

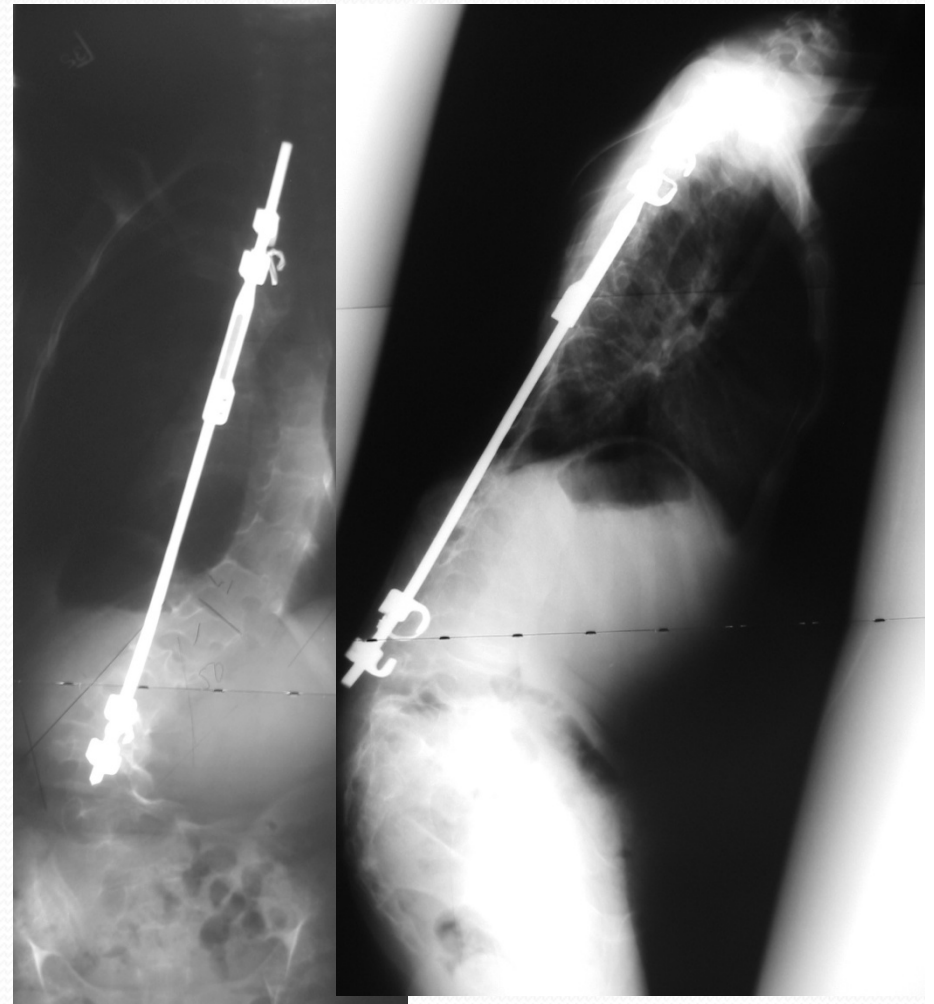
# Myth vs truth: Posterior Distraction Techniques are Kyphogenic

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# Schprintzen-Goldberg

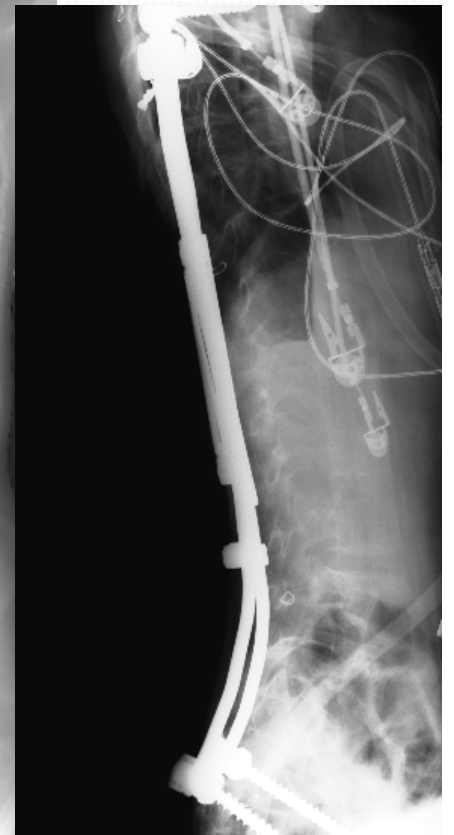
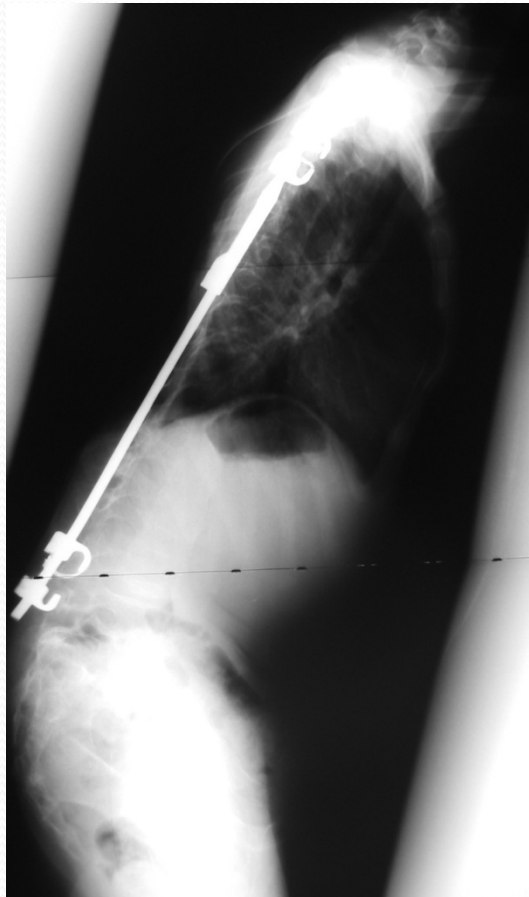
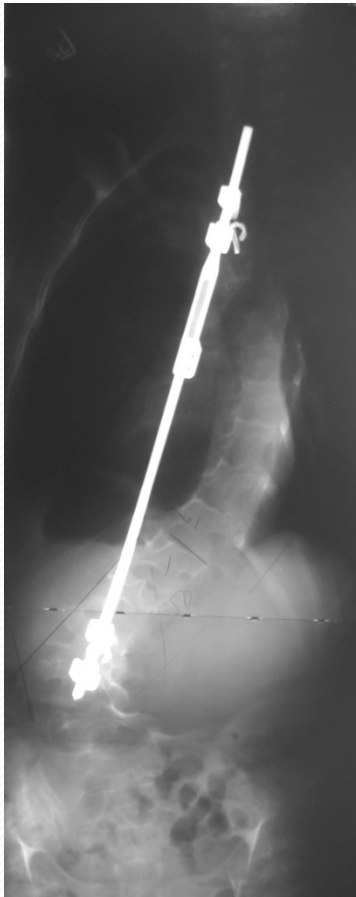
(FBN1 mutation)

- Moe technique
  - Single Harrington rod
    - Lumbar Distraction
    - Balance/ Connective tissue?



# Schprintzen-Goldberg

- Revision to pelvis







# Existing Kyphosis

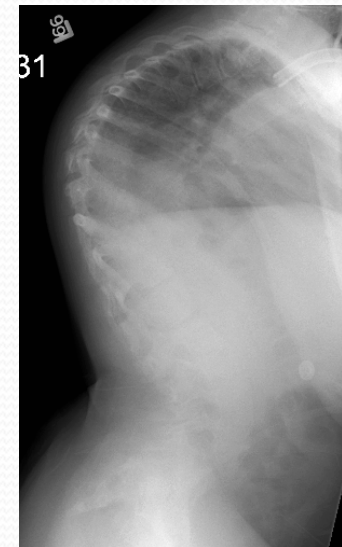
- Due to Weakness / laxity
- Posterior column elongated
- Posterior distraction may exacerbate this
  - But cantilever may help

# Example: 6 yo with CP

- 90° scoliosis- corrects to 70 in tx
- 105° kyphosis-corrects to 95 in tx



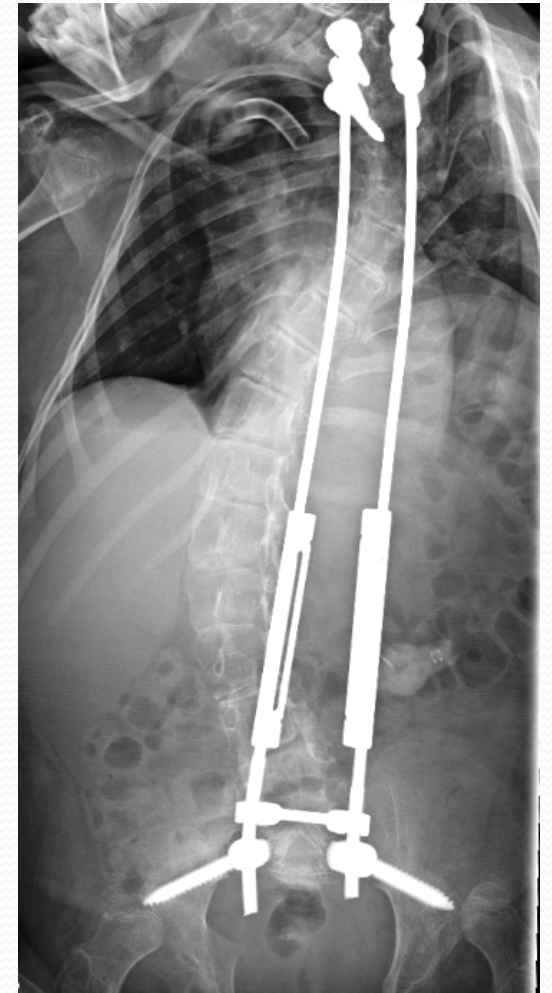
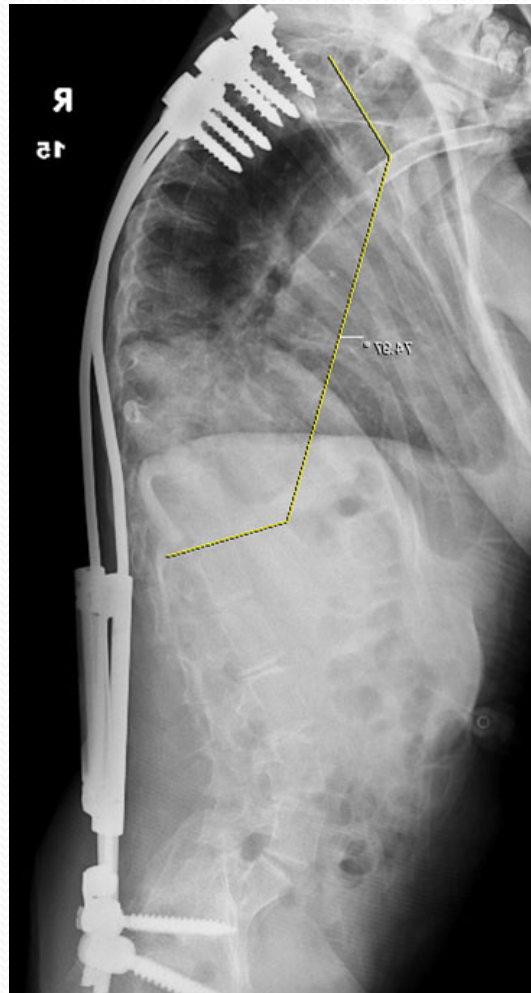
In tx





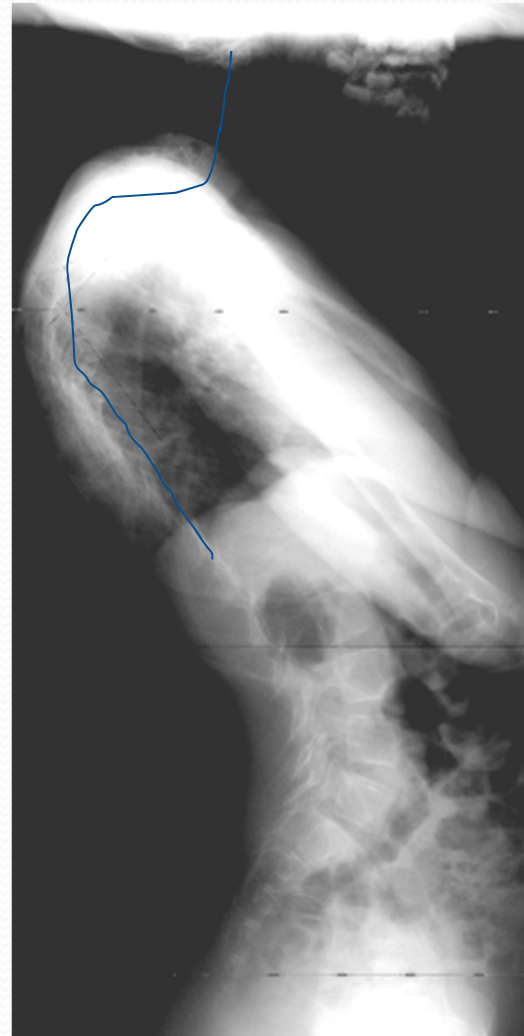
# Follow-up: CP

- 5 yrs later
  - After 5 distractions



# Example: 8 yo congenital myopathy

- 85° kyphosis C5-T5
- 87° scoliosis T1-T10

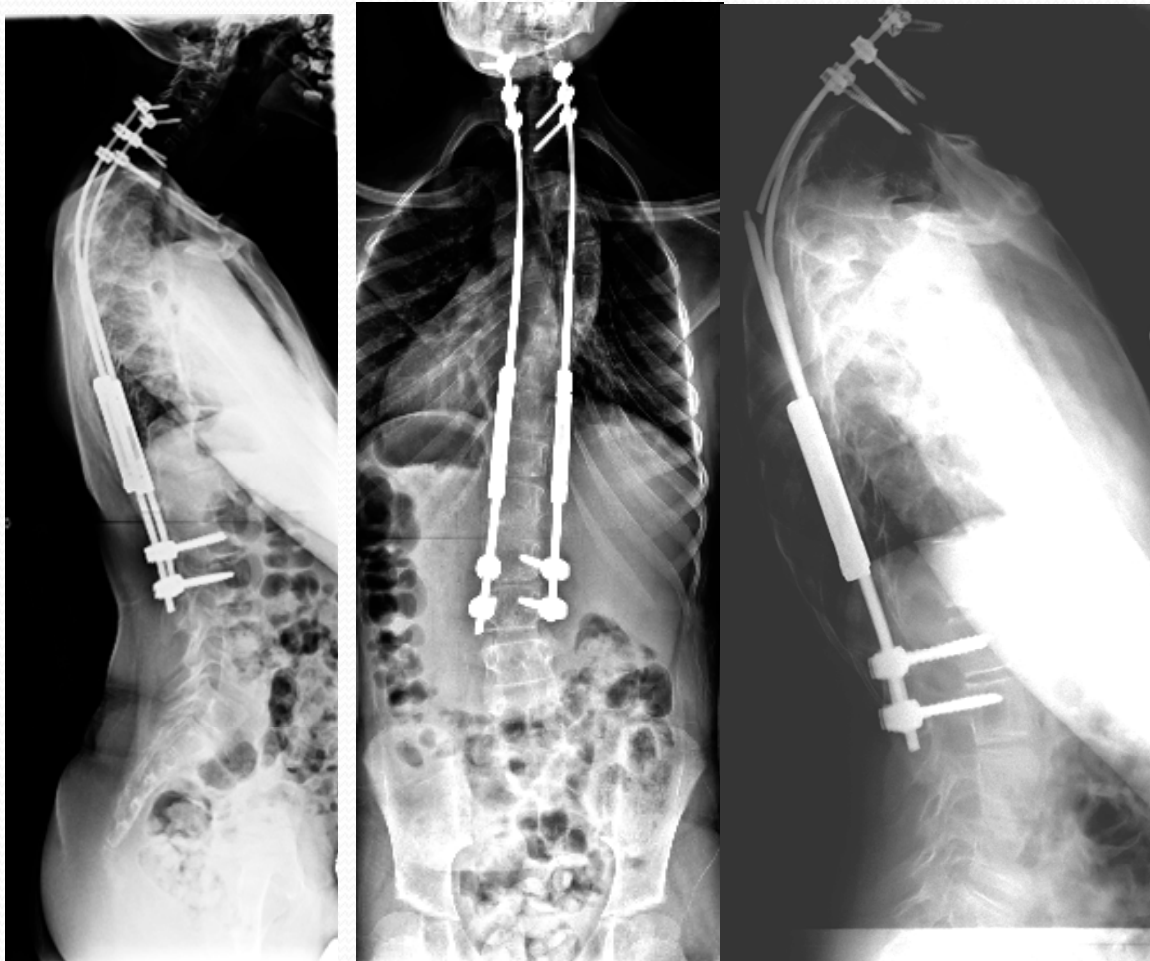


In Tx





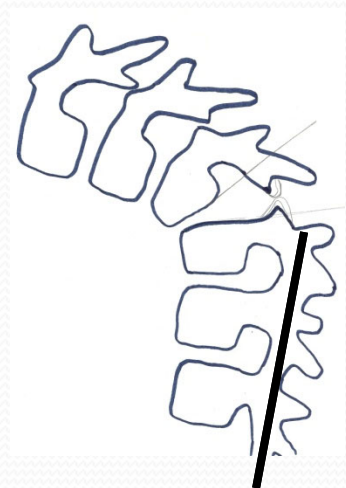
# Follow up: Myopathy





# Postop Kyphosis

- Within instrumented segment
  - Can be made worse by distraction
  - Especially lumbar
- Outside of instrumented segment
  - PJK / DJK
  - Due to transition of rigidity
  - Due to surgical dissection





# Principles

- Correct well at initial surgery
  - With position or traction
  - To minimize acute cut-out
- “Foundation” strength adequate
  - Number ,type and location
- Span the kyphotic region
- Cantilever when necessary
- Minimize dissection at ends



# Myth AND Truth

- Posterior techniques can be kyphogenic
  - Within and beyond curve
- This effect can be minimized
  - Great ideas presented at this meeting
- It can more often control and correct kyphosis!