



MedStar Health

It's how we **treat people.**

Excelsius Deformity– First 100 Patients

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First 100 Deformity Cases with Excelsius Navigation + Robotics

- Average 8 vertebral levels
- 9/23 cases had S2AI pelvic screws – obviate an average of 7 fluoroscopy images per case.
- Selective thoracic instrumentation of two less levels per case, less than Cobb due to more accurate visualization of level-to-level rotation into and out of thoracic structural curve.
- Conventional freehand model of intramedullary probing and staying totally within the pedicle is no longer required nor optimal with computer-navigated robotics.



Lenke 3C

Med

Rigid 45 degree scoliosis







Lenke 4C
43 Degree
Scoliosis



Correction Flat Back Syndrome 23 to 46 degrees Lordosis



Lenke 1C 55 Degree Scoliosis



Correction of Flat Back Syndrome



Correction of L5 Pedicle Fractures



Decompression + Excision of 6 X 8 cm Thoracic Spinal tumor





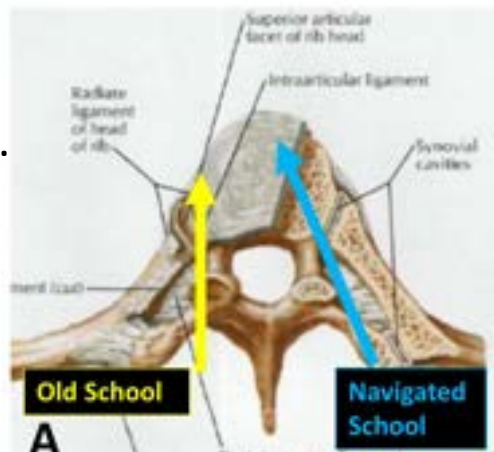
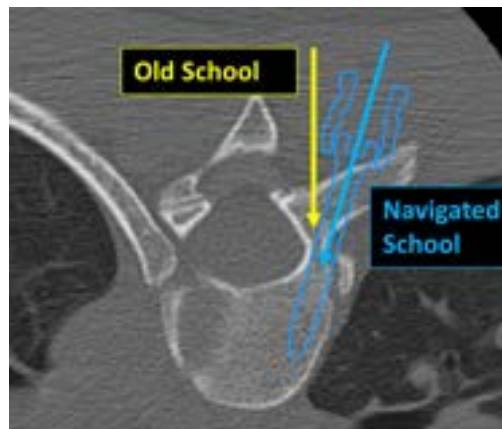
In Severe Revision Cases from Elsewhere General
The Robot helps you find the Good bone—
Hard to find Good purchase in Swiss Cheese when screws cut out

We were able to save an average of 2 levels per case.

Key is to use longer screws and Screws with larger diameter

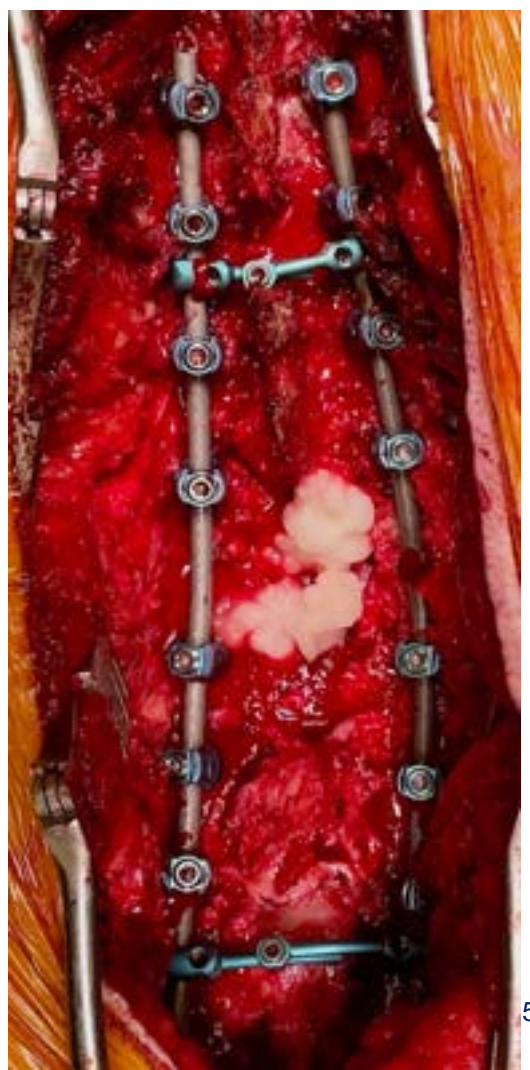
Instead of “Old School” Nav at Pedicle center, we advocate Nav off of the medial pedicle wall.

Treat the entire Costovertebral Complex as the Thoracic Pedicle.





Complex F + B Revisions
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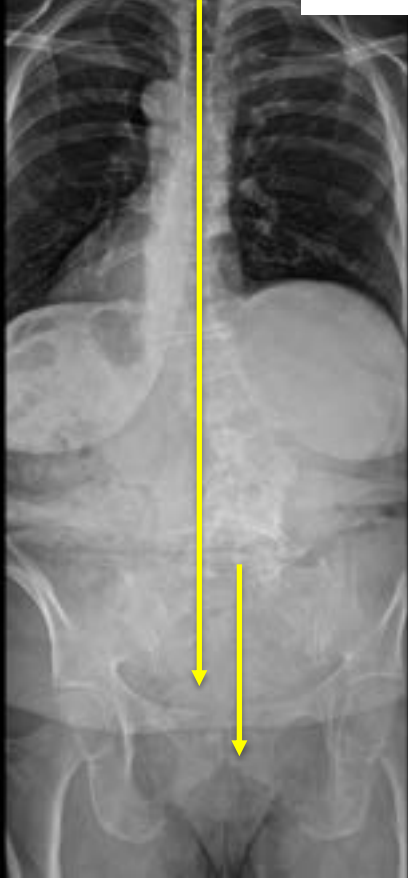


Advantages of Intraoperative Excelsius 3D CT – optimize screw positions



L
PA

Front + Back Navigated
Interbody Solutions
Balance Restored



Good Lordosis Correction





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