Expert Consensus for Early Onset Scoliosis Surgery 2018

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Various Deformities of Early Onset Scoliosis
• Has technology outpaced surgeon ability to define indications in early onset scoliosis?
Methods

• Define consensus > 80%
• Red cap 2 weeks prior to ICEOS deadline
  – 100% response by 10 days
• 478 years of experience
Methods

Case 1

- 9 y/o F
- Spina Bifida
- Wheelchair
- C-EOS:M4+
- TL curve has progressed 30° over past 2 years (now 92°)
Methods

Case 1
Treatment you would offer now:

a. Observe
b. Brace
c. Mehta cast
d. TGR
e. VEPTR
f. MCGR
g. Shilla
h. PSF
i. Other_________________

If growth-friendly surgery:

1. Proximal anchor fixation choice
   a. Ribs
   b. Spine
   c. Combination

2. Distal Anchors
   a. Spine
   b. Pelvis--S/U hook on iliac wings
   c. Pelvis—iliac/sacral screws
Results

Case 1: **9/20 - PSF**

4 different treatment options

<table>
<thead>
<tr>
<th></th>
<th>PSF</th>
<th>MCGR</th>
<th>A/P Fusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spina Bifida</td>
<td>9</td>
<td>6</td>
<td>5</td>
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</table>
Results Case 2: **12/20 - MCGR**

4 different treatment options
Results

Case 3: 6/20–Brace 6/20–MCGR

6 different treatment options
Results Case 4: **15/20 - MCGR**

4 different treatment options
Results Case 5: 10/20 - VEPTR

7 different treatment options
Results  Case 6: 7/20 – VEPTR thoracoplasty @ 1 y/o

5 different treatment options
In 2018 EOS consensus is no where to be found

<table>
<thead>
<tr>
<th>Cases</th>
<th>Number of EOS Surgeon Experts</th>
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<tbody>
<tr>
<td>Spina Bifida</td>
<td>9</td>
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<tr>
<td>Soto’s Syndrome</td>
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<td>Juvenile Idiopathic</td>
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<td>SMA Syndrome</td>
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<td>Congenital</td>
<td>10</td>
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<td>Exp Thoraco @ 1</td>
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<tr>
<td>Exp Thoraco @ 2</td>
<td>6</td>
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<tr>
<td>No Surgery Jeune’s Syndrome</td>
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Last Question

Name the single surgeon/thought-leader, current or past, who has had the greatest impact on your decision-making for EOS:

_______________________
Impact on Thought Leaders

- Robert M. Campbell
- John B. Emans
- Combined: 11/20
Where do we go from here

I3- → MCGR
C4N → VEPTR
S2N → Growth Guidance
I2+ → Brace
I2- → Tether??
Early Onset Scoliosis - Time for Consensus

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