A Tale of Two Spines

Deciding Between Vertebral Tether and Fusion

Tether Vs Fusion Indications

- When your adolescent child has scoliosis that is in the surgical range there are currently two options in how to address the curve.
- The traditional surgery for scoliosis is called a **posterior spinal fusion and instrumentation – or PSIF**. This procedure uses a spinal rod placed in the back part of the spine. The other option which is **anterior vertebral body tethering (AVBT)** is where the tether uses a flexible cord which is placed from the front part of the spine only on the convexity of the curve. This allows correction of the scoliosis but also continued growth on the oppositie (concave), untethered side.
- Here are the differences between the two procedures to help you make an informed decision about what is best for your child.

Tether Vs Fusion Indications

Tether Candidate

- Curves 40-60 degrees
- Flexible curves
- Compensatory Curve smaller than 45 degrees
- Mild amount of rotation
- Skeletally immature
  - Risser 0-3
  - Sanders 2-5
- Operation is usually thoracoscopic (minimally invasive)
- Length of hospital stay 2 days
- 10% Risk of Reoperation
- Little to no loss of flexibility
- Back to sports at 6 weeks

Fusion Candidate

- Curve >50 degrees
- Flexible or inflexible curves
- Any size compensatory curve
- Mild to Severe Rotation
- Skeletally immature or mature
  - Risser 0-5
  - Sanders 3-8
- Operation is through a 10 cm incision
- Length of hospital stay 3-4 days
- 2% Risk of Reoperation
- Possible loss of flexibility depending on lowest level fused
- Back to sports 6 weeks

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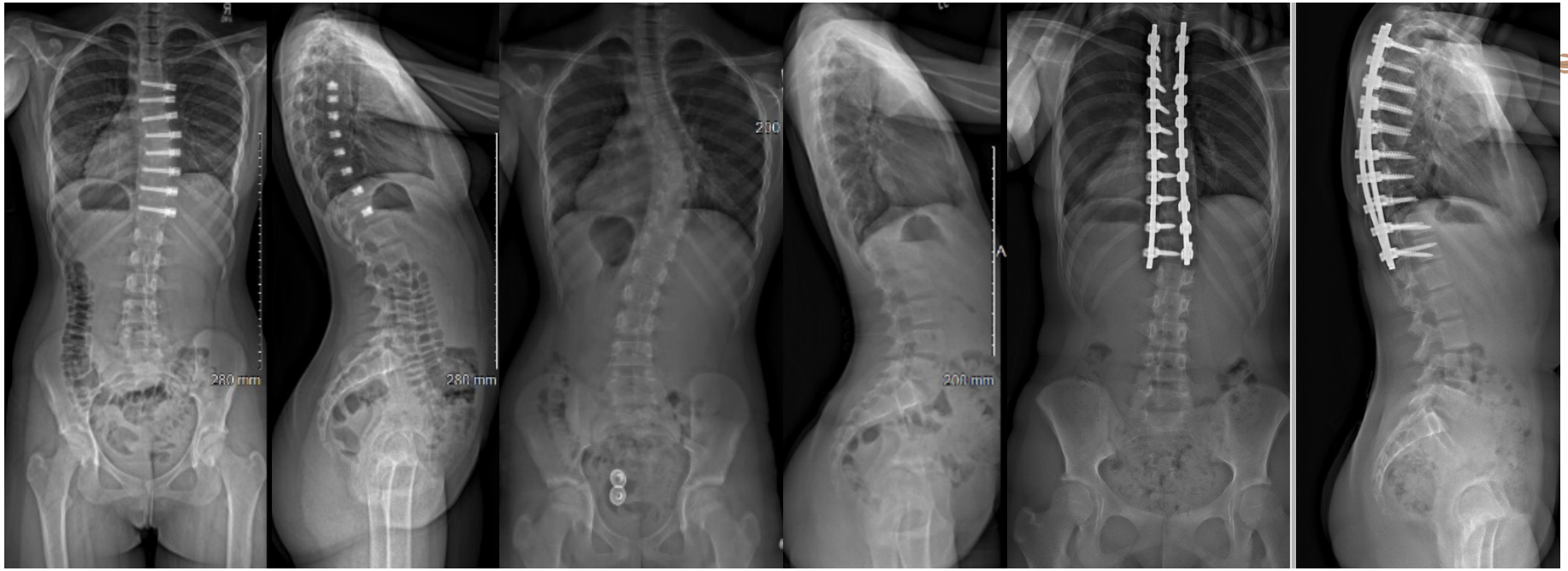
Tether

Fusion



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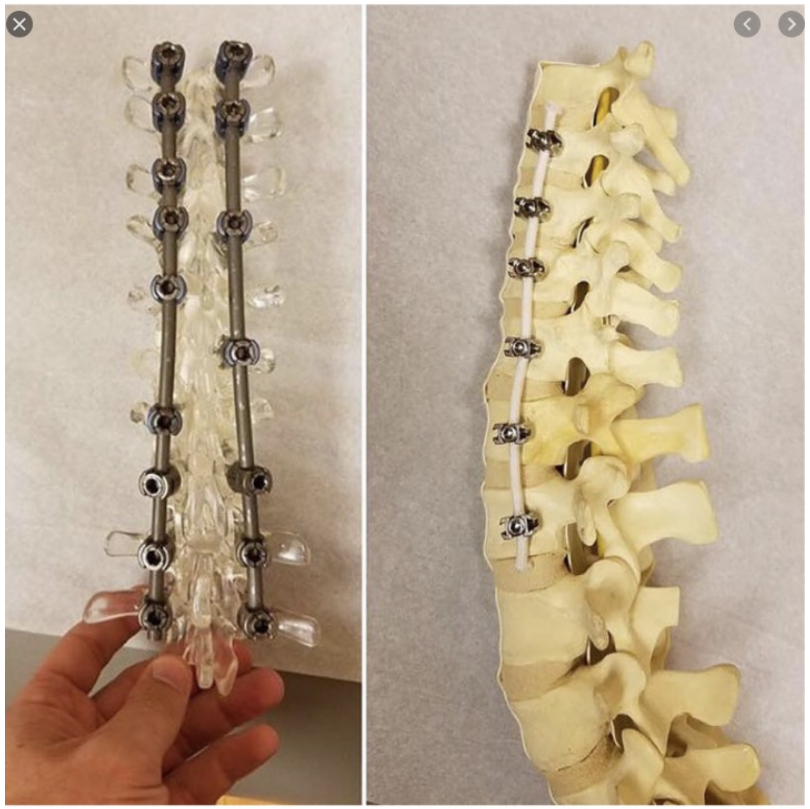

Fusion Hardware

VBT Hardware

Tether