

VEPTR: Who is (was...) my ideal patient for VEPTR

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Disclosures

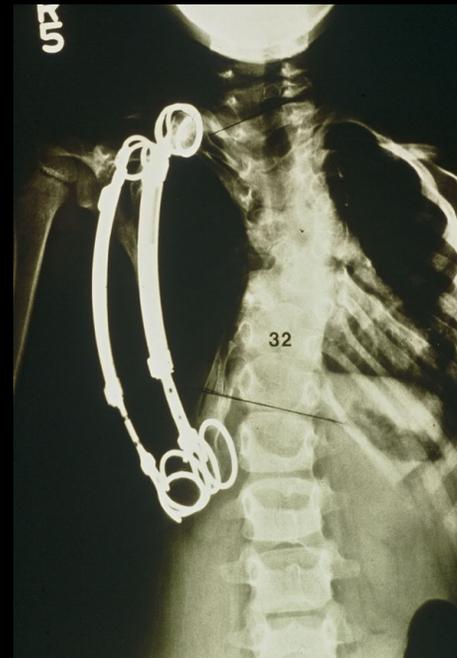
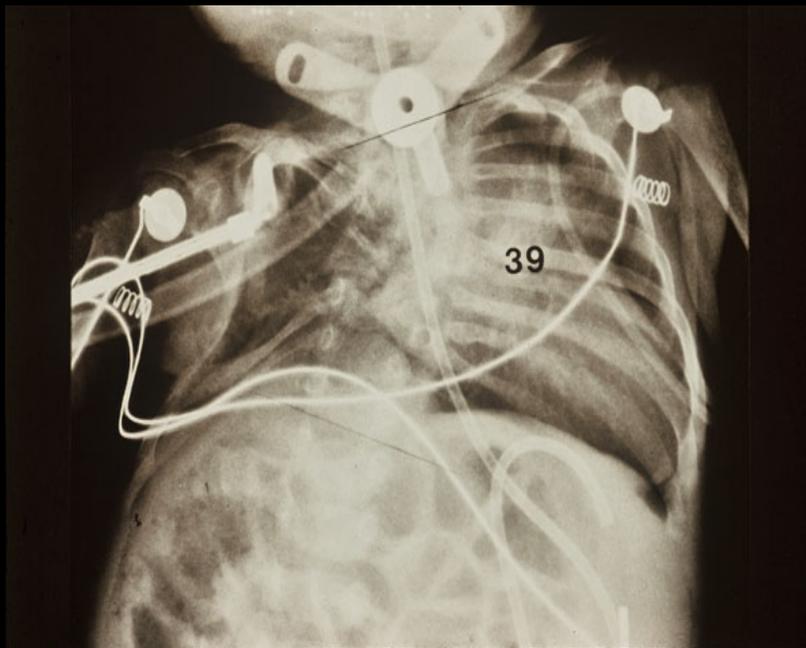
- Consultant: Depuy-Synthes; Zimmer-Biomet; Spineguard; Globus medical; Ellipse (wife)
- Board of Directors: Children's Spine Foundation
- Royalties: **VEPTR 2 device**



My Initial introduction to VEPTR: 1994

R. Campbell and M. Smith:

- “Treatment of Lethal Thoracic Insufficiency with a Titanium Rib”



WOA, August, 1993

deal Indication

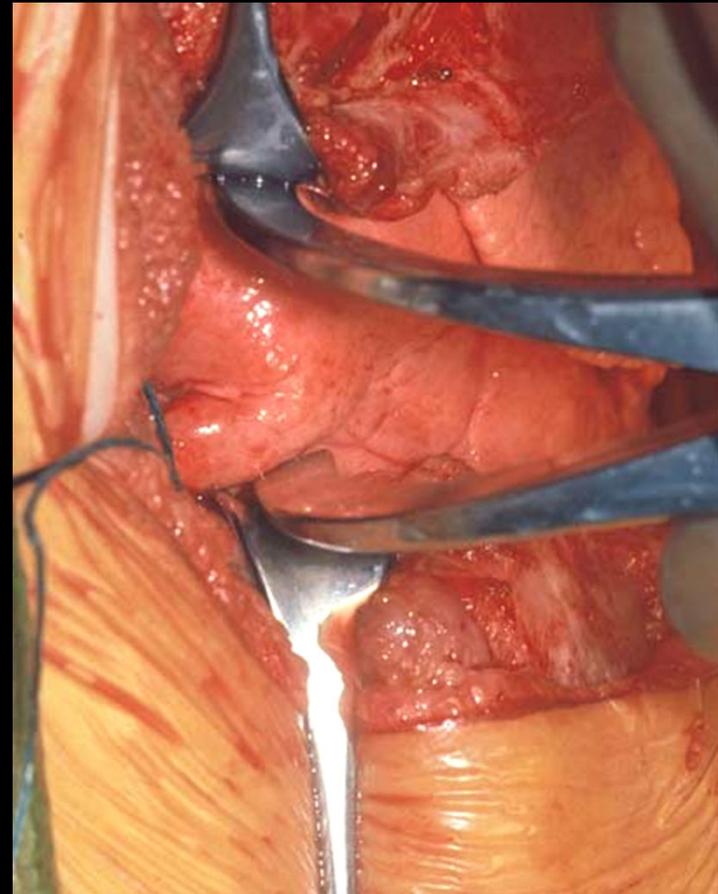
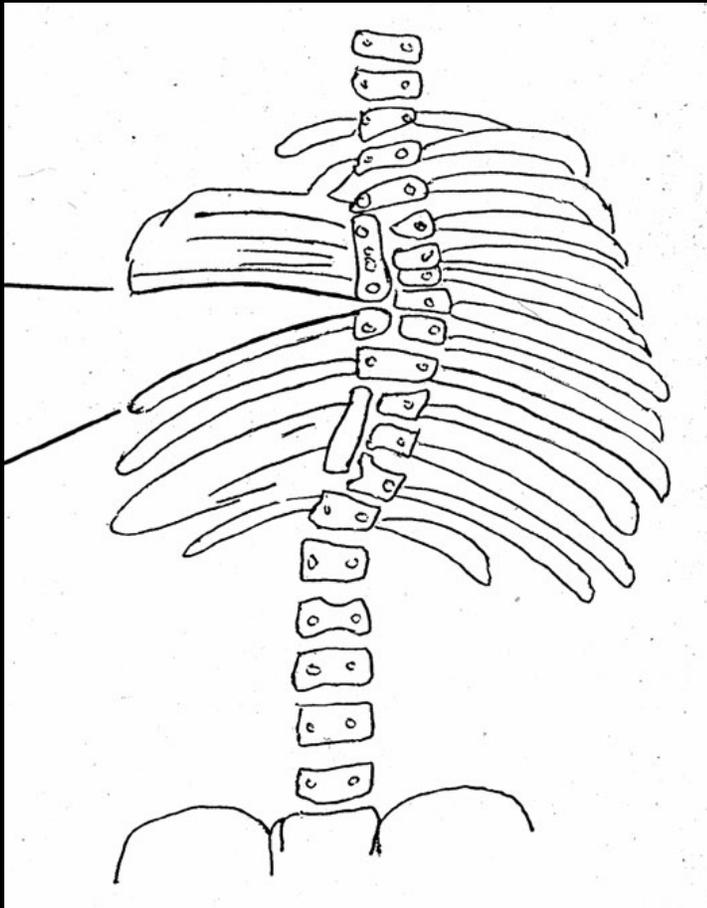
Treatment of TIS secondary to a
low volume thorax

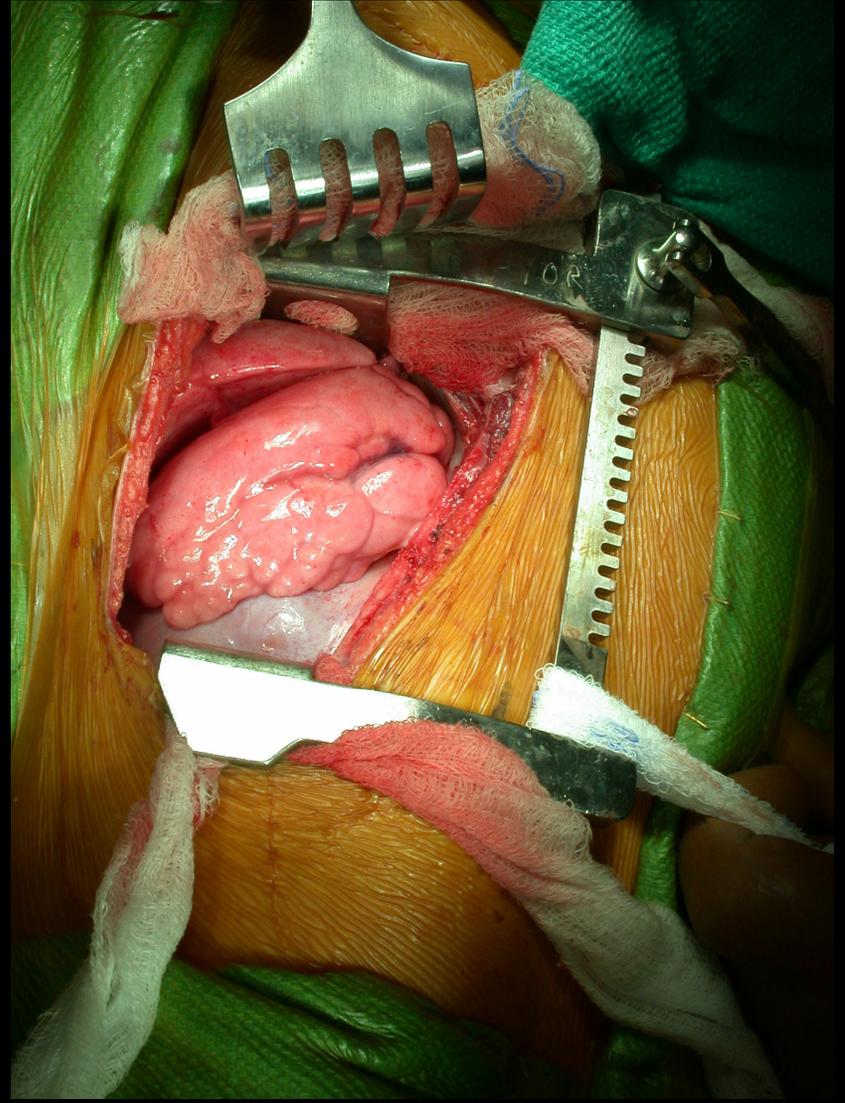
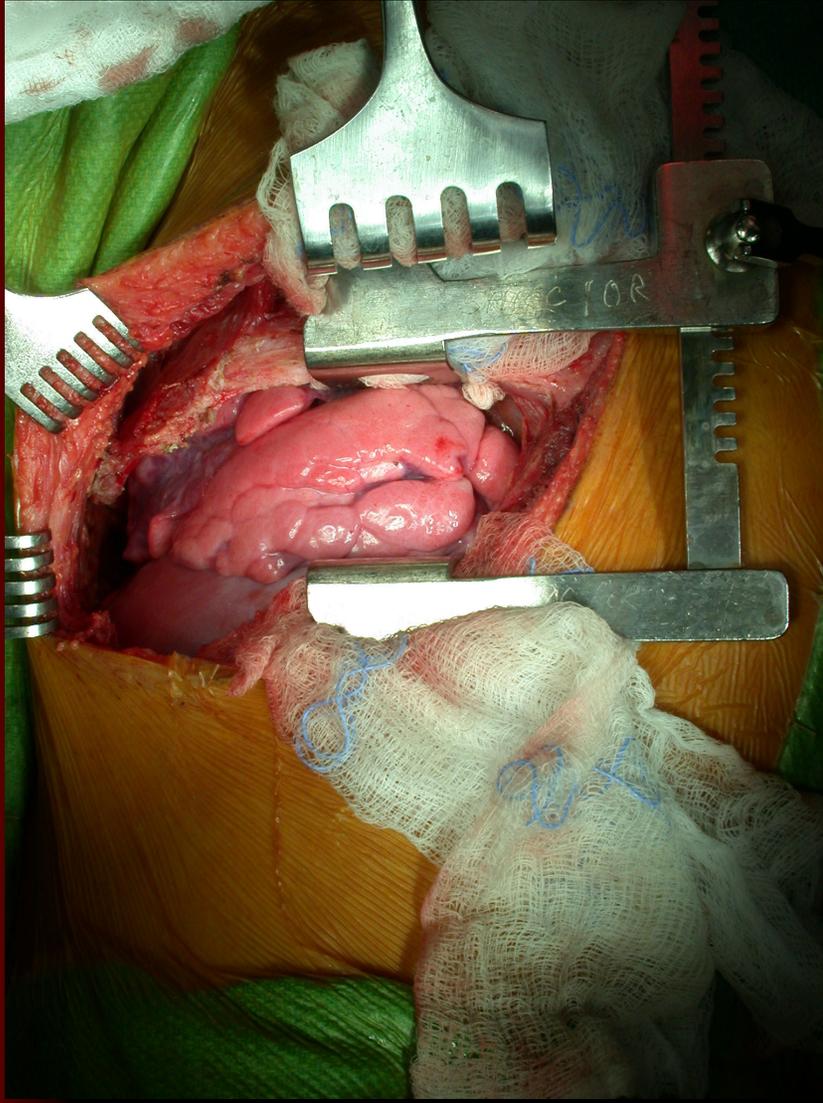


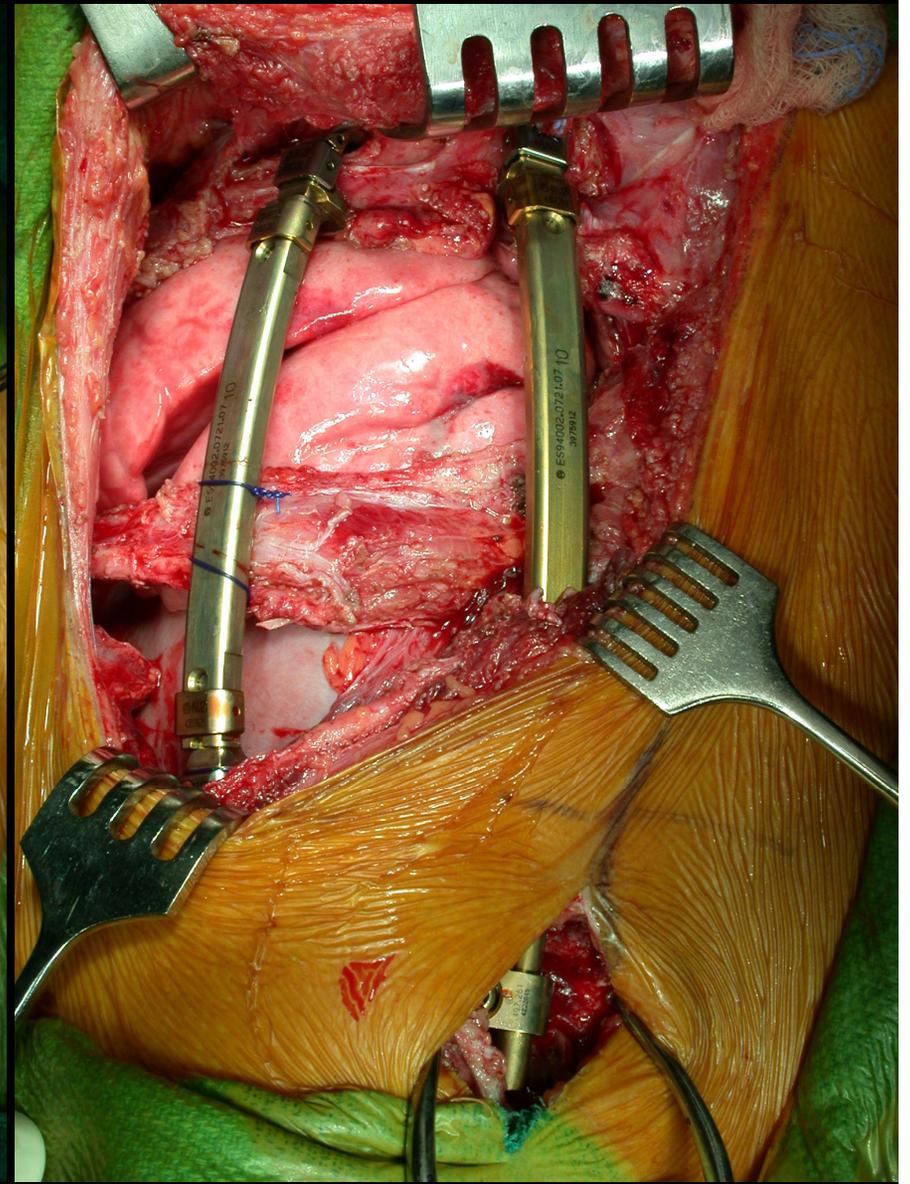
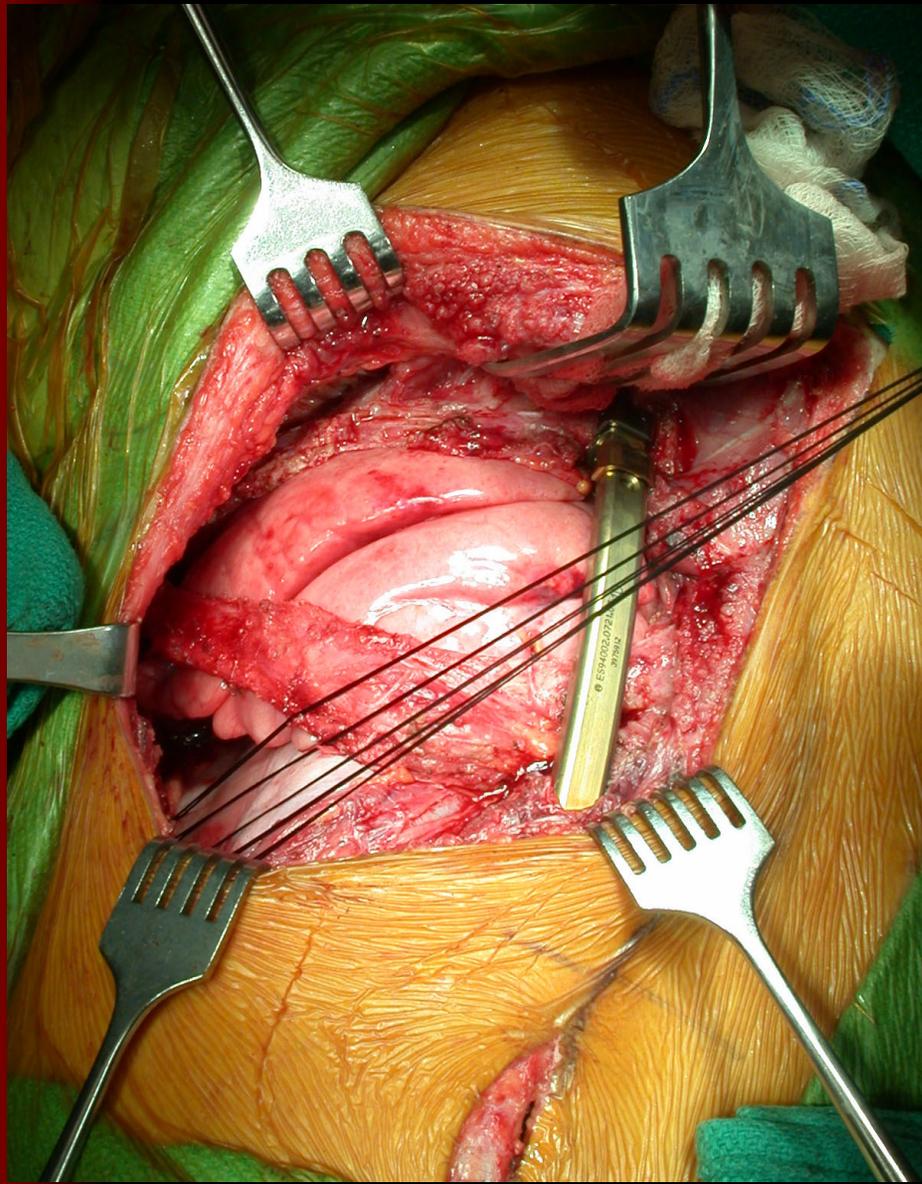
Congenital Scoliosis and Fused Ribs



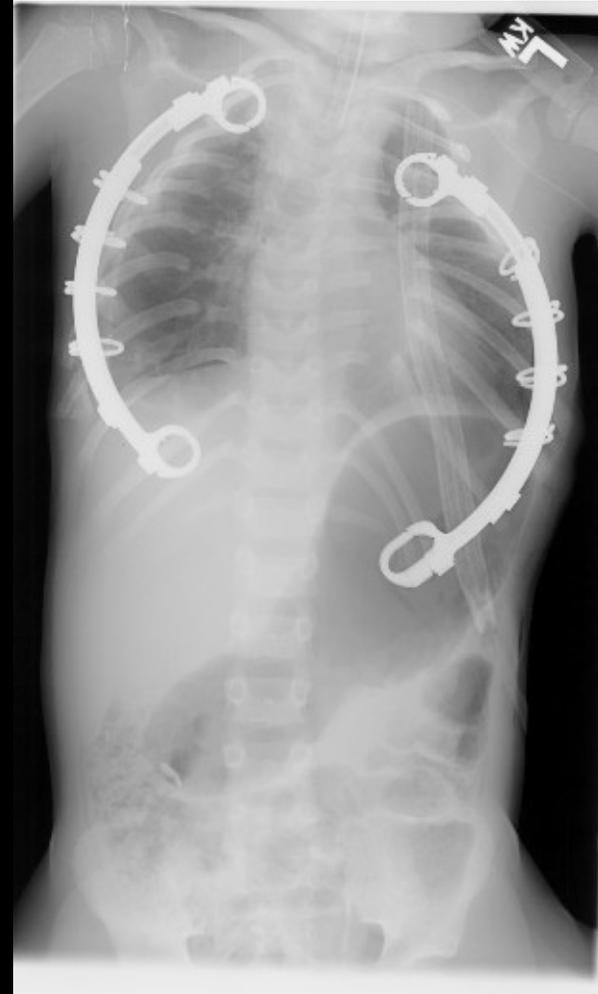
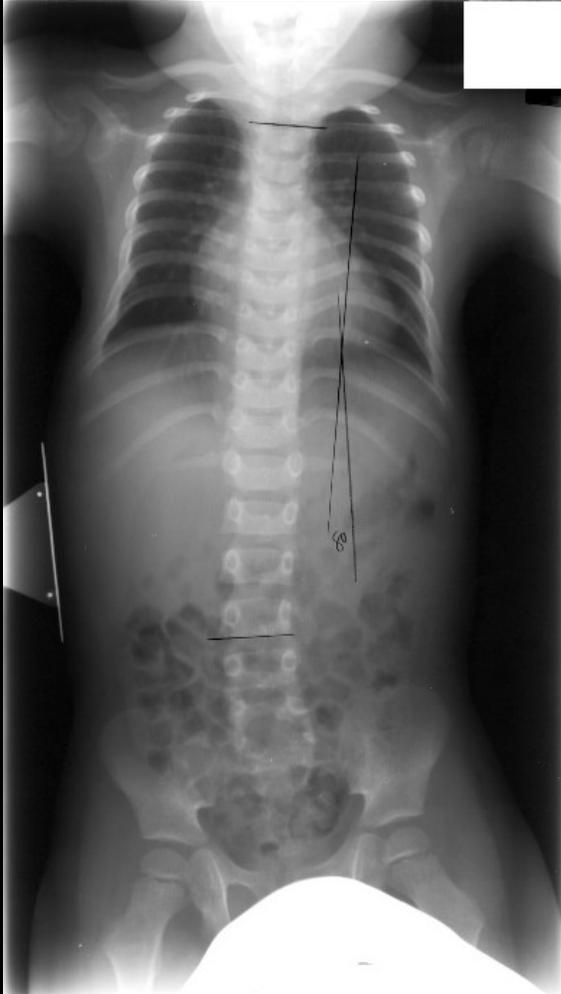
Opening Wedge Thoracostomy



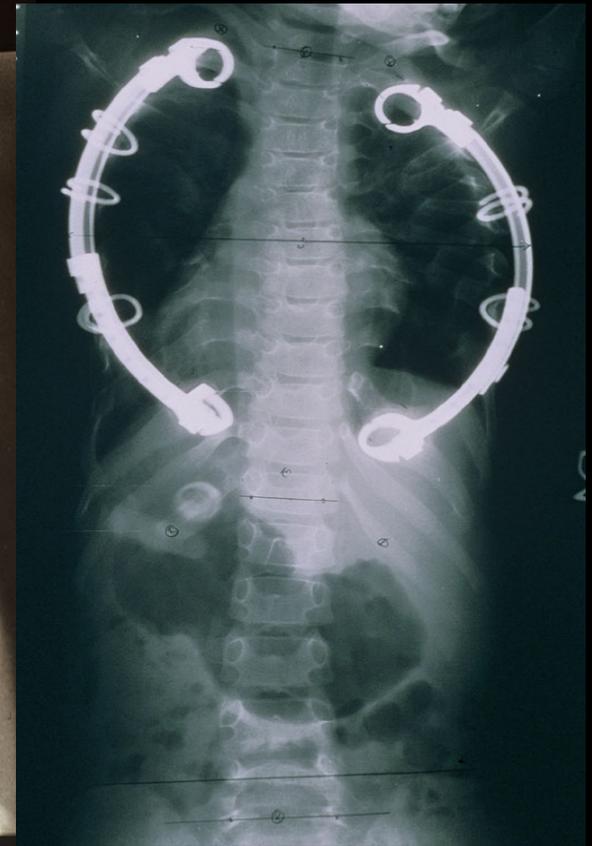
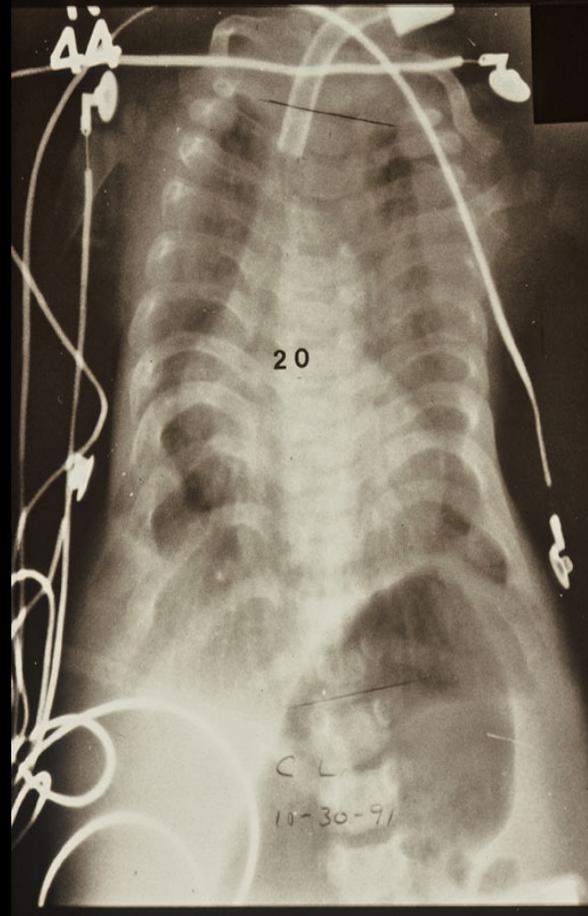




Thoracic Dystrophy/Spondylocostal Dysplasia



Type IIIb: Jeune's Syndrome (Asphyxiating Thoracic Dystrophy)



Neuromuscular EOS: Rib to Pelvis Technique



Bob Campbell:

“This is a clear example of someone who does not understand VEPTR...”

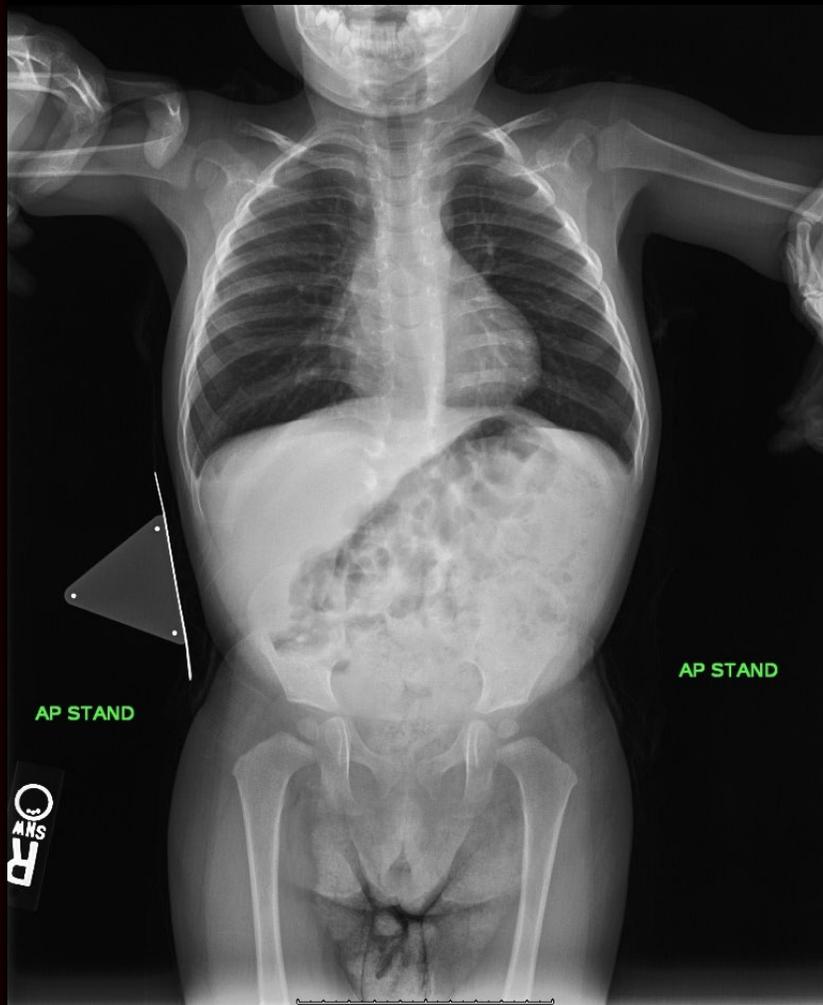


Gibbus Deformity: Early VEPTR Rib to Pelvis



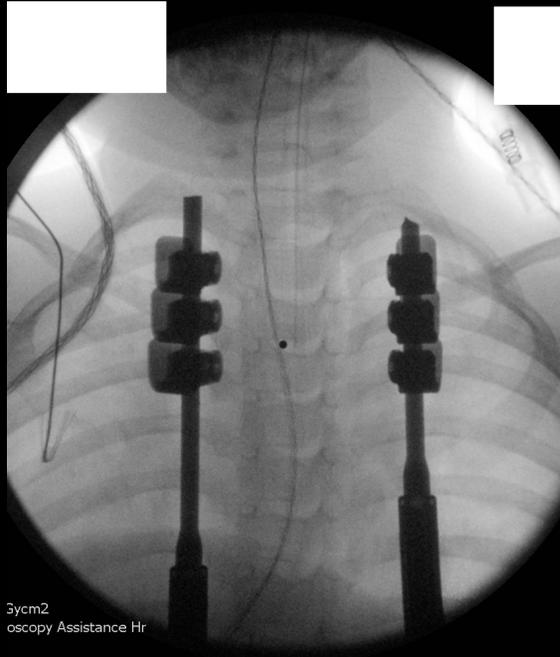
Smith: JBJS, 2010

But now.....

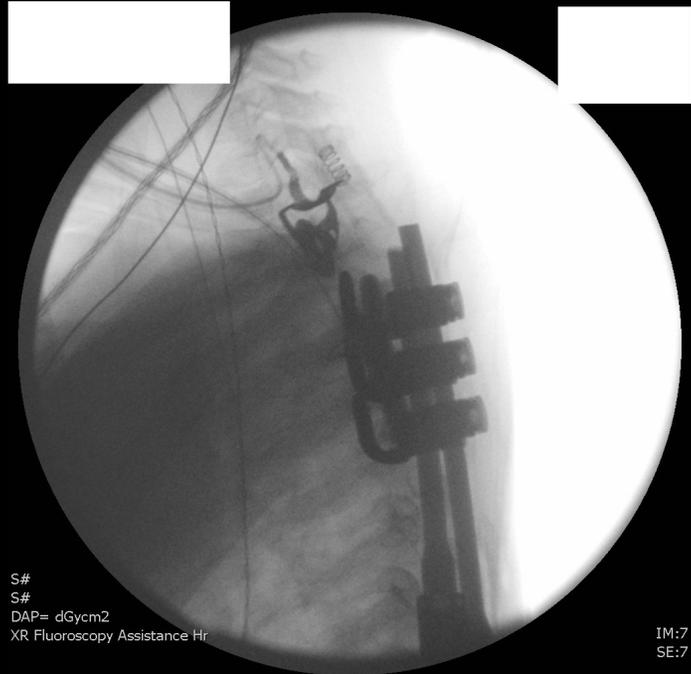


Rib to Pelvis MCGR



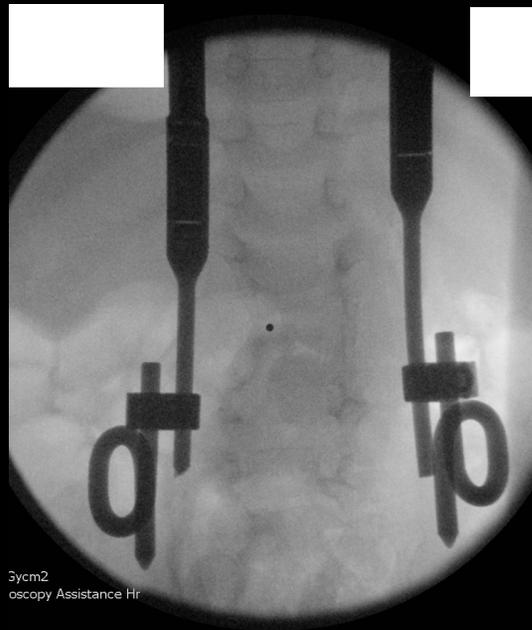


3ycm2
oscopy Assistance Hr

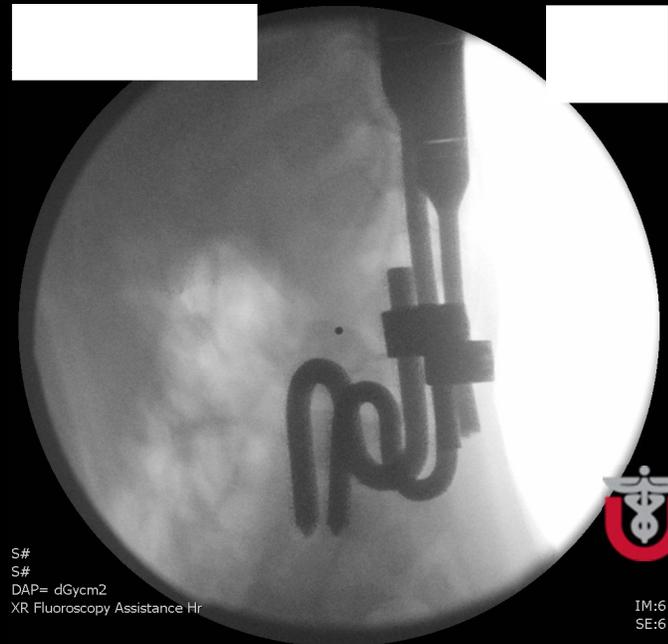


S#
S#
DAP= dGycm2
XR Fluoroscopy Assistance Hr

IM:7
SE:7



3ycm2
oscopy Assistance Hr



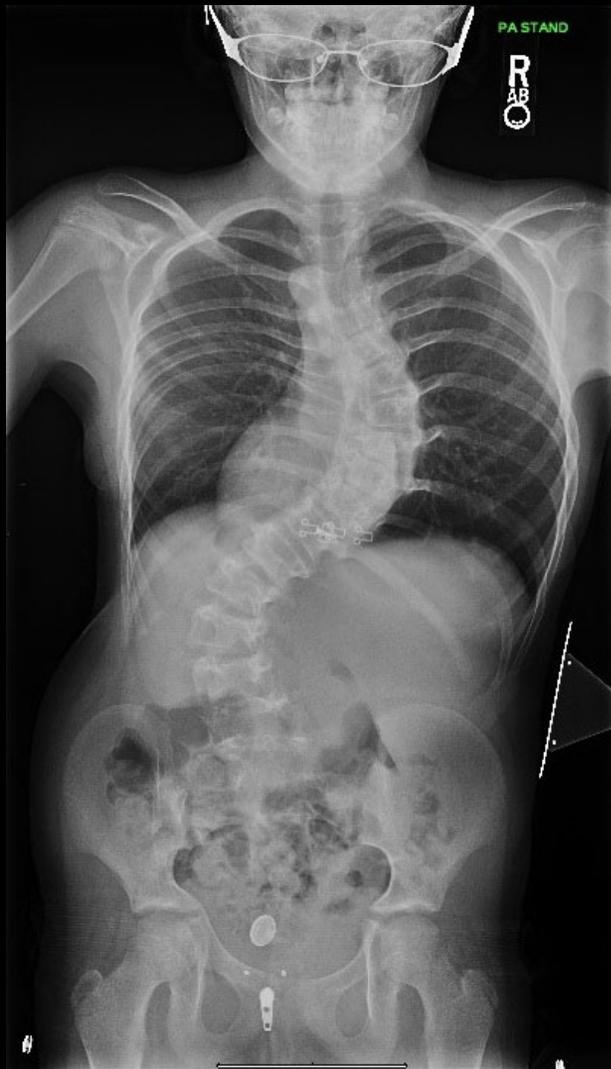
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S#
DAP= dGycm2
XR Fluoroscopy Assistance Hr

IM:6
SE:6





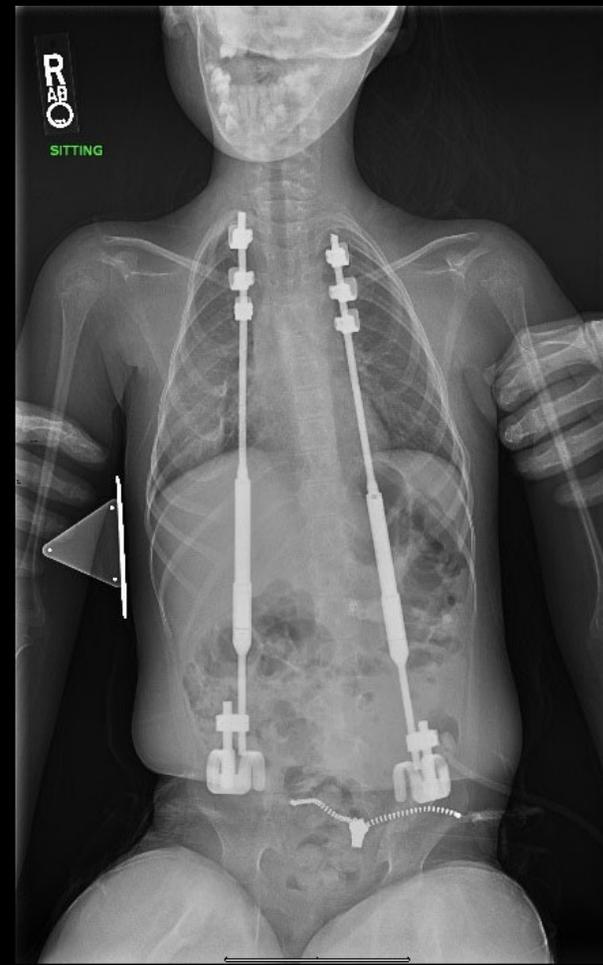
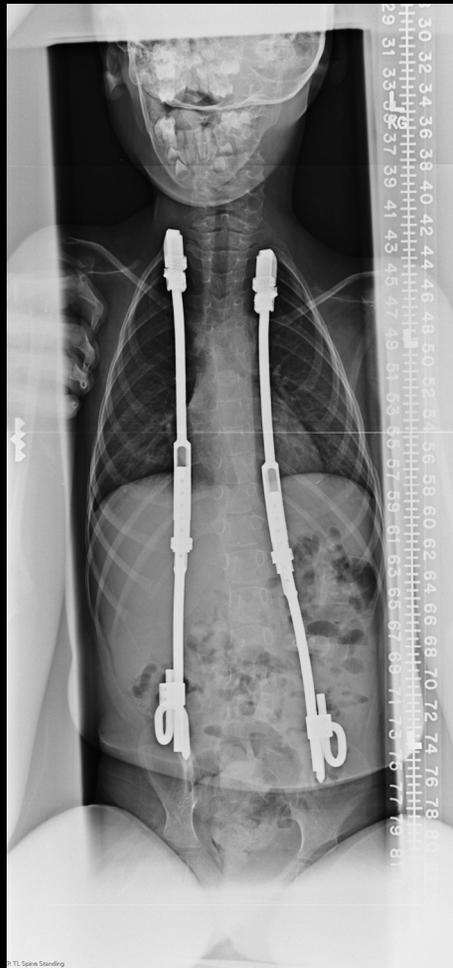
Infantile EOS: Rib to Spine VEPTR



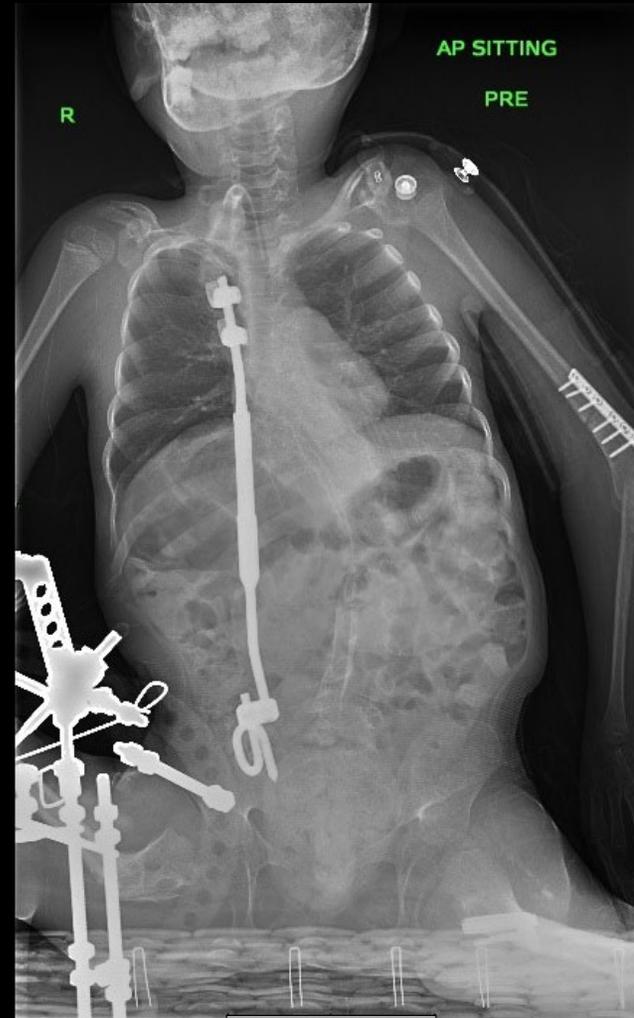
But, now.....MCGR



Congenital Myopathy: VEPTR, now MCGR



Arthrogryposis: VEPTR to MCGR



VEPTR

- The ingenious invention of Bob Campbell and Melvin Smith
- Changed the management of chest wall and spine deformity from growing rods alone



However,

- Requires repetitive surgeries to lengthen
- Significant complication rate as with all “growth-friendly” surgery
- ***Parents*** are requesting MCGR
- Still has a role in the low-volume thorax requiring a thoracostomy



The future?

- Magnetically controlled lengthening (The mythical VEPTR XT.....?)
- Hydraulic/implantable motors
- ???



VEPTR.....?



Thank you



Future spine surgeon????