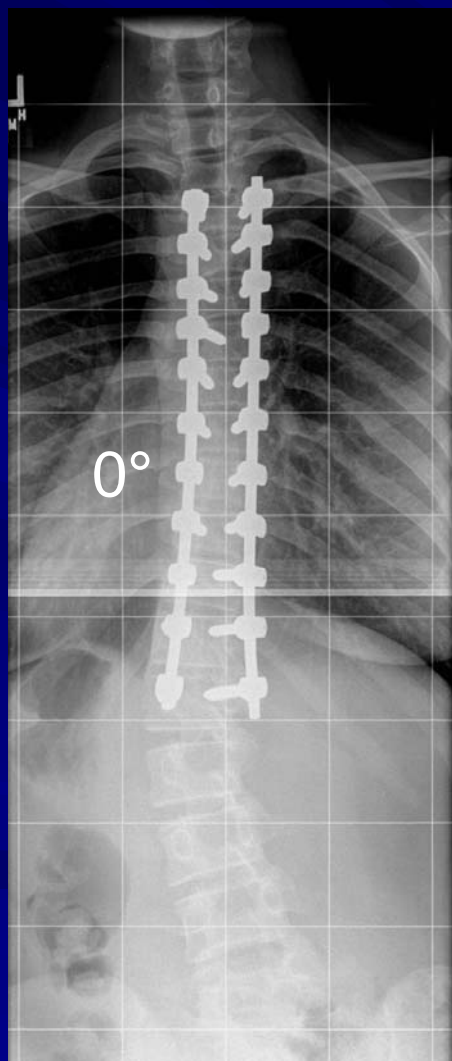


She is well balanced in both the sagittal and coronal planes.

Pre-Op/Post-op Comparison



June, 2007



June, 2008

The patient's curve was reduced 100%, from 52° to 0°.

She is doing very well...and anxious to start karate at one year post-op.

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June, 2008