“Complex Spinal Deformities – The Limits of Surgical Intervention”
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Congenital Scoliosis
Double level Corrective Osteotomies

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Congenital Scoliosis

- Male – date of birth - 27.1.1999
- VATER Syndrome
- Multiple Vertebral Congenital Anomalies
- Spinal Dysrasyfism (Intradural lipoma with Tethered cord - L2 - L3)
- Agenesis of Lt. Kidney
- Reflux at Rt. Kidney
- Unperforated Anus (3 surgeries)
Congenital Scoliosis

First spinal surgery – at age 1y.8m. old
Resection of Hemi L1 - From the front and PSF with “baby CD” (L1-L2)

Second spinal surgery – at age 2.5y. old
L5 Laminectomy with removal of lipoma and untethering
Congenital Scoliosis

My first meeting - at age 10y.old (24.2.2009)
Congenital Scoliosis

24.2.2009

10Y.O.

1.5cm

57°

40°

L

R
Congenital Scoliosis

- What to do?
- When to do?
- How to do?
- Where to do?

Progression - is a Natural History of Congenital spinal deformities
- Preferred “Wait and See”
- Until Pubertal period with growth spurt
Congenital Scoliosis

- He gets taller by 12cm during the period 3 years.
- New MRI – Thoracic Syrinx.
Congenital Scoliosis

- The surgery - at 5.8.2012 - 13.5y.old
- Removal of baby CD
- Double level osteotomies
Congenital Scoliosis
Congenital Scoliosis
Congenital Scoliosis

14y.o.  6M.
Thank you
EBM

Case 1:
Grade 4 evidence. Weak recommendation for double PSO
Progressive Congenital KyphoScoliosis

Multiplanar Corrective Osteotomy

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Congenital KyphoScoliosis

- Female - at admission - 12.5y. old (grown-up)
- Congenital KyphoScoliosis
- Short trunk
- Normal general and neurological examinations
- No signs of Spinal Dysrafism
- MRI is normal
- Impressive esthetic problem
Congenital KyphoScoliosis
Congenital KyphoScoliosis
Congenital KyphoScoliosis

T8

T9

Lt.

Rt.
Congenital KyphoScoliosis

- T8
- T9
- Lt.
Congenital KyphoScoliosis

Posterior Synostosis
Congenital KyphoScoliosis
Congenital Kypho-Scoliosis

- The surgery:
  - Pedicular screws insertion
  - Osteotomy - wide based dorsally and convexity side
  - Monitoring alarm was recorded from Rt. leg - concave side
  - Rehabilitation of spinal cord (warming, BP and quite atmosphere) was done
  - Convex working rod was introduced
  - Immediate concave decompression – completed with monitoring “recovery”
Congenital Kypho-Scoliosis
Congenital KyphoScoliosis
Congenital KyphoScoliosis
Congenital Kypho-Scoliosis
Thank you
2\textsuperscript{nd} case:

**Grade 4 evidence:** Weak recommendation for single PSO.