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Rebuttal: Growing Rods Cannot Be Used In Patients With Kyphosis

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I Surrender

Muharrem Wins!!!

**You Can use Growing
Rods in kyphosis in
EOS but.....**



Considerations for Kyphosis in EOS

Increased risk for proximal foundation
failure in kyphosis

- Insertion and with lengthenings
- Increased PJK
- Revisions difficult

Bone loss

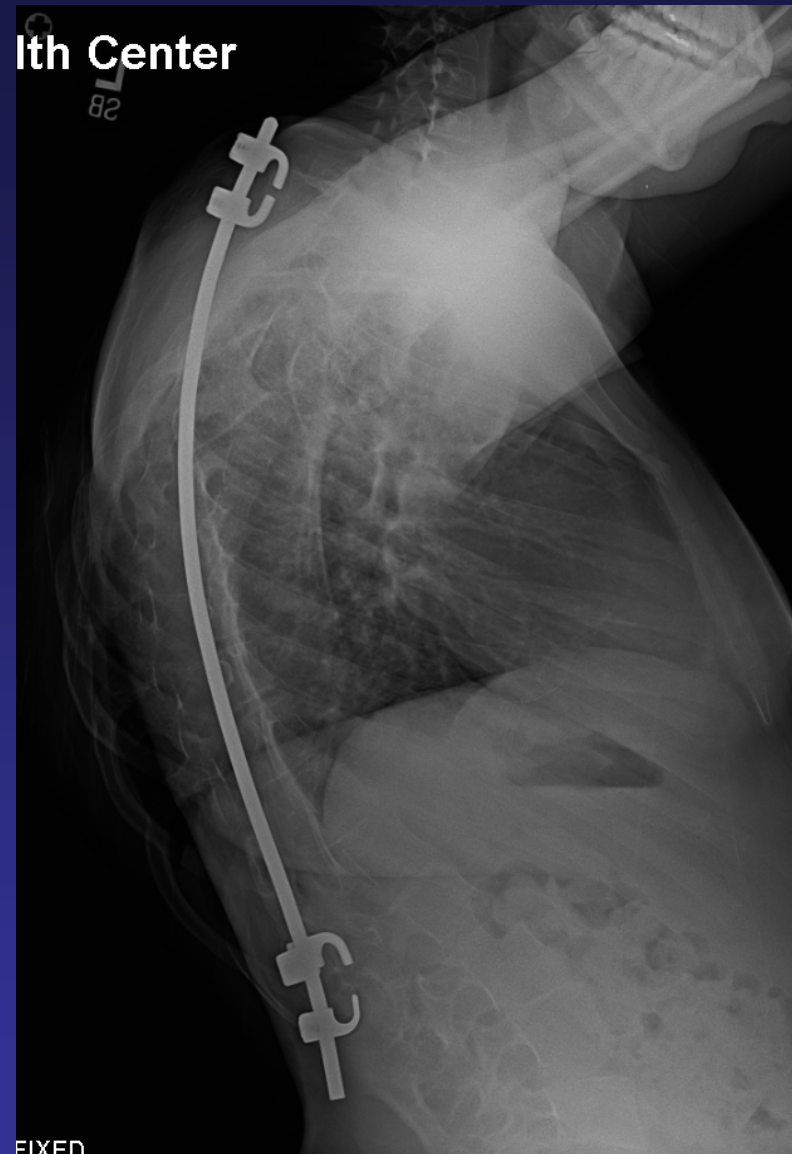
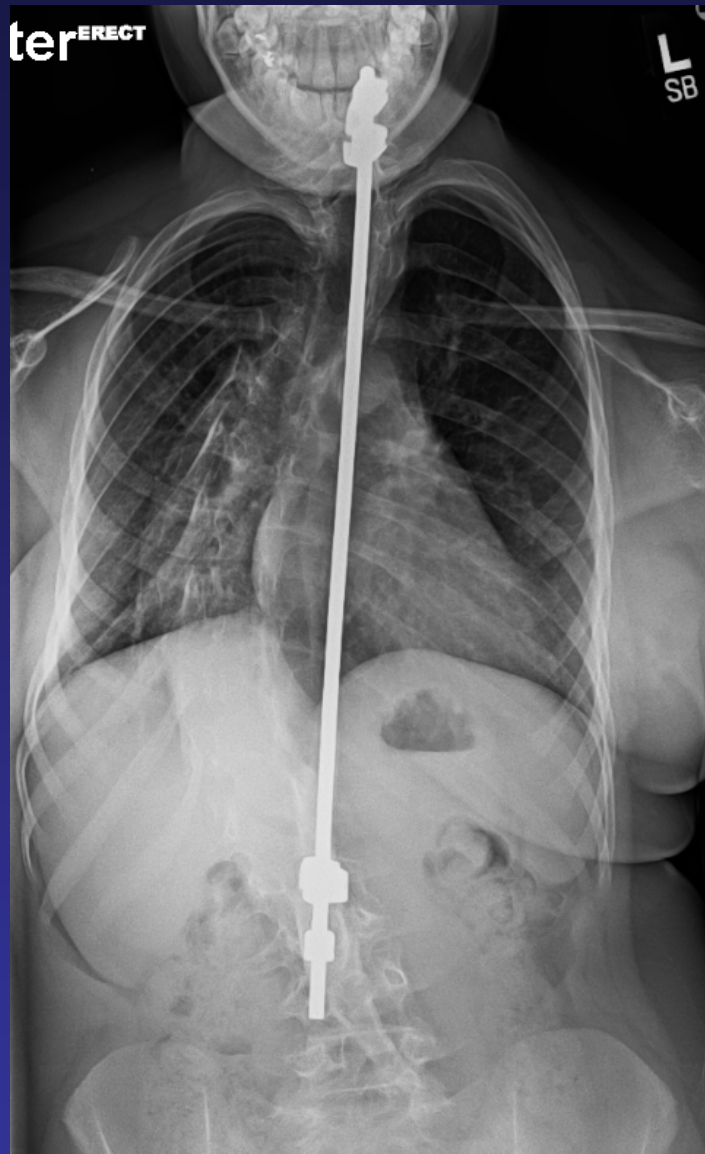
Small pedicles



Operative considerations

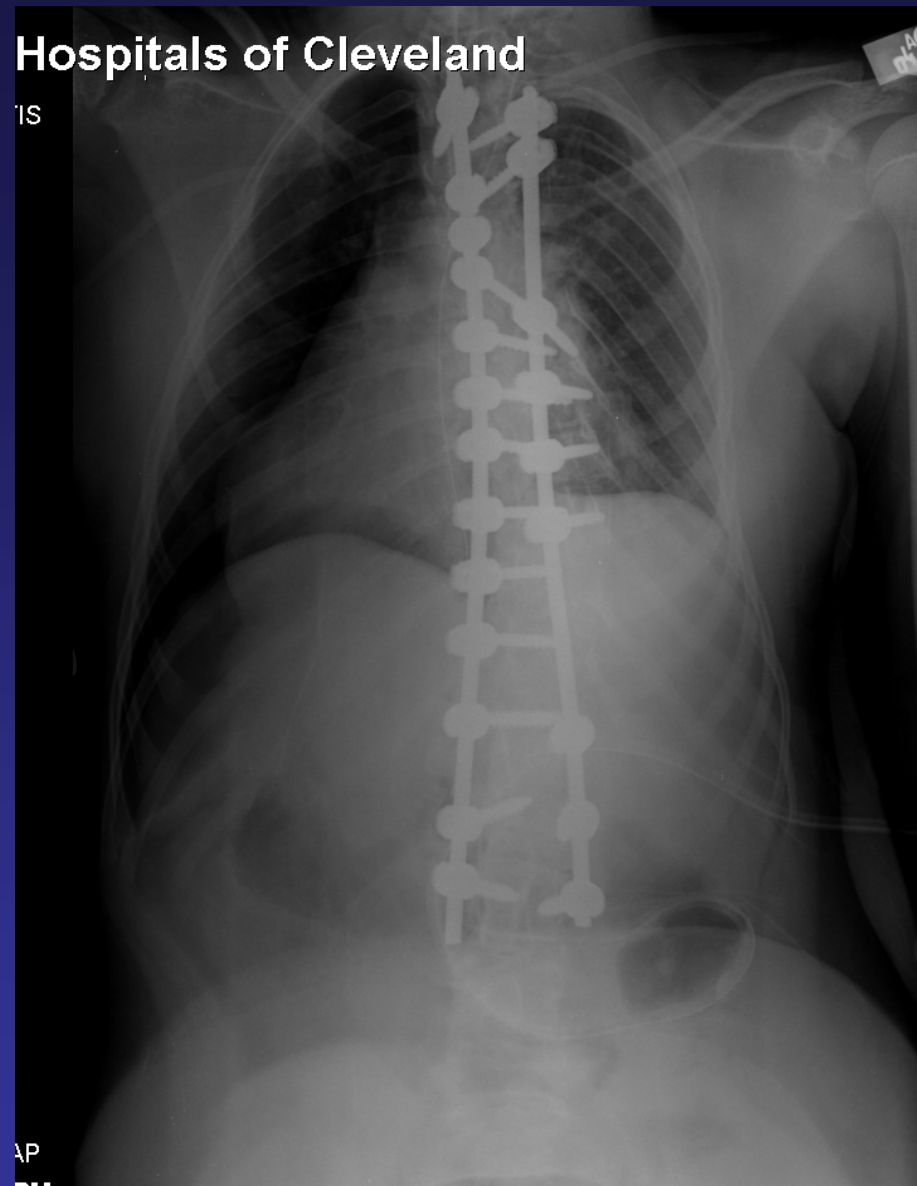
- Correct kyphosis first – stronger more stable proximal foundation
 - Osteotomies, vertebrectomies, etc*
- Include more vertebrae (3 – 4) to distribute the various forces
- Sublaminar fixation – tapes or wires
- Pedicle screws in older, larger patients
- Minimal initial distraction until foundation mature
- Limit cantilever forces
- Postoperative support (Risser cast) for 3 – 4 months





**JH 11.9 yo female 6 years after
insertion of growing rod 11- 09**





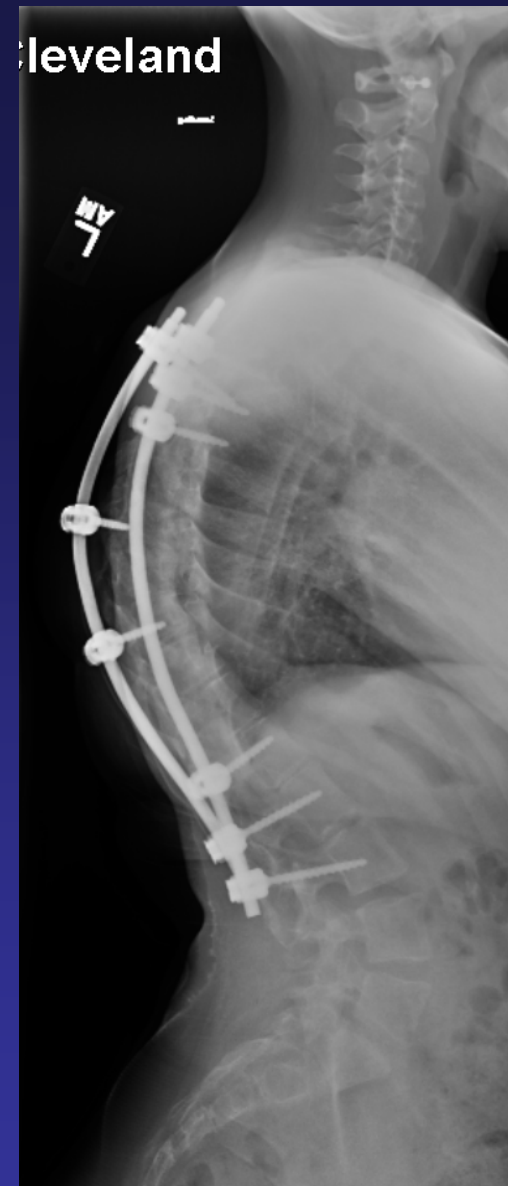
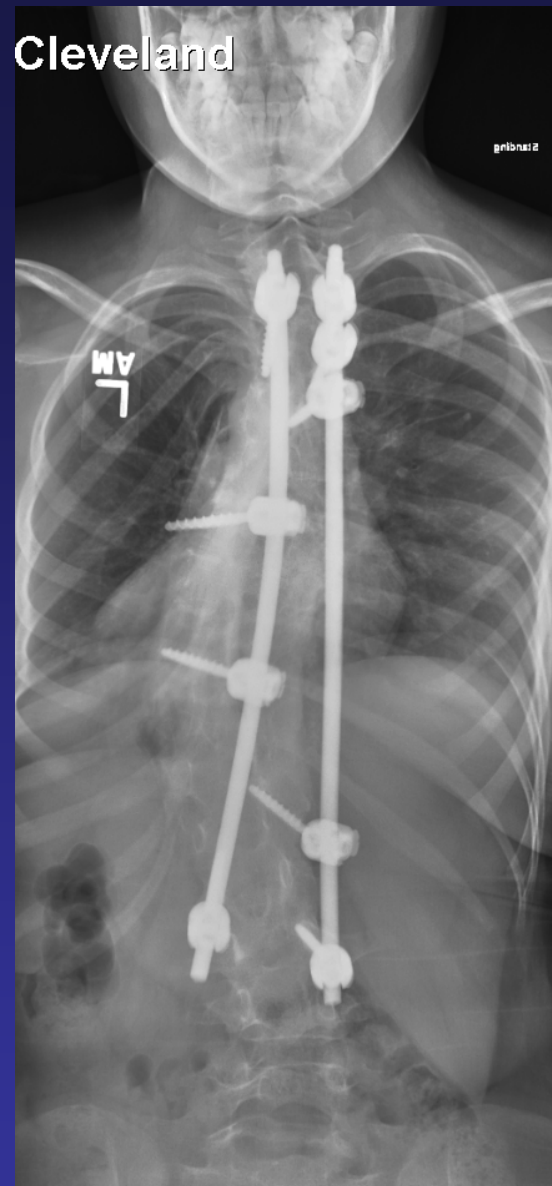
JH postop final fusion 11- 09





***MK 10.3 yrs IIS 7 years following
submuscular growing rods 10 - 07***





***MK 12.3 yrs 2 yrs
after final fusion 11-09***



Conclusions

Kyphosis is not a contraindication to growing rod treatment in EOS

Increased risk for proximal foundation failure

Careful preoperative planning

Consider short-term postoperative support





Thank You

