Case Presentation

Our worst EOS Case?

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Disclaimer

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- Speaker Bureau: Depuy Synthes, K2M, Medtronic & Stryker
- Royalties: Depuy Synthes
- Some instrumentation and/or techniques shown may not be approved for use in the US by the FDA but are approved for use in the UK
Skaggs’ Classification – ‘Growth Preservation’

**Nonoperative**
- Observation
- Casting (+/- traction)
- Bracing

**Operative**
- Distraction based
  - Single/dual rod (manual distraction)
  - VEPTR
  - ‘Hybrid’ Spine / Rib
- Growth Guided
  - Luque trolley
  - Shilla / ‘Shilla like’
- Anterior Tether based
  - Staples (disc/growth plate)
  - Screws - cable/ligament
  - Osteotomy
♂ 4yrs old
- MRI normal
- Mild Arthrogryphosis
- Soft tissue leg Rx
- Walking difficulties
- Serial Casting + Brace
- Paediatric ISOLA dual rod aged <6
Regular lengthenings / connector change / rod revision

8 years uneventful treatment
Routine lengthening

- Normotensive anaesthetic
- Passed ‘wakeup’ test
- Progressive paralysis of legs < 30 minutes post - distraction
- Immediate return to theatre – distraction released
- No recovery
- Full ‘neuro’ support
- CT / MRI
- T3/T4 Paraplegia
- No recovery
- Further MRI’s (including head)
- No evidence cord signal change
- Neurophysiology Studies – no additional information
True and Fair Record?

- Nothing ‘unusual’ on this distraction
- Very rapid return to theatre - when identified? minor delay
- Full neurological support
- No implant related or radiological identified problems on scans
- Would removal of all implants have helped?
What have we Learnt / Changed?

- All staff aware of need for detailed post-operative neurological observations in lengthening patients.
- Any implant revisions done with neurophysiology monitoring (?) Helpful in this case (?)