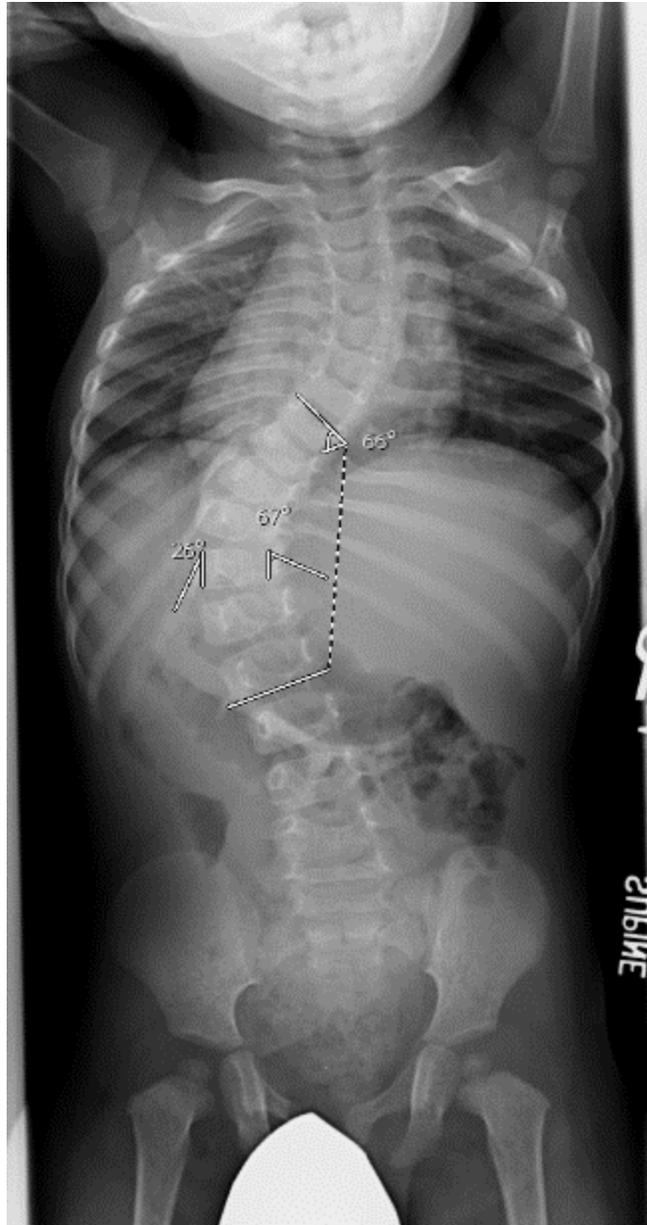


Something I Wouldn't Do Again...

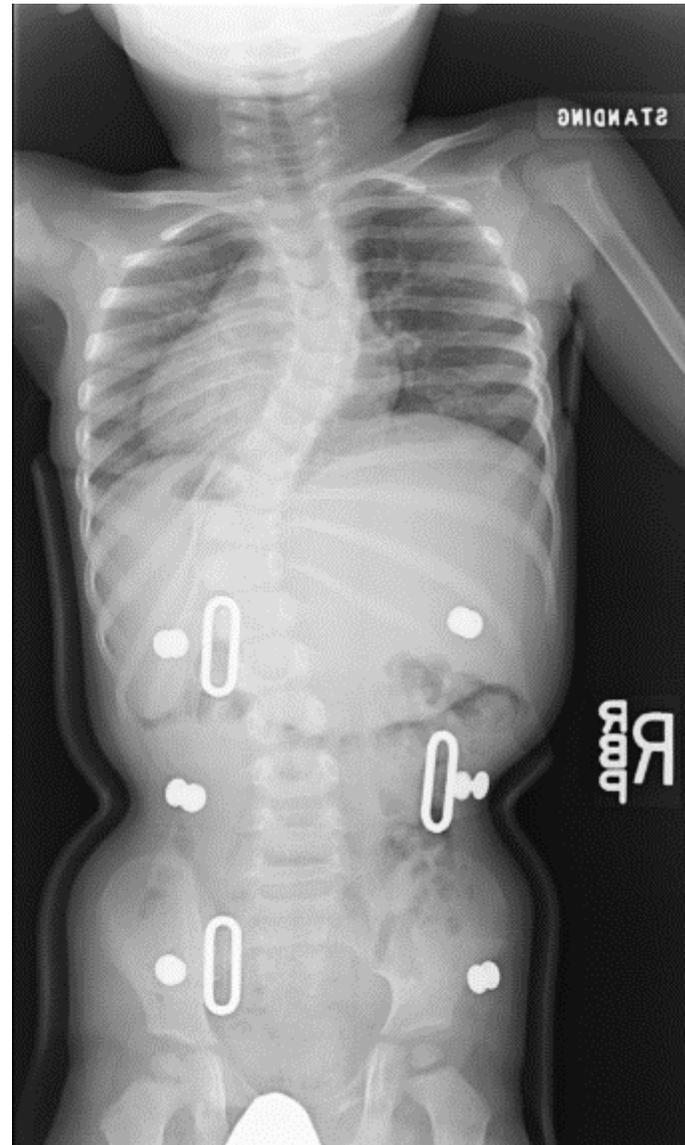
Ramo ICEOS 2017

- 15 month old male
- Infantile idiopathic scoliosis
- Circa 2001
- Treated initially with two Risser casts
- Transitioned to TLSO until age 11
- Wore TLSO for 20-23 hours/day for 10 years

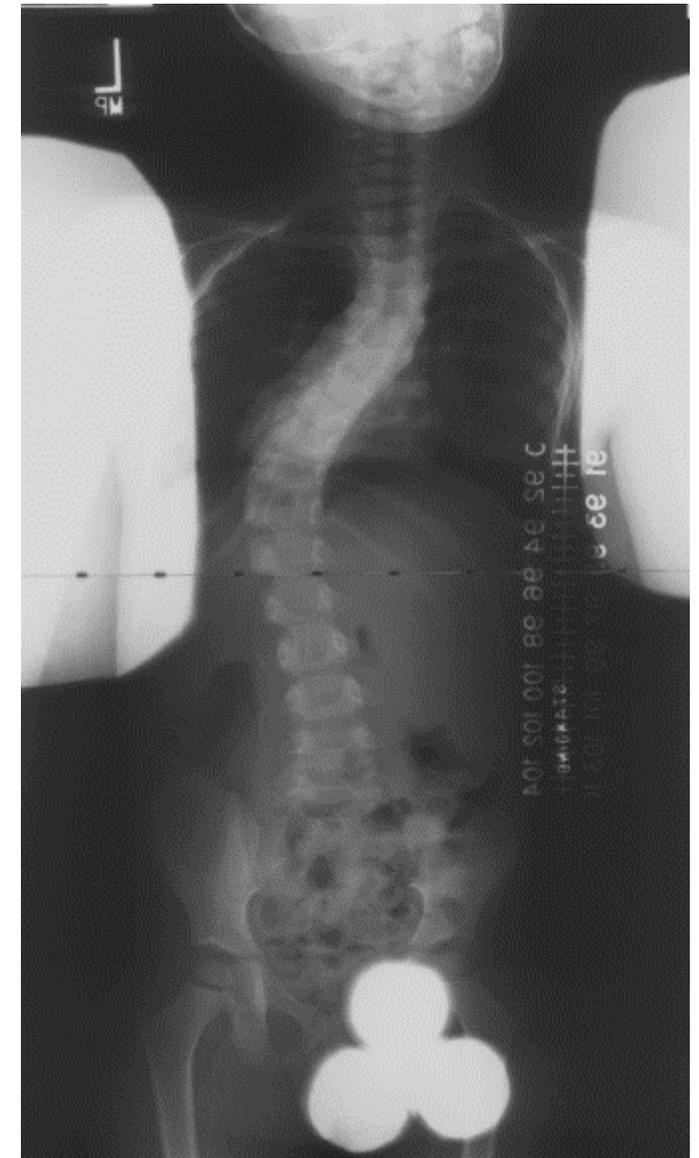
Age 16 months



Age 24 months



Age 48 months

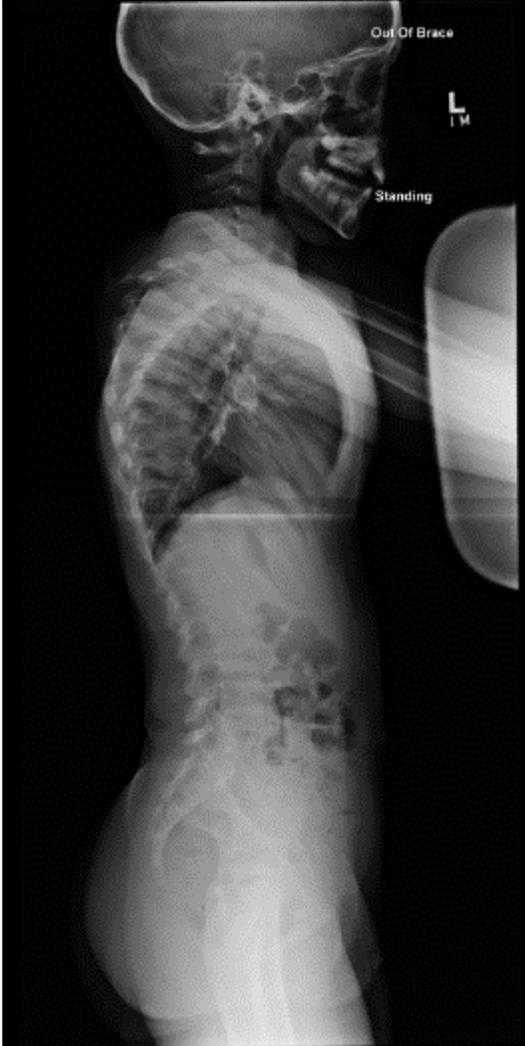
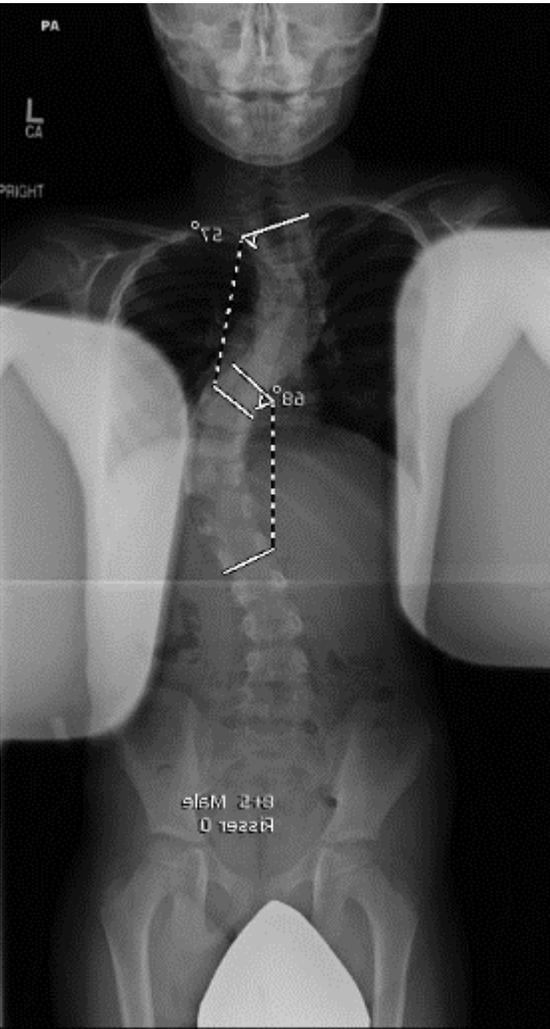


Braced for several years....

Age 8

Age 10

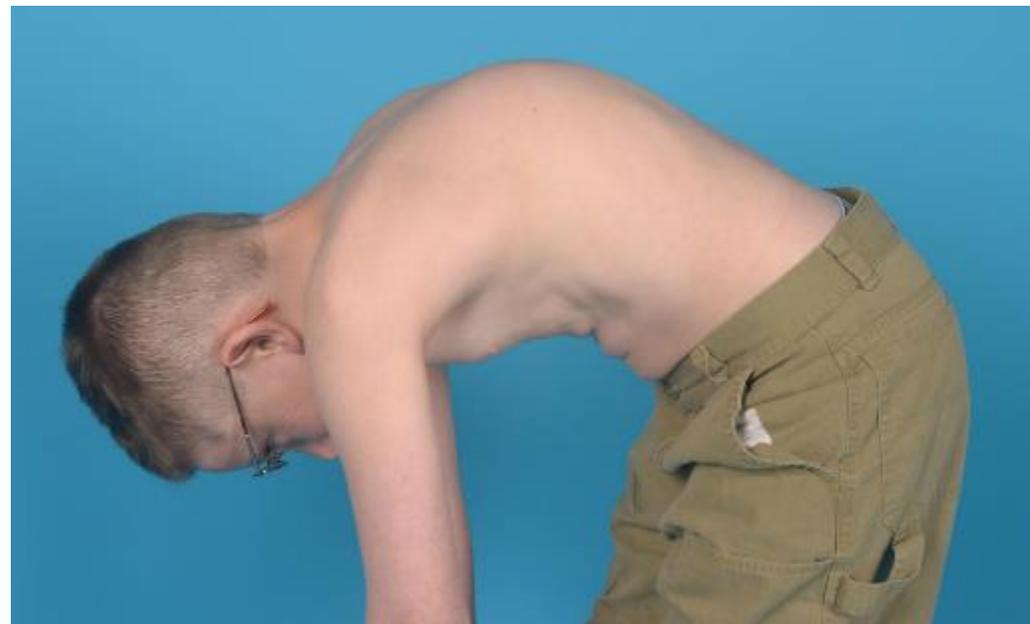
Age 11



T1-T12 = 17cm
Bone Age = 10



Age 11+3



Fixed Ends, Gliding Apex

Clin Orthop Relat Res (2011) 469:1356–1367
DOI 10.1007/s11999-011-1783-4

SYMPOSIUM: EARLY ONSET SCOLIOSIS

Surgical Technique

Modern Luqué Trolley, a Self-growing Rod Technique

Jean Ouellet MD, FRCSC

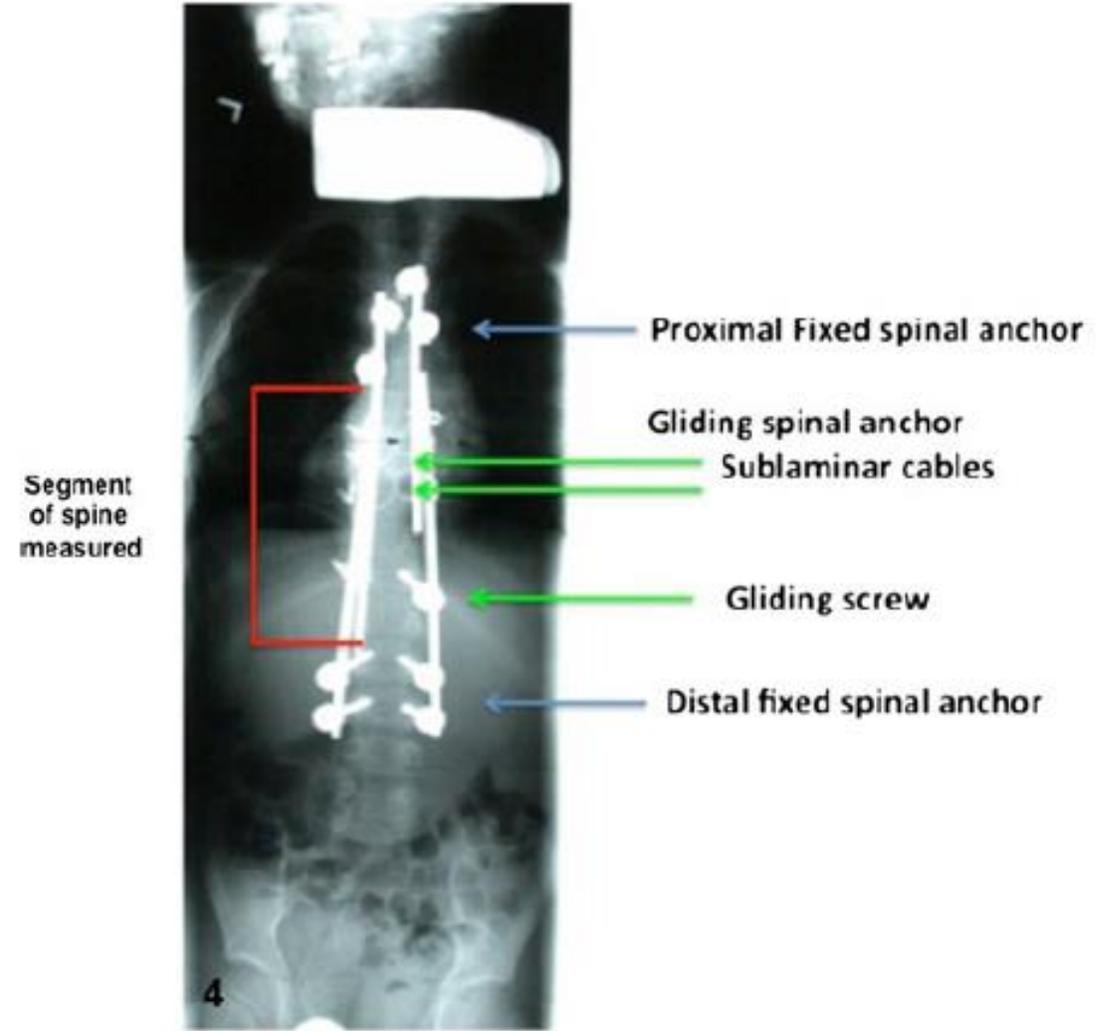


Fig. 4 Classic construct of a modern Luqué trolley consisting of two proximal claws (or four proximal screws) and four distal pedicle screws as fixed anchors are shown. Two intercalated sublaminar cables are placed across the thoracic curve and one gliding screw at the apex of the lumbar curve.

Anterior Release T10-T12, fixation at T10-T12 (gliding)
Domino used on left and Apical Wires on Right

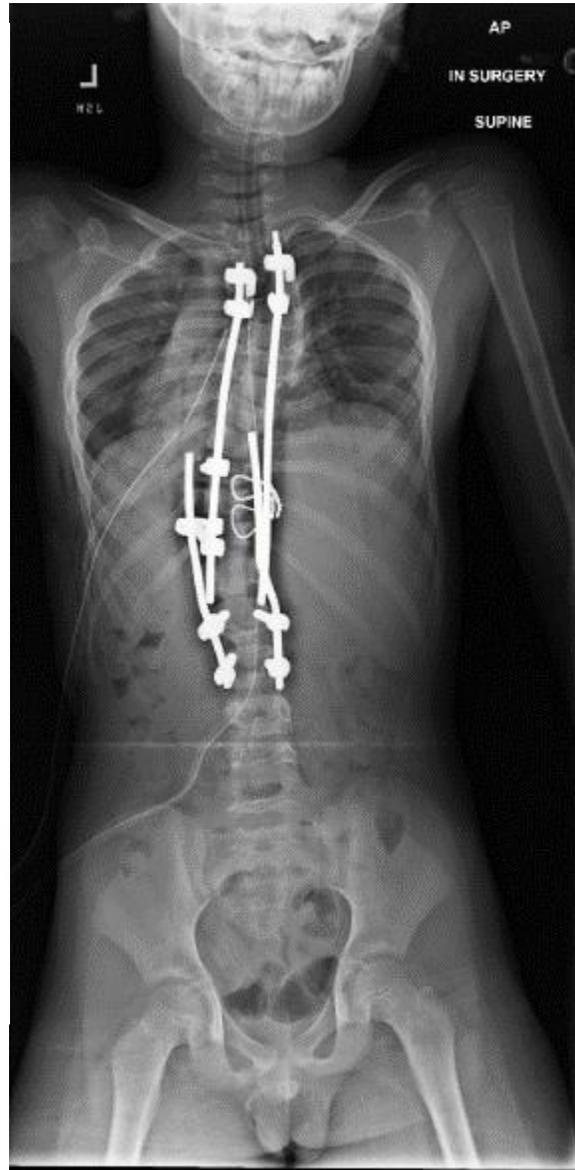
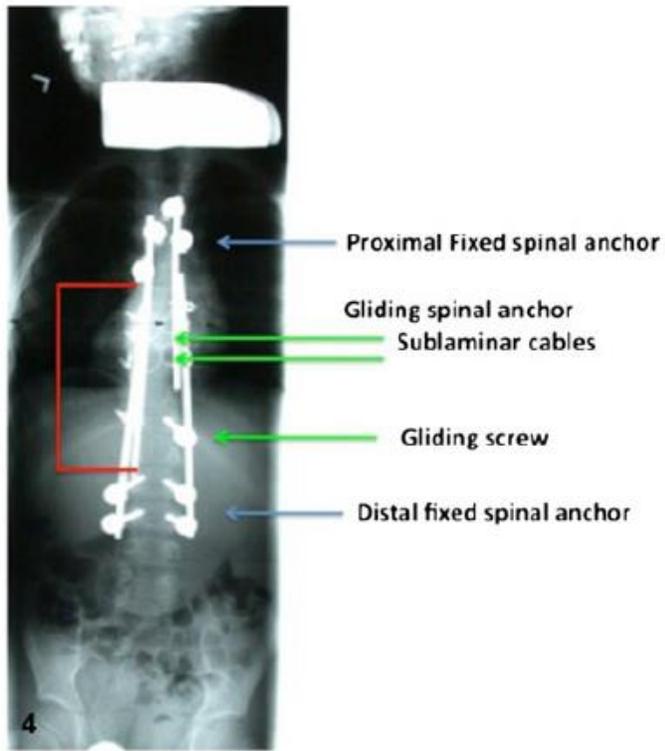
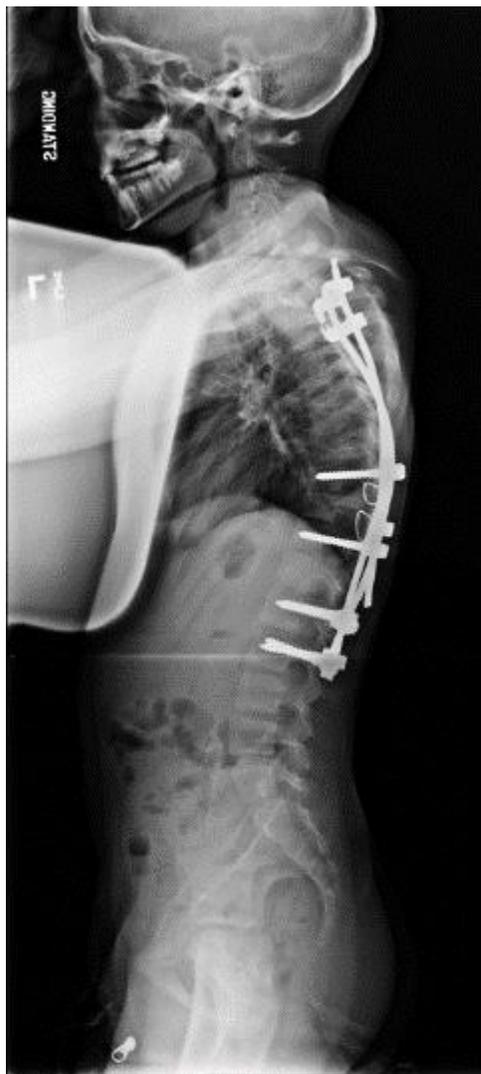
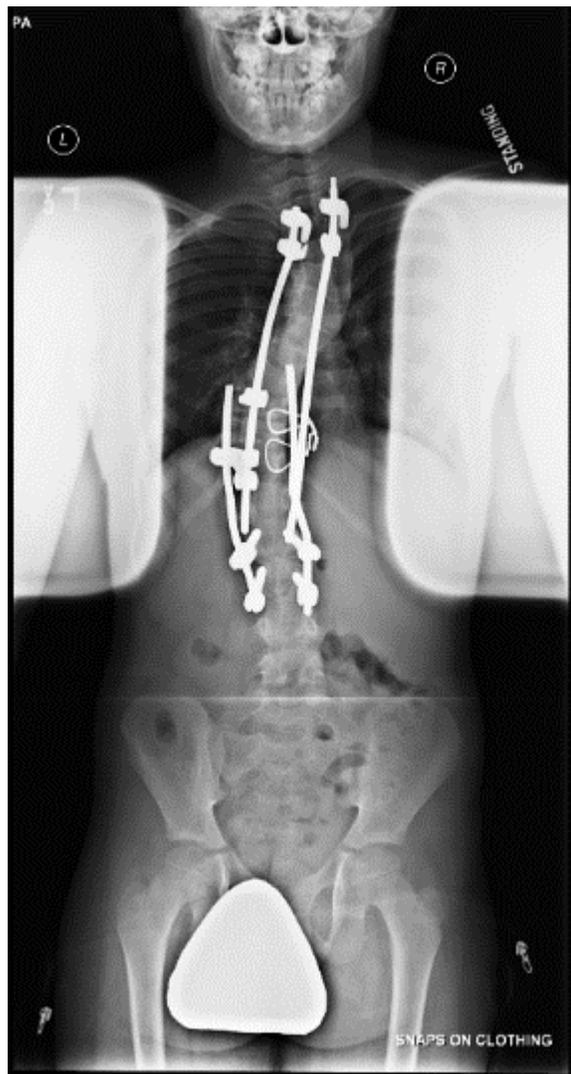
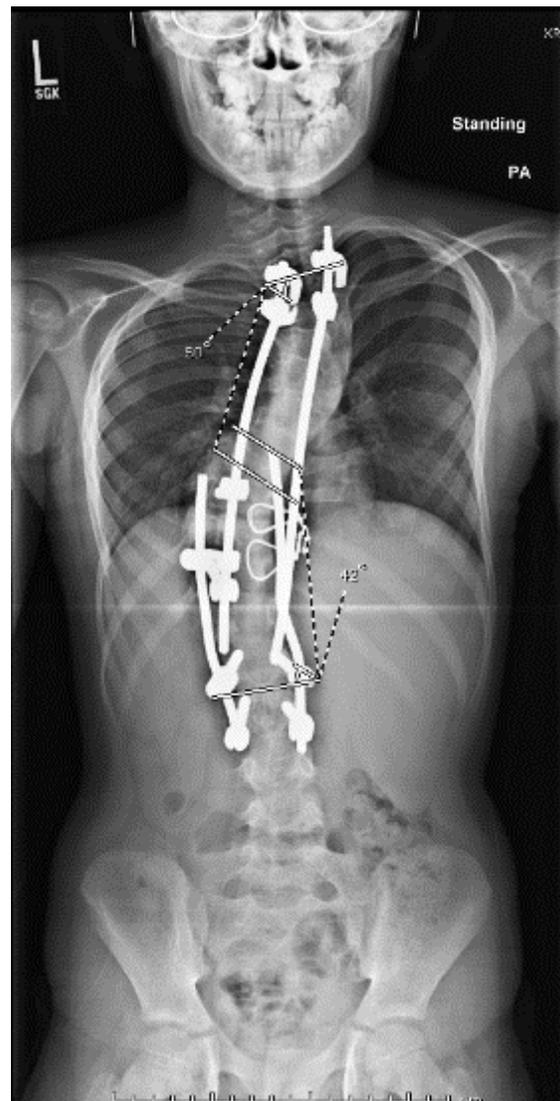


Fig. 4 Classic construct of a modern Luqué trolley consisting of two proximal claws (or four proximal screws) and four distal pedicle screws as fixed anchors are shown. Two intercalated sublaminar cables are placed across the thoracic curve and one gliding screw at the apex of the lumbar curve.

2 weeks postop –
20.3 cm

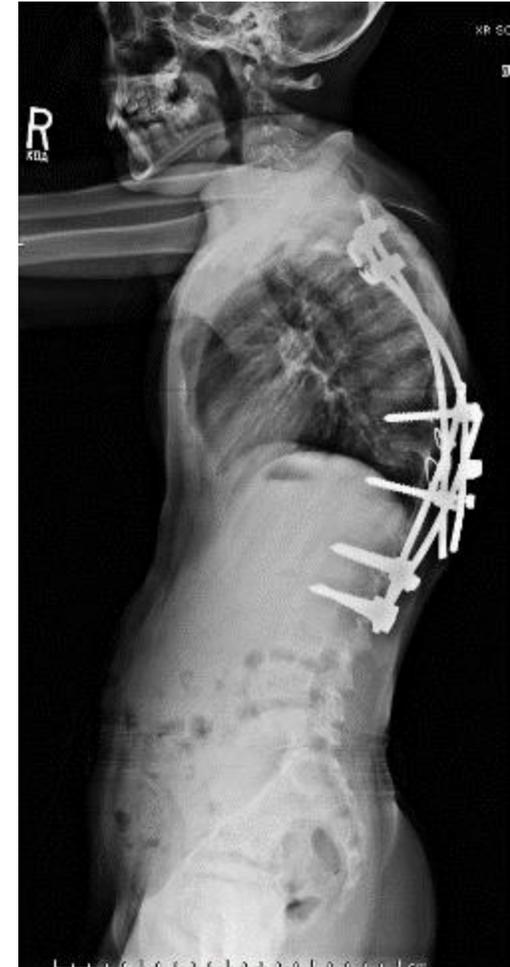
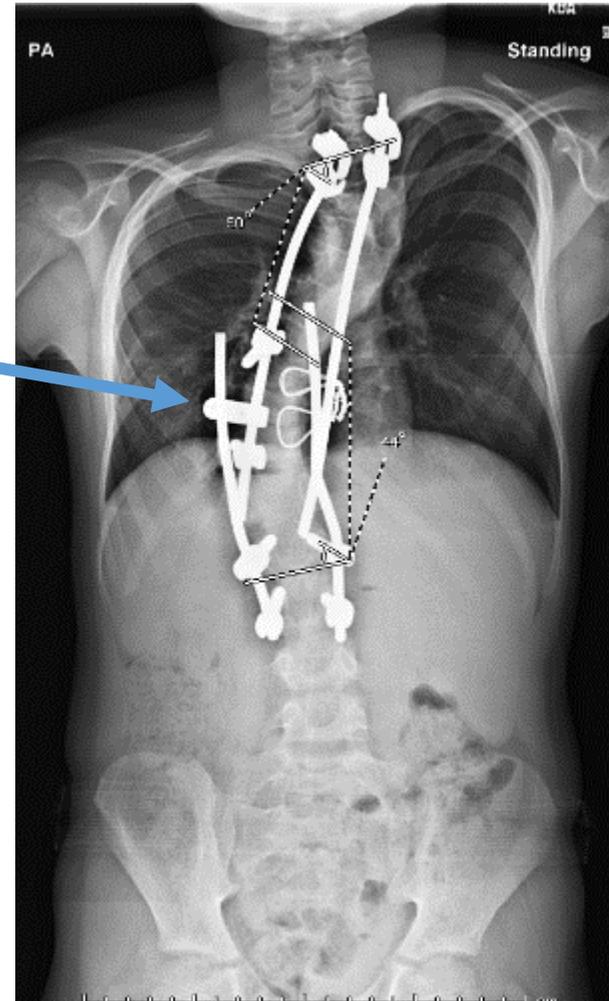
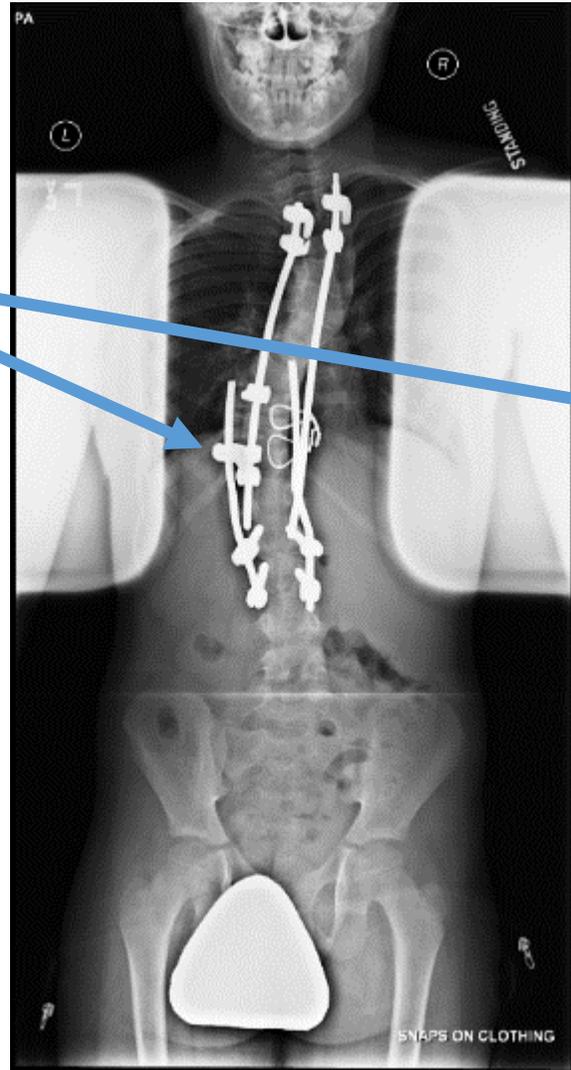


6 weeks postop



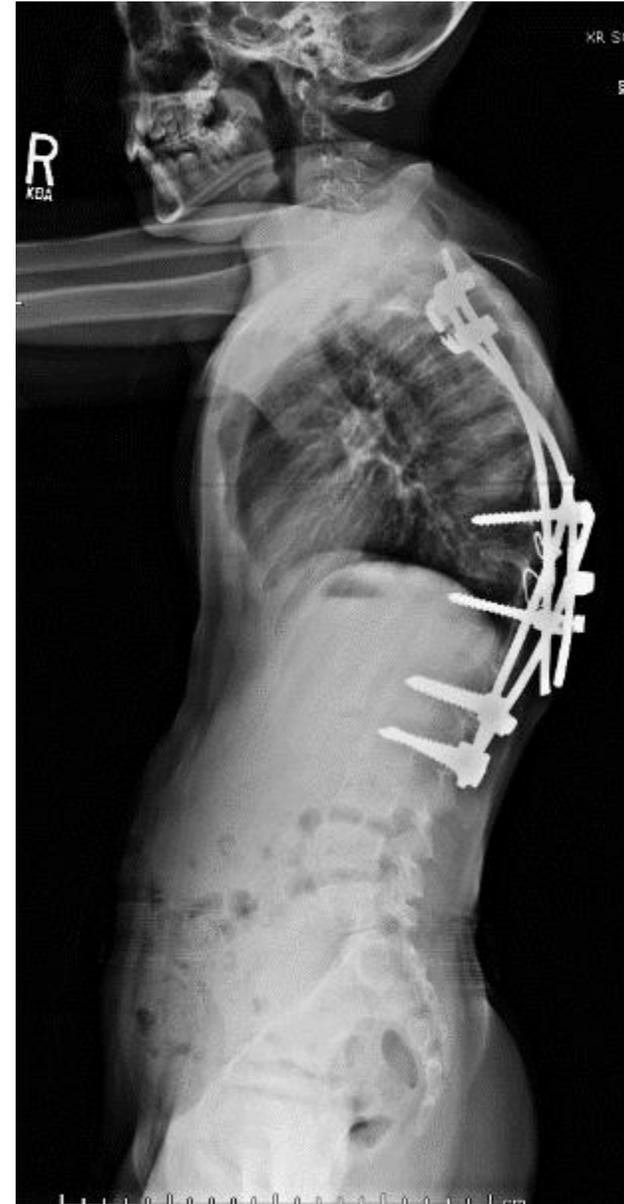
4 months postop –
Child fell at school,
sudden increase in
pain at implants
over apex

Domino rotated



4 months postop –
Child fell at school,
sudden increase in
pain at implants
over apex

Domino rotated



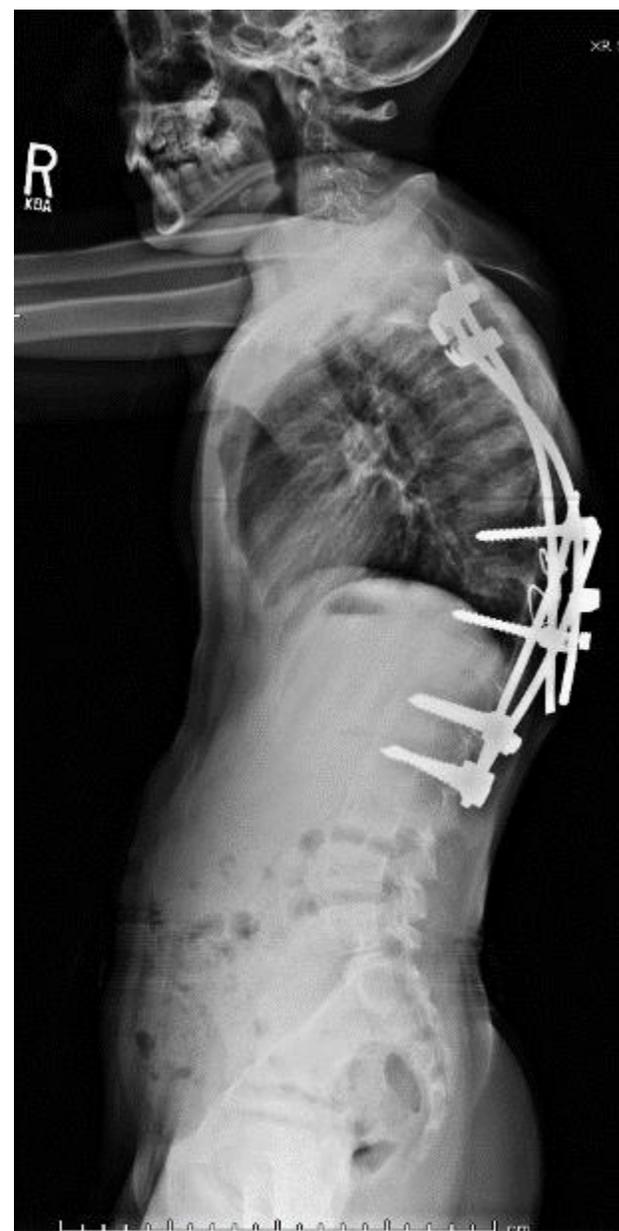
2 weeks



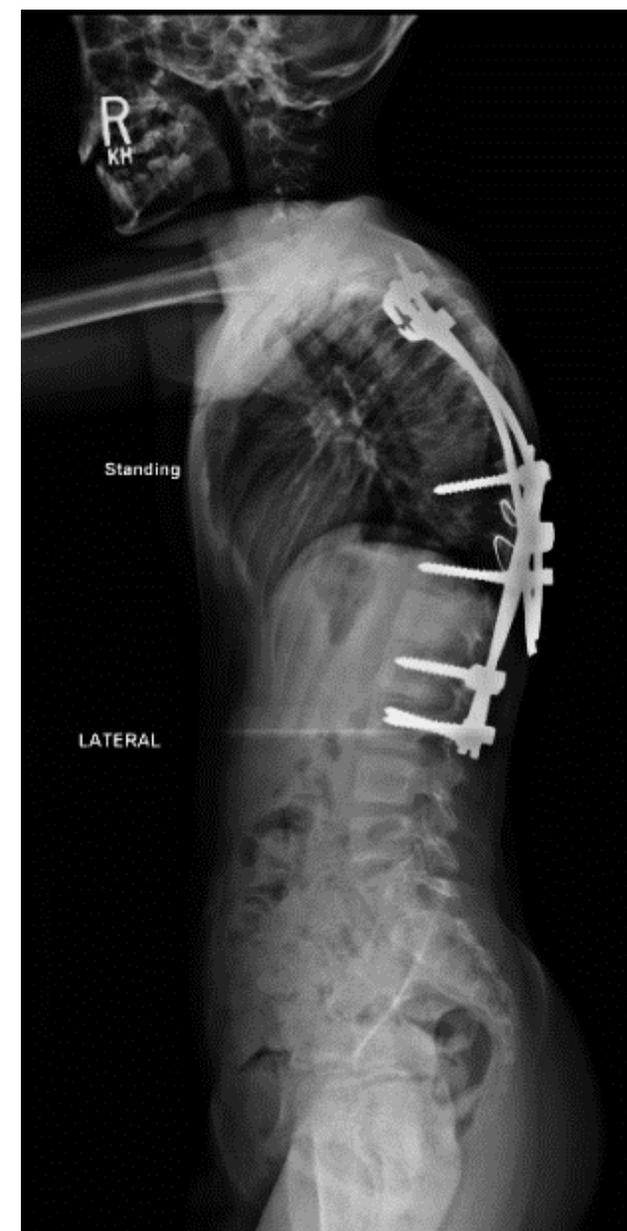
6 weeks



4 months

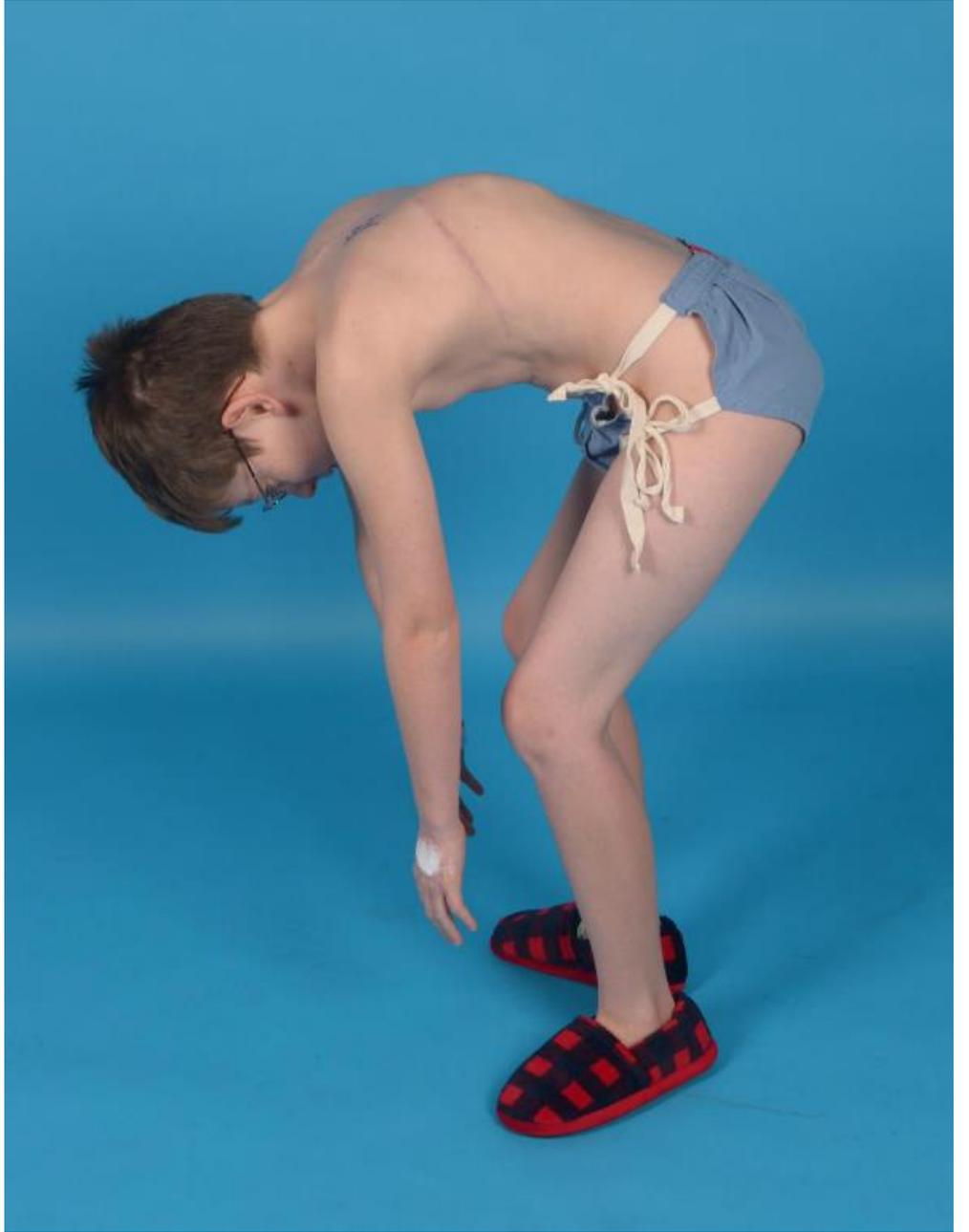


5 months



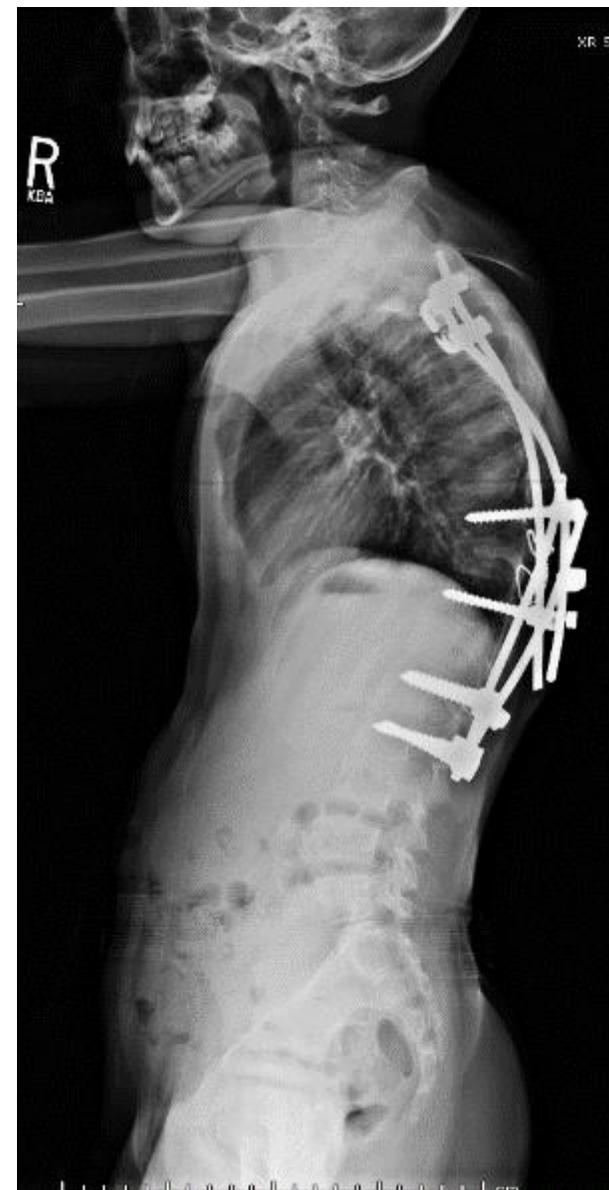
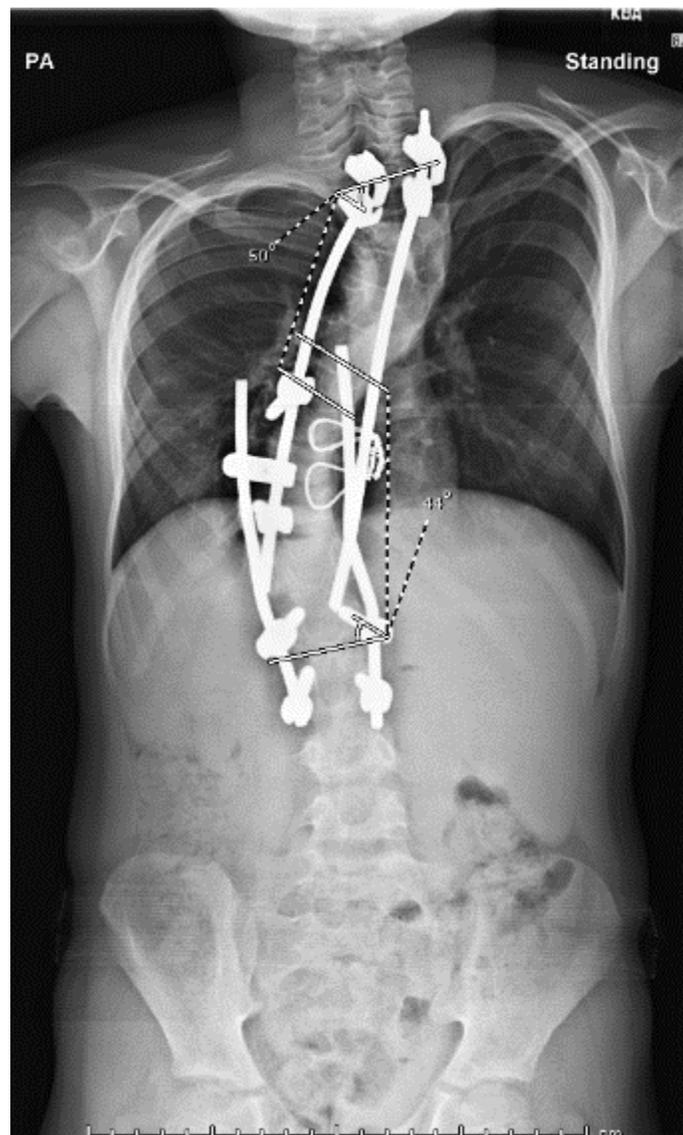






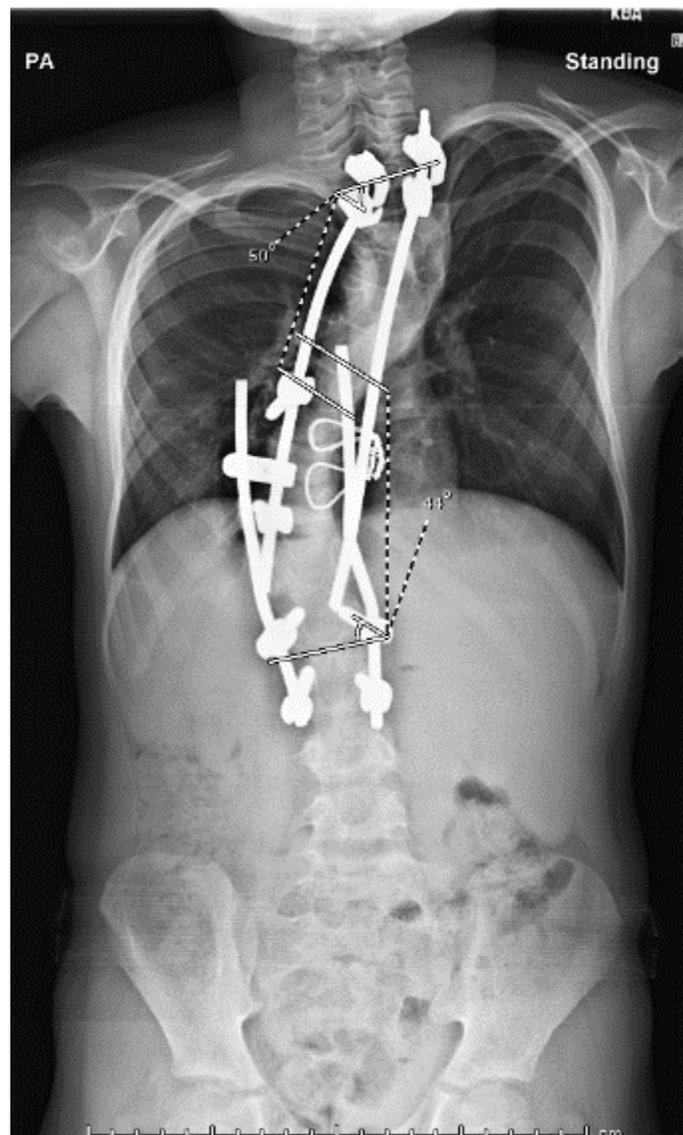


6 months postop –
20.4cm





6 months postop –
20.4cm

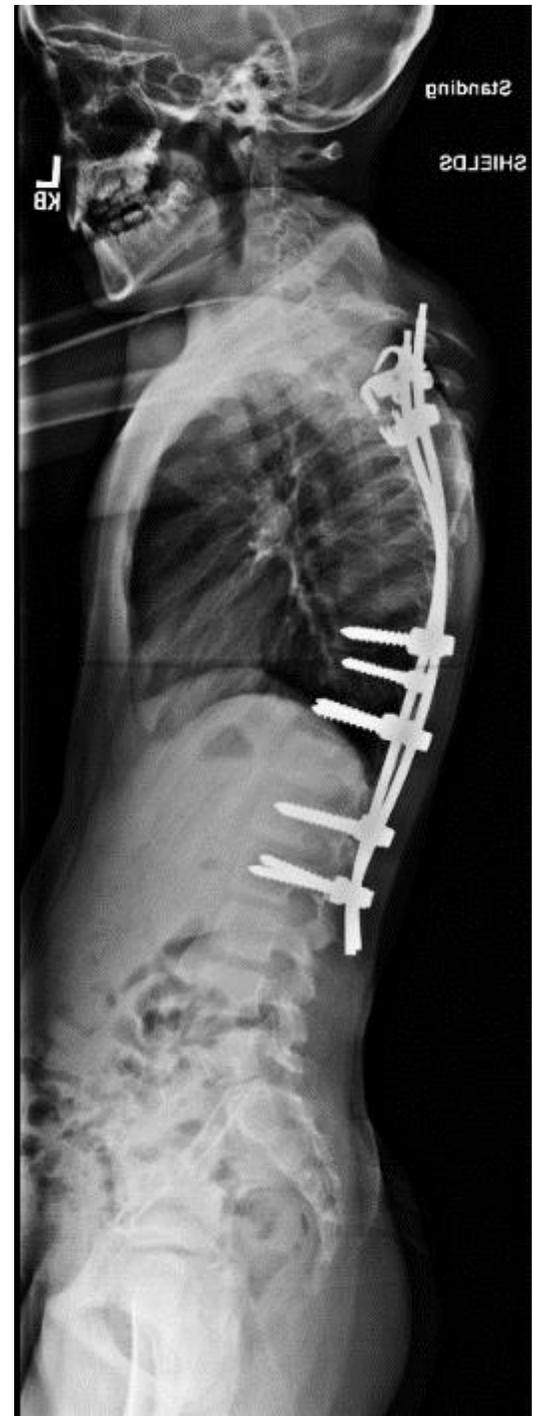
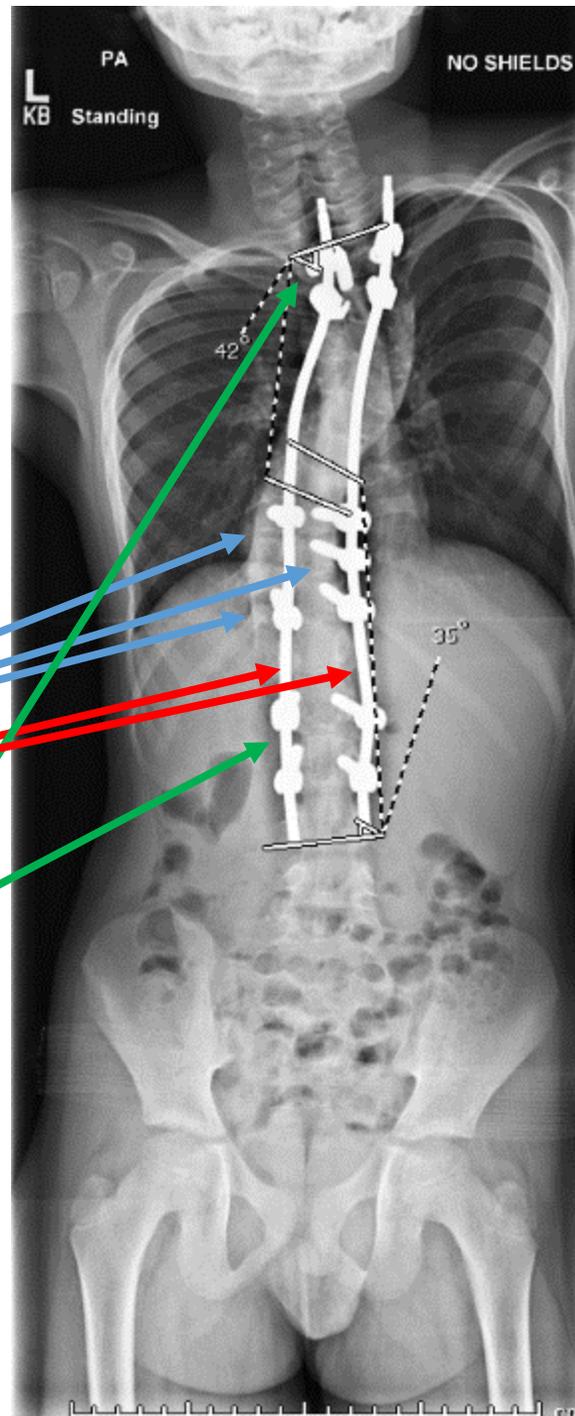


Fixed Apex,
Gliding Ends

4.5 locked screws

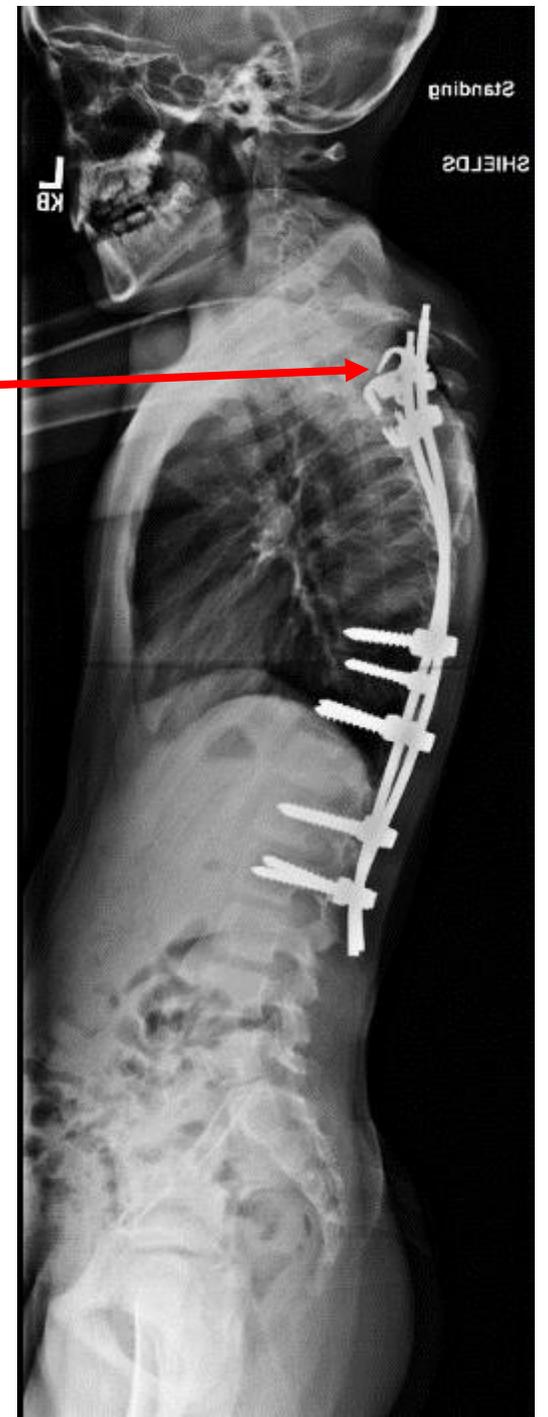
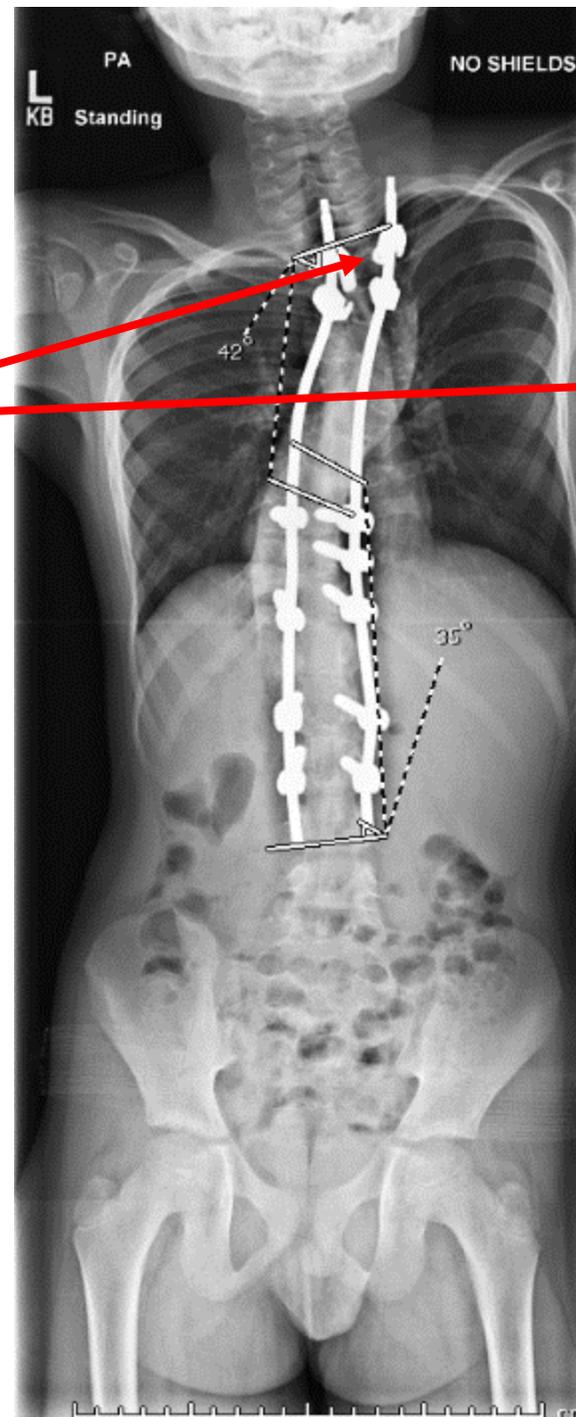
4.5 rods

5.5 locked screws and hooks

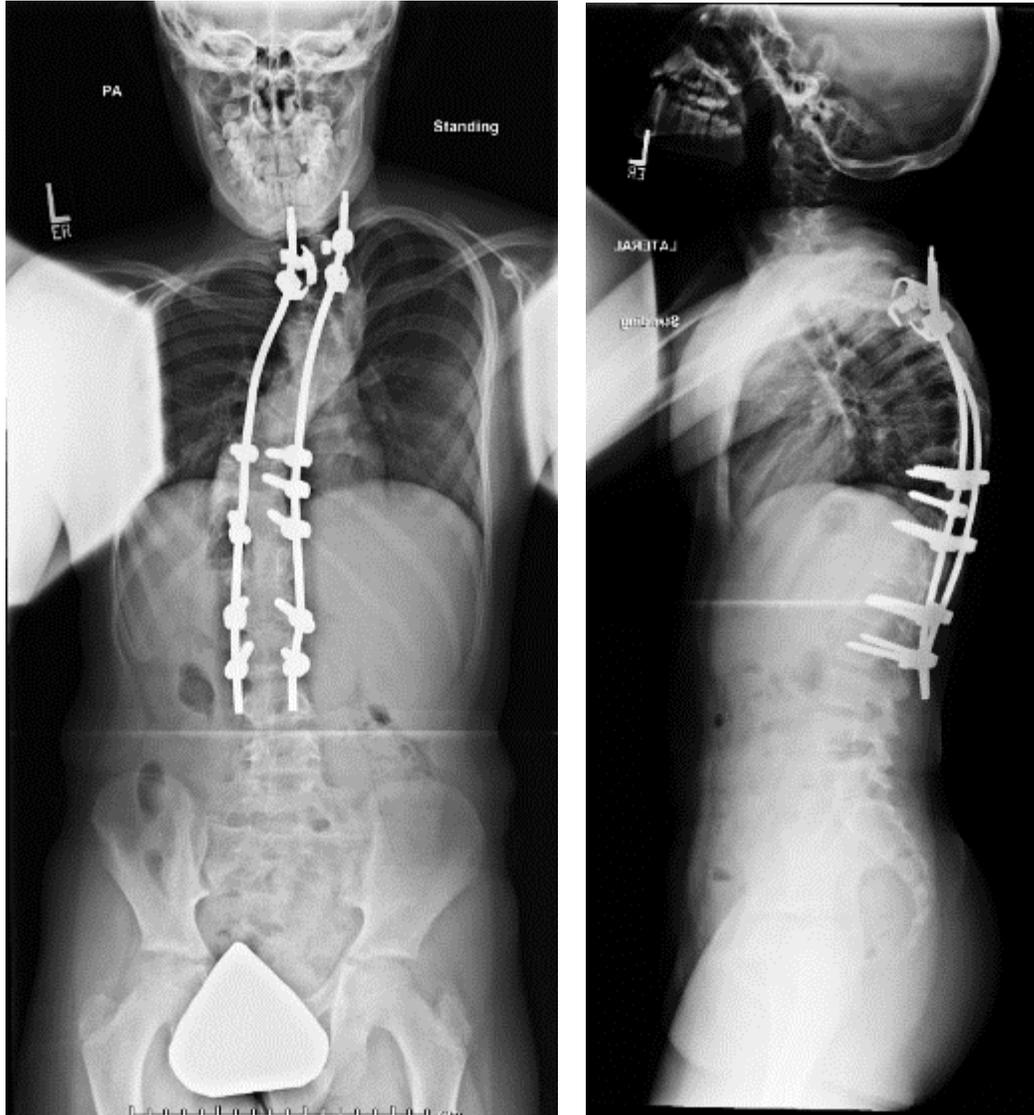


Early Failure

- Noted within first 6 weeks

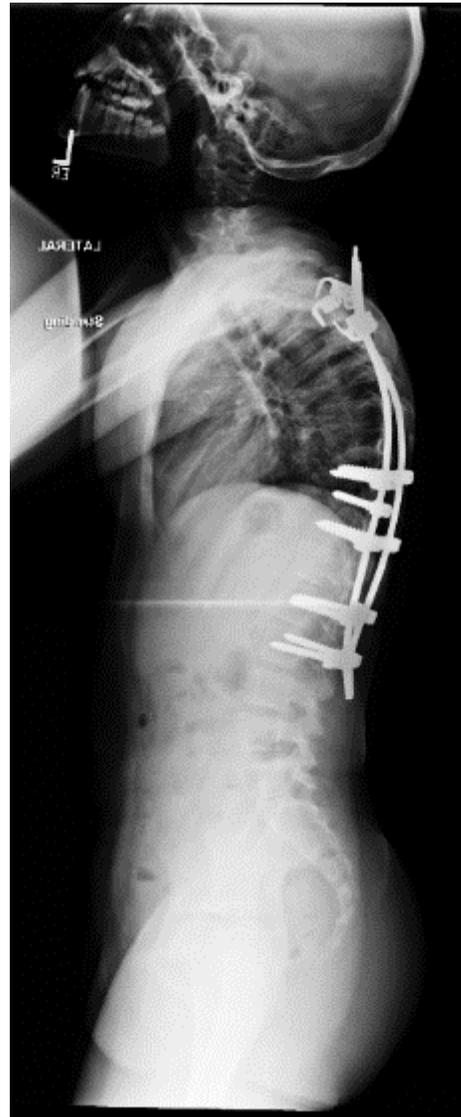
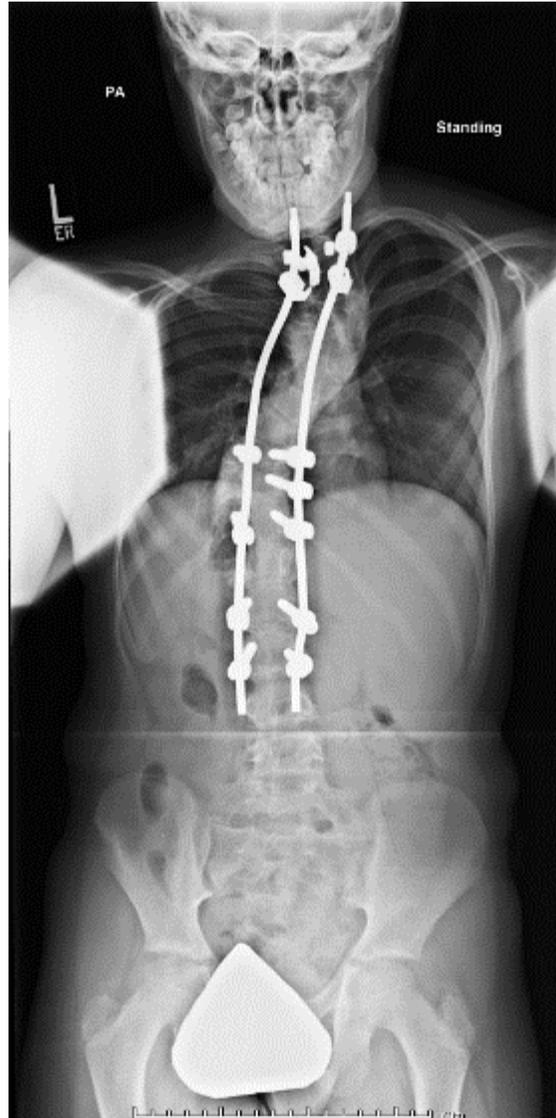


Stayed asymptomatic for some time....
26 months post conversion

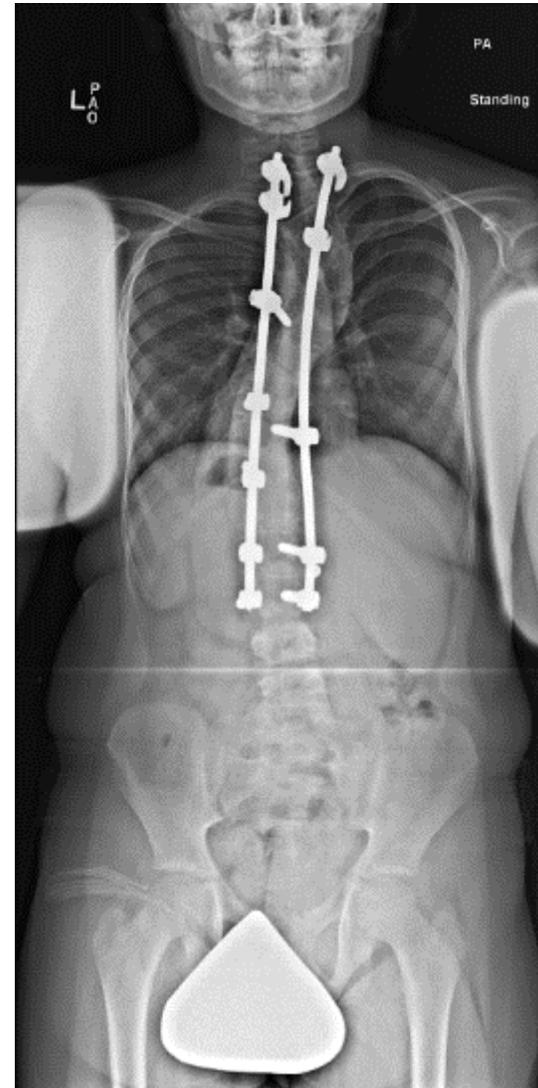


- Child dealing with other health problems limiting activity
- Diagnosed with Multiple Sclerosis in interim

Stayed asymptomatic for some time....
26 months post



At conversion... noted to have
“significant fibrosis and metallosis
everywhere, not just at gliding screws”



3 years post
original 20.4 cm



- Seen at 1 year postop
- Age 14+3
- Asymptomatic
- “well balanced clinically: balanced shoulders, waist and pelvis”
- “Excellent result”
- Triradiate open, and this

