When to Fix to the Pelvis - and “how”

ICEOS 2017 Session 9 “Tips & Tricks”
Paul Sponseller
3:55-4:05
Paper 94: Don’t You Wish You Had Fused to the Pelvis the First Time?  Nielsen…. Skaggs

Take Home Message:
• Advise Families if a second operation to the pelvis is needed
  – it will be as “big” as the first surgery
    • OR time
    • EBL
  – likely end up with less correction
Does the Same apply to EOS?
Advantages of Fixation Short of Pelvis

- Lower infection rate?
- Increased mobility (if it works)
- Fewer CSF risks
Advantages of Fixing to Pelvis

- Strongest distal anchors
- Foundation for rotational control
- Better sagittal control
- Better coronal control
My indications for Fixing short of Pelvis

- Apex above L1
- End vertebra L4 or higher
- Upright balance:
  - Stander or independent sitter
  - With level pelvis
- Adequate distal anchor purchase above pelvis
Un-needed fixation to pelvis

• Less correction of intended segment
Infantile Marfan Syndrome

- 2.5 yr old
- 3 heart valves
- GR replaced with MAGEC
VEPTR in Marfan

- Forward lean progresses
• Yazici
• Fixing to the pelvis implies
  – fusing there later.
CP

- 8.5 y.o.
- GMFCS 5
- Non amb
• How to Fix to the Pelvis: Simplicity Matters
• Aboussamra...HSG

Pelvic Obliquity

- Unit Rod
- SAI Screws
- Iliac Screws

Preop | Postop | 6 Months | 1 Year | 2 Year | 5 Year
Pelvic Implant – Related Complications

- **Unit Rod Group (11%)**
  - 1 reoperation:
    - Pseudarthrosis at L5 - S1

- **SAI Group**
  - 0% pelvic implant – related complications

- **Iliac Screws Group (14%)**
  - 6 Cases:
    - 2 Prominent Screws (not needing reop)
    - 3 disconnections (1 not reop, 2 reop)
    - 1 loose iliac screw that needed removal
Thank You
Thank you!