



EMINENT  
— SPINE —

# 3D Titanium Pedicle Screw

## Case Studies



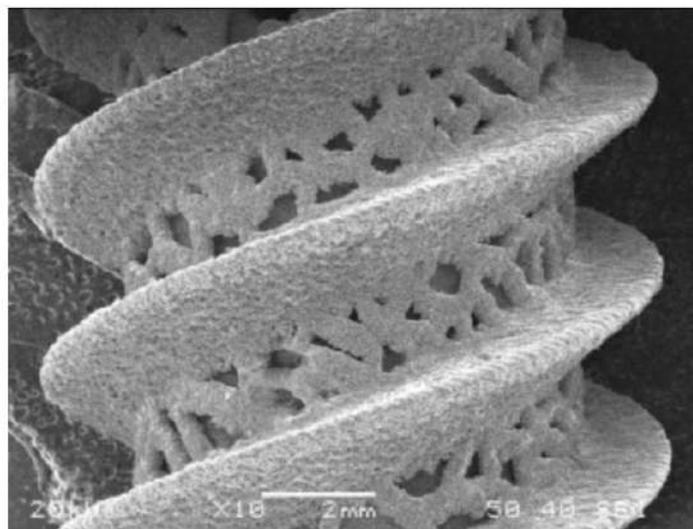
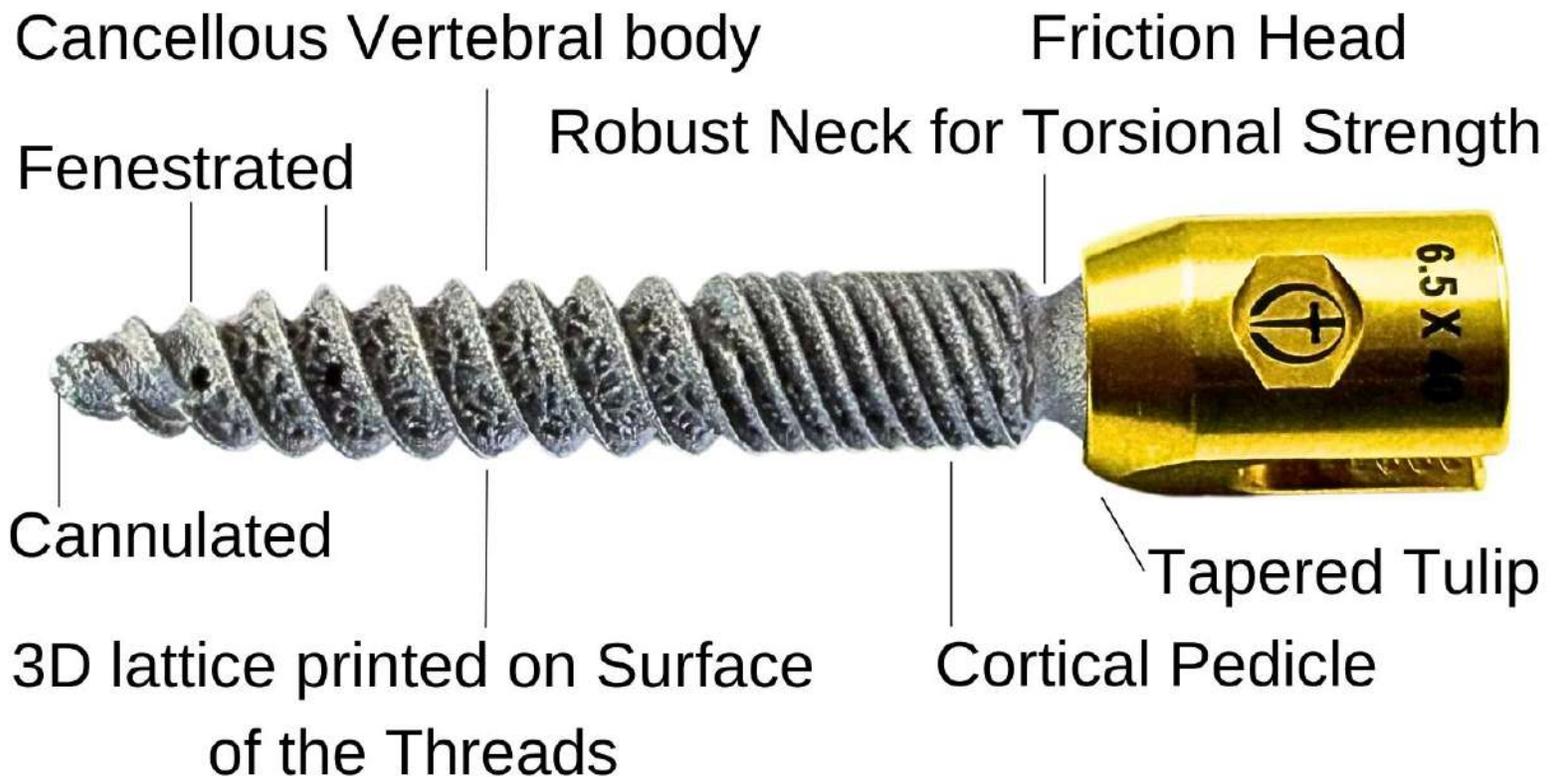
THE 1<sup>st</sup> 510(k) FDA 3D TITANIUM PEDICLE SCREW  
APPROVED IN THE WORLD



— Eminent Spine —



## FEATURES



Osteo-integrated with the Bone

# 3D PRINTED PEDICLE SCREW

Triple lead screw technology for ease of insertion and greater pull out strength



- Cannulated
- Cutting Kerf
- Cancellous Vertebral body
- Fenestrated
- 3D lattice printed on Surface of the Threads
- Cortical Pedicle
- Robust Neck for Torsional Strength
- Tapered Tulip & Friction Head

Comprehensive universal instrumentation set

## SCREW OPTIONS

### Diameter

- 6.00mm
- 6.50mm
- 7.00mm
- 7.50mm
- 8.00mm

### Length

- 40-60mm | 5mm
- 40-60mm | 5mm
- 35-60mm | 5mm
- 35-60mm | 5mm
- 35-60mm | 5mm

Non-Cannulated

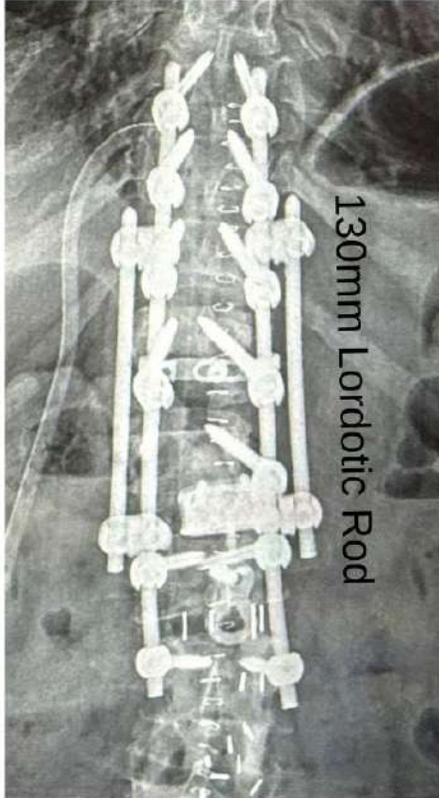
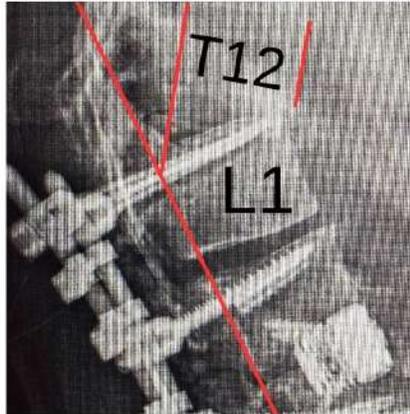
Cannulated

# 3D PRINTED PEDICLE SCREW

57 y/o L1-L4 Fusion & T12-L1 Junctional Kyphosis

DOS 9/15/25

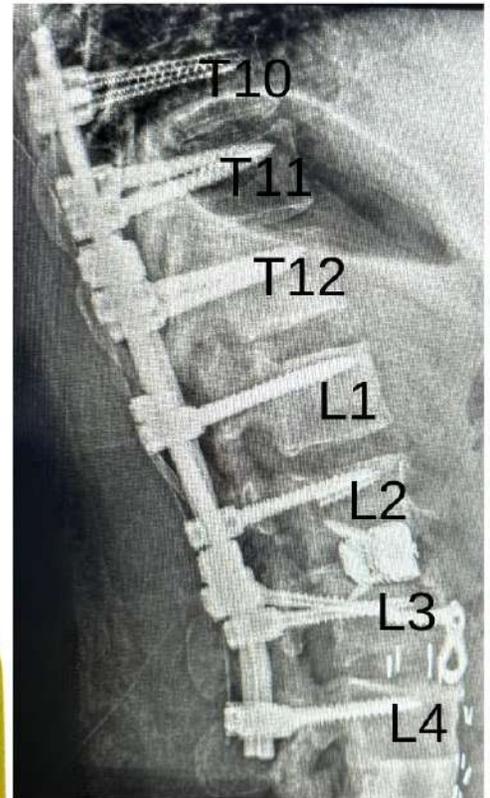
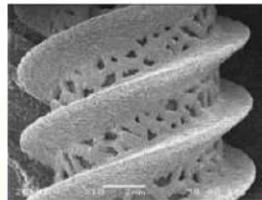
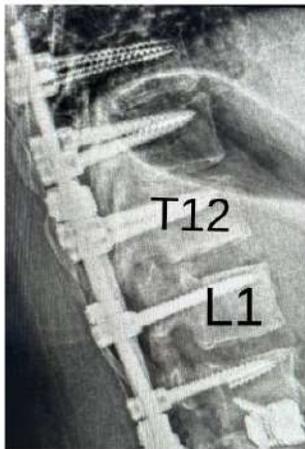
Halo around L1 screws



130mm Lordotic Rod



Rod to Rod Connector



# 3D PRINTED PEDICLE SCREW

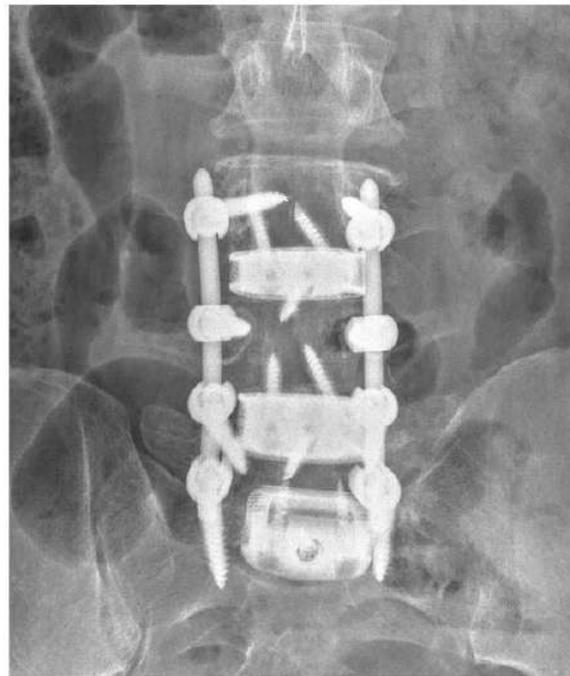
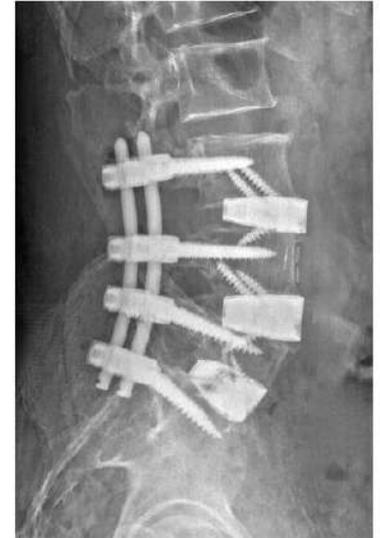
THE FIRST  
510(k) FDA 3D TITANIUM PEDICLE SCREW LUMBAR  
SURGERY IN THE WORLD



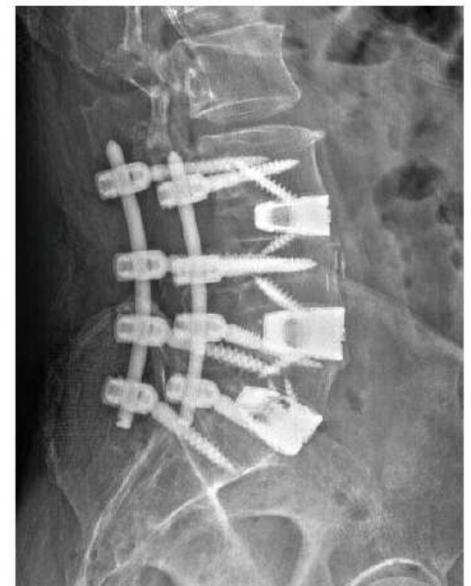
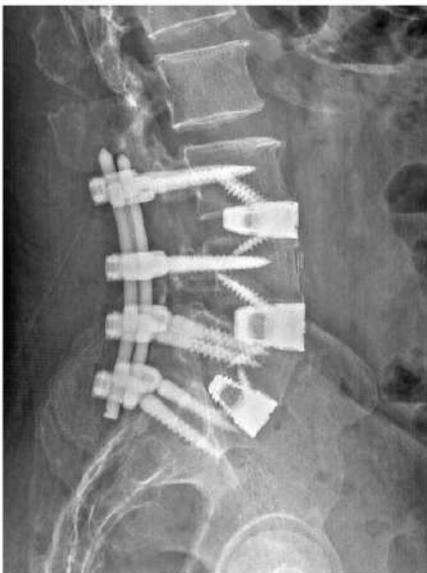
DOS 7/07/25



6.0mm x 40  
6.5mm x 40  
7.0mm x 40  
7.0mm x 35



35x25x14mm 12° cage  
35x25x18mm 12° cage  
35x25x16mm 18° cage  
100mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

61 y/o Post-Laminectomy Syndrome & Stenosis &  
Severe Neurogenic Claudication



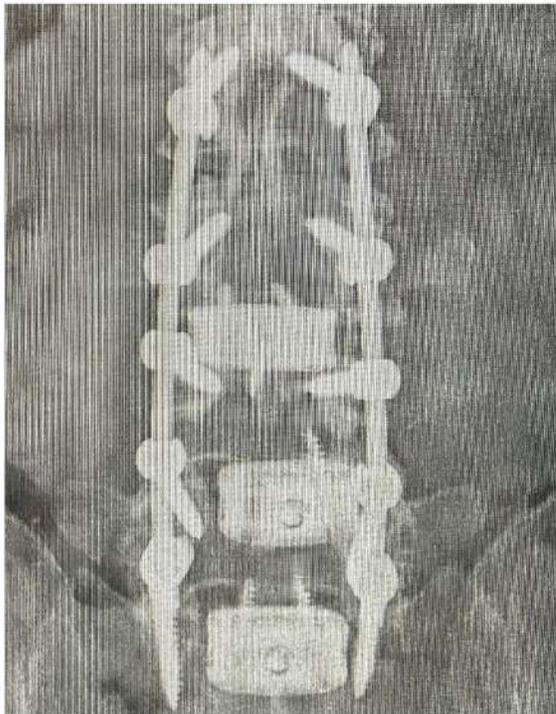
DOS 7/16/25

B L4 & L5 screws loose  
upon removal

4 of 6 screws loose =  
66%



Full Spinal Canal and Nerve Root Decompression



6.0mm x 50

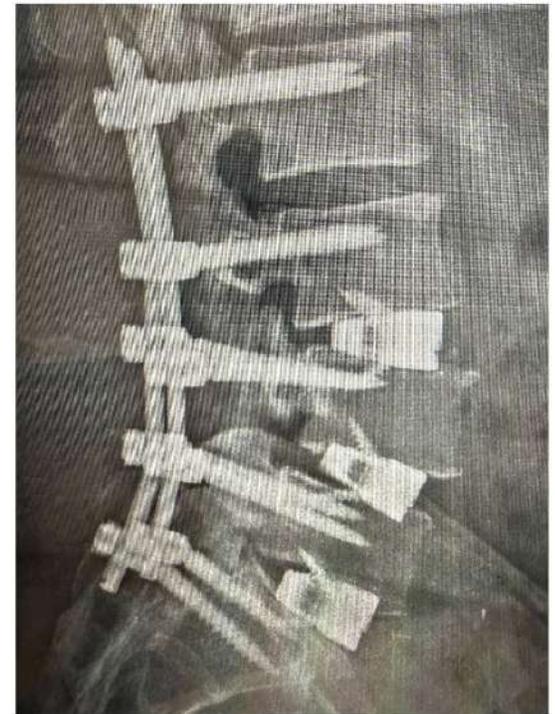
6.5mm x 50

6.5mm x 50

6.5mm x 50

7.0mm x 40

7.0mm x 45



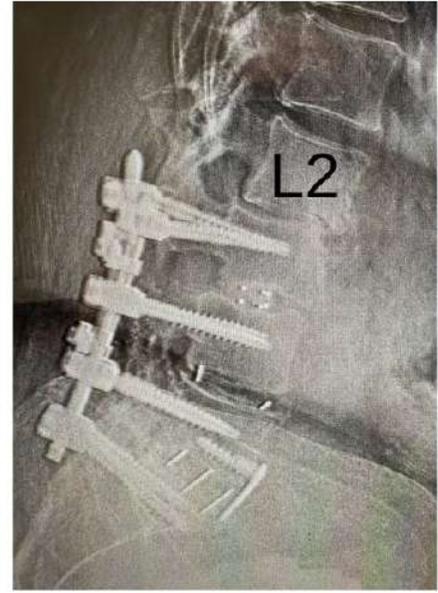
4.5 hrs

150mm Lordotic Rod

35x25x16mm 18° cage	L3/4
35x25x16mm 18° cage	L4/5
35x25x18mm 18° cage	L5/S1

# 3D PRINTED PEDICLE SCREW

63 y/o L3-S1 Fusion & L2-3 Junctional Kyphosis & BMI 47%  
DOS 8/04/25



6.0mm x 45

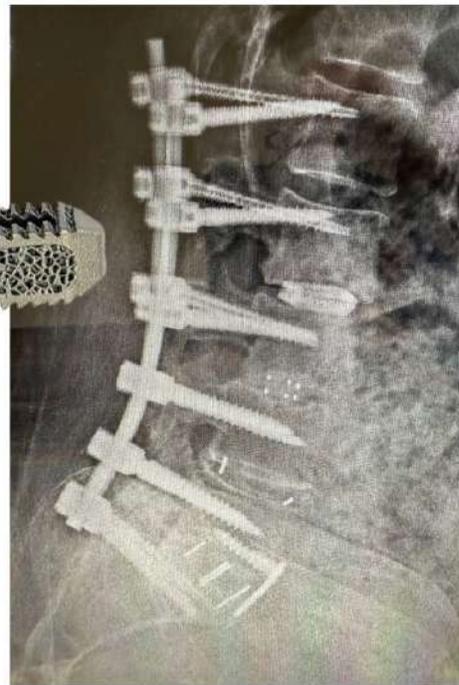
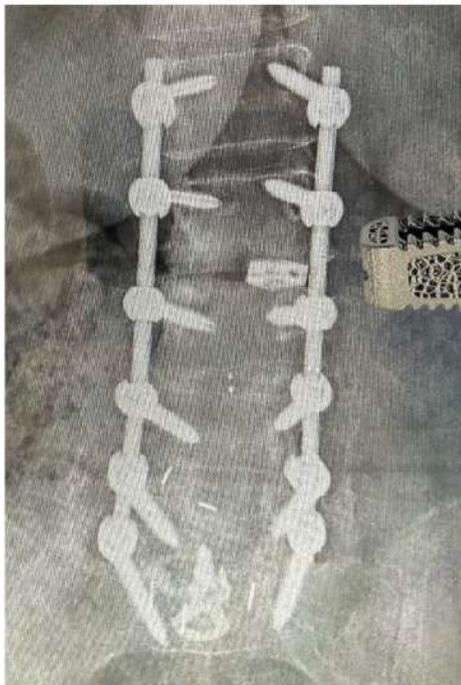
6.0mm x 45

6.5mm x 45

6.5mm x 45

7.5mm x 45

7.5mm x 45



5.5mm x 50

5.5mm x 50

6.5mm x 45

6.5mm x 45

7.5mm x 40

7.5mm x 45

160mm Lordotic Rod 28x9x8mm  
6° cage

51 y/o L4-S1 Attempted Fusion & L3-4 Junctional Stenosis

BMI 45%

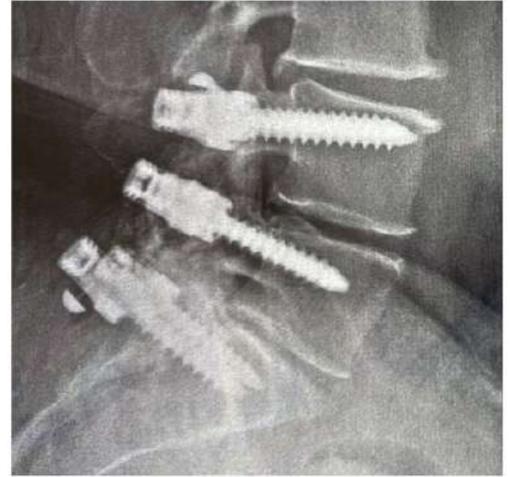
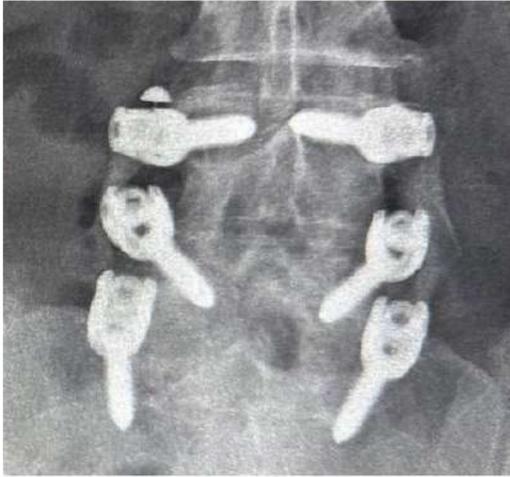
Halo around screw

DOS 8/13/25

B L4 & L5 screws loose upon removal

4 of 6 screws loose =

66%

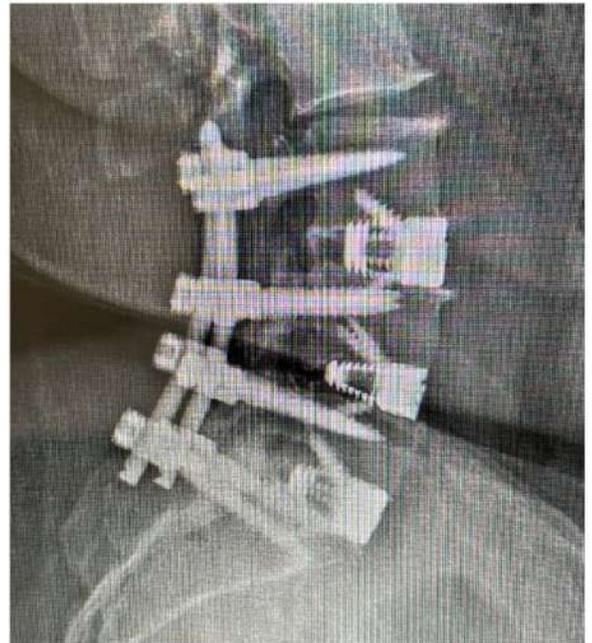


6.0mm x 40

6.5mm x 40

6.5mm x 40

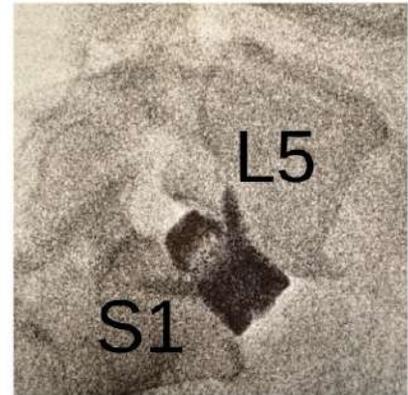
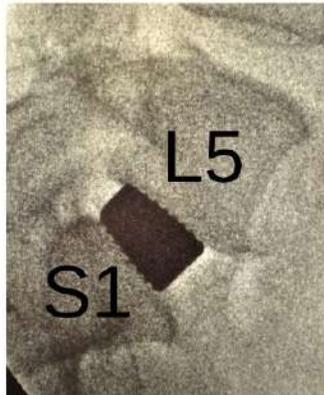
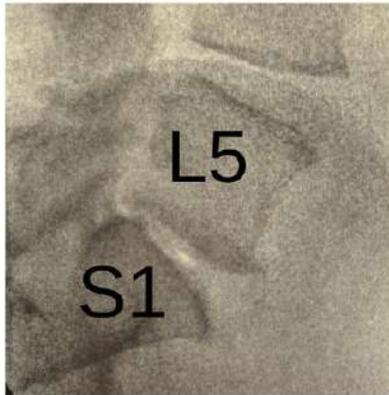
7.0mm x 45



95mm Lordotic Rod

35x25x16mm 12°cage	L3/4
35x25x14mm 18°cage	L4/5
35x25x14mm 18°cage	L5/S1

61 y/o Post-Laminectomy Syndrome & Recurrent Disc  
Herniation L5/S1  
DOS 9/10/25

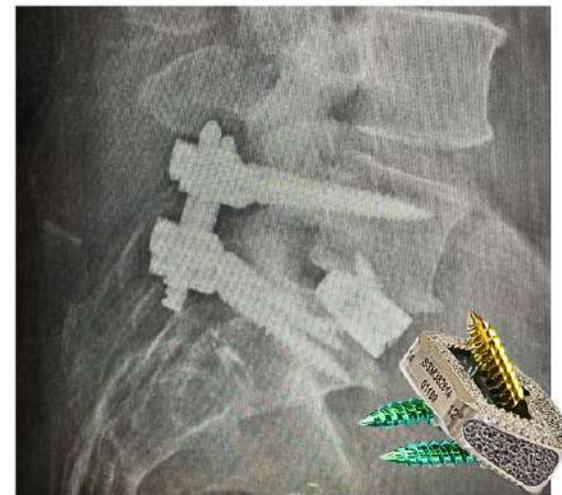
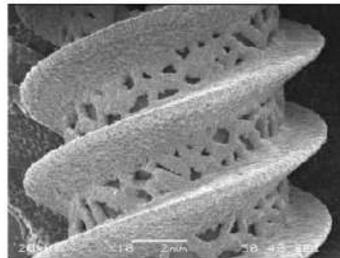


OR Trial

35x25x14mm 12° cage



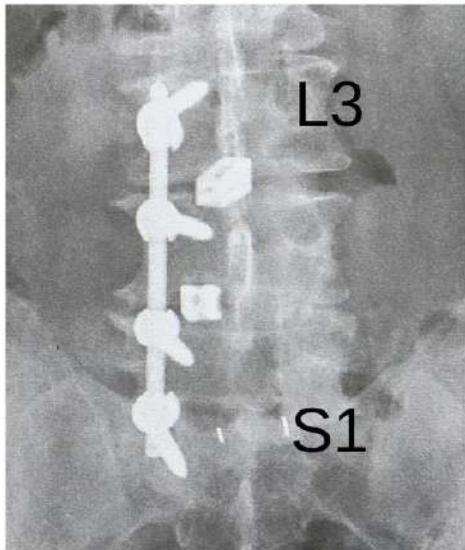
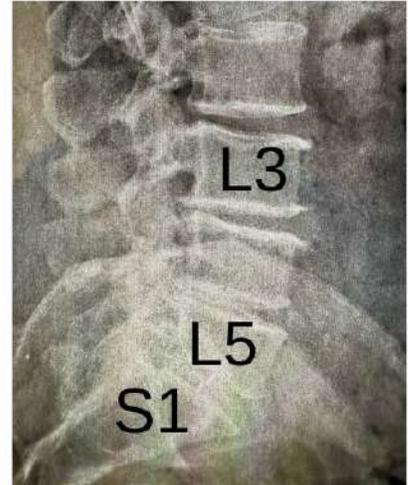
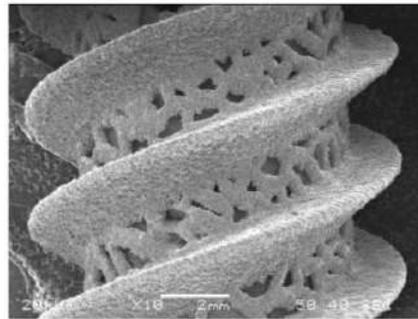
6.5mm x 45  
7.0mm x 40



45mm Lordotic Rod

60 y/o Post-Laminectomy Syndrome & Stenosis & Unilateral Symptoms

DOS 9/24/25



6.0mm x 50

6.0mm x 50

6.0mm x 45

6.5mm x 45



31x9x10mm  
6° cage

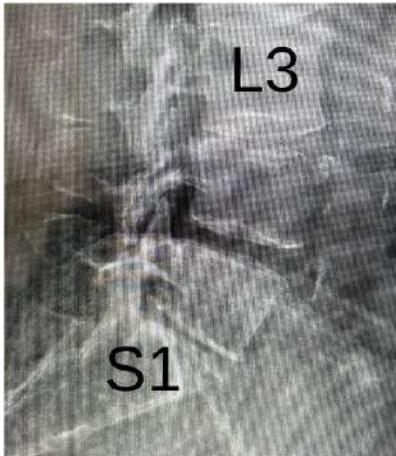


110mm Lordotic Rod

# 3D PRINTED PEDICLE SCREW

60 y/o L3-S1 Multi-level Stenosis

DOS 10/01/25



35x25x16mm

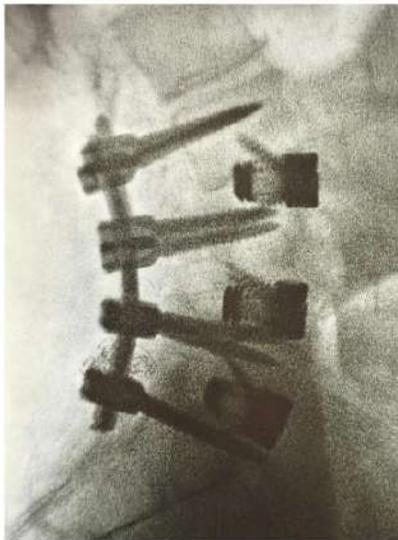
12°

35x25x16mm

12°

35x25x16mm

18°

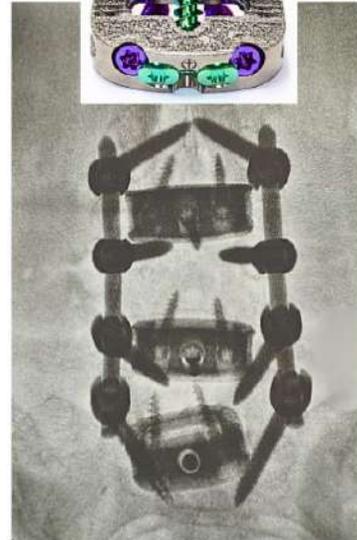


6.0x45

6.0x45

6.0x40

6.5x40



95mm Lordotic Rod

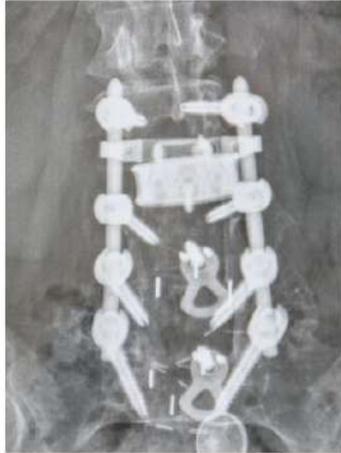
# 3D PRINTED PEDICLE SCREW

59 y/o L2-S1 Multi-level Stenosis

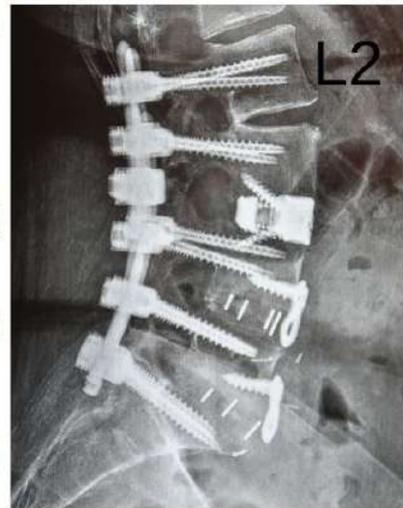
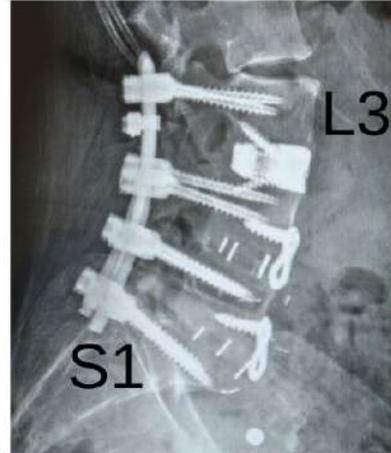
DOS 10/06/25



Rod to Rod Connector



4.75x45

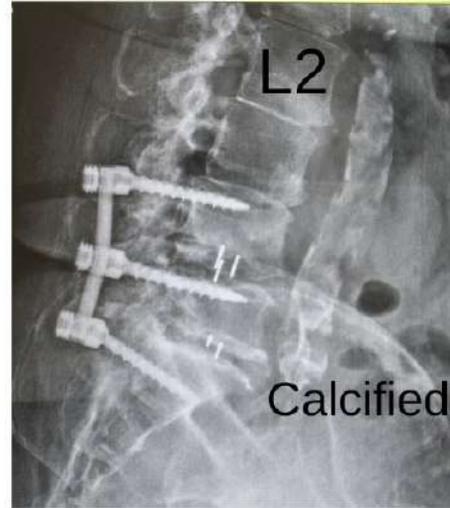


60mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

72 y/o Previous fusion L4-S1 & Junctional Stenosis  
DOS 10/29/25



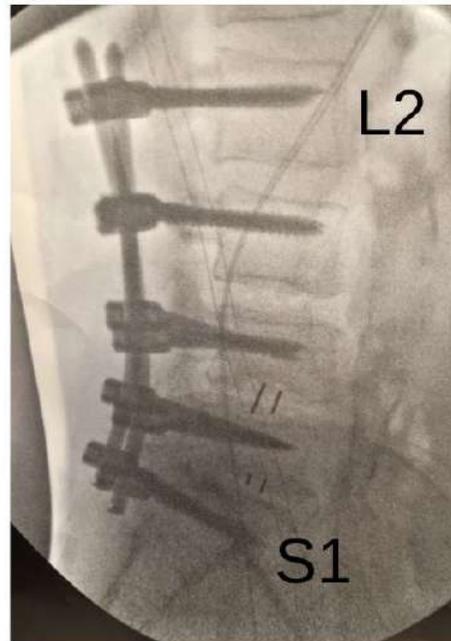
6.0mm x 50

6.0mm x 50

6.5mm x 45

6.5mm x 45

7.0mm x 45



6.0mm x 50

6.0mm x 50

6.0mm x 45

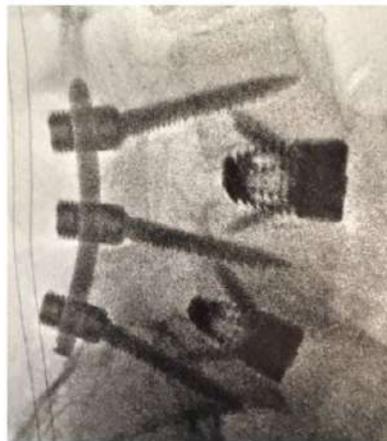
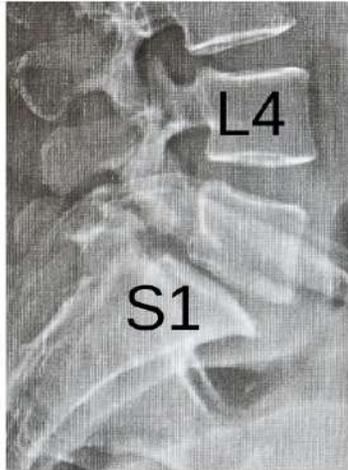
6.5mm x 45

7.0mm x 40

140mm Lordotic Rod

# 3D PRINTED PEDICLE SCREW

62 y/o L4-S1 Multi-level Stenosis & Spondylolisthesis  
DOS 11/19/25



35x25x16mm  
18°

35x25x14mm  
18°

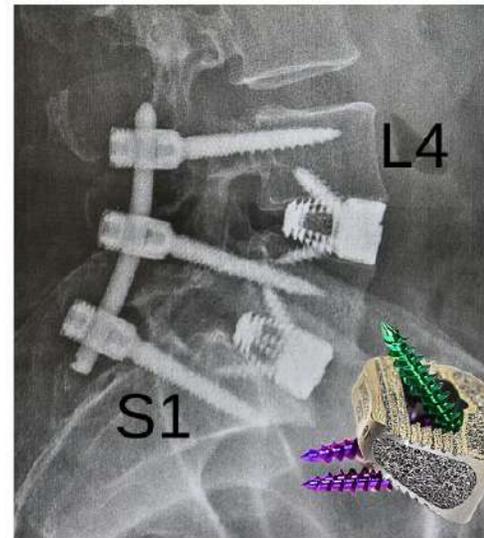
5.5 x 25mm screws



6.0 x 40

6.0 x 40

6.5 x 45

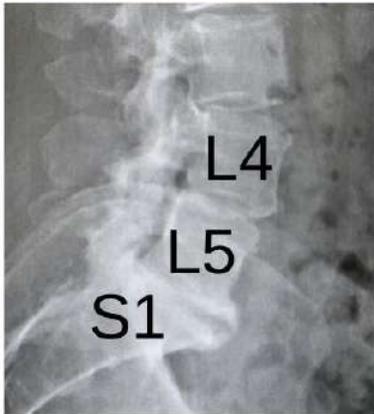


70mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

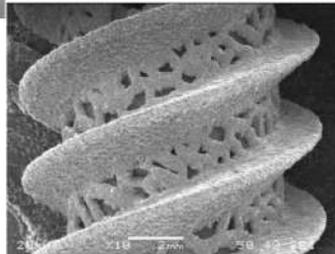
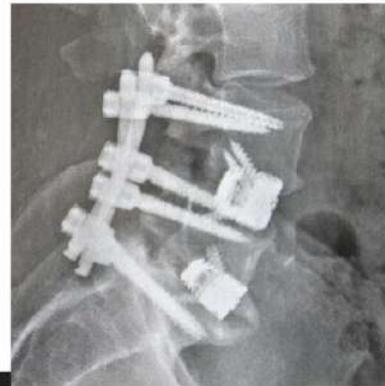
46 y/o Severe Disc Disease L4-S1  
DOS 12/1/25



32x21x16mm 12° cage  
32x21x14mm 12° cage



6.0mm x 45  
6.5mm x 45  
6.5mm x 45

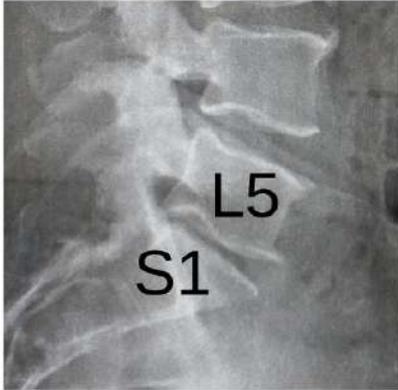


80mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

52 y/o Post-Laminectomy Syndrome & Recurrent Disc Herniation L5/S1



DOS 12/4/25



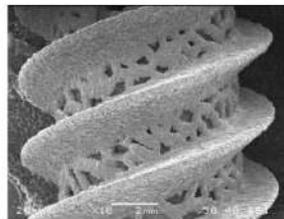
38x26x18mm cage  
18°



6.0mm x 45  
6.5mm x 45



6.0mm x 40  
7.0mm x 40

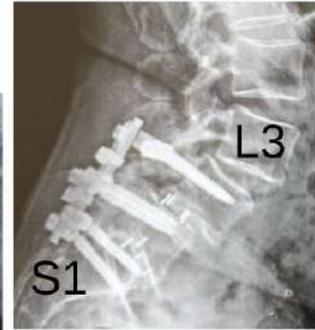


45mm Lordotic Rod

# 3D PRINTED PEDICLE SCREW

64 y/o L3-S1 Multi-level Stenosis

DOS 12/17/25



35x25x16mm

12°



6.0x45

6.0x45

6.0x40

6.5x40

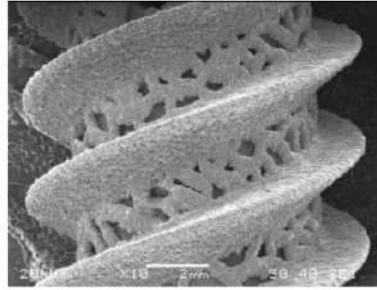
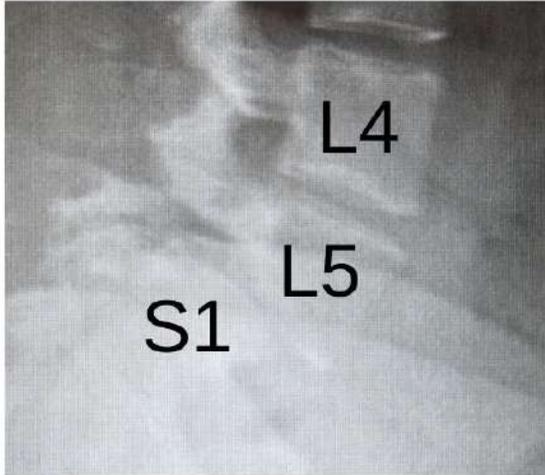


110mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

19 y/o Grade II Spondylolisthesis L5/S1, BMI 45%  
DOS 12/24/25



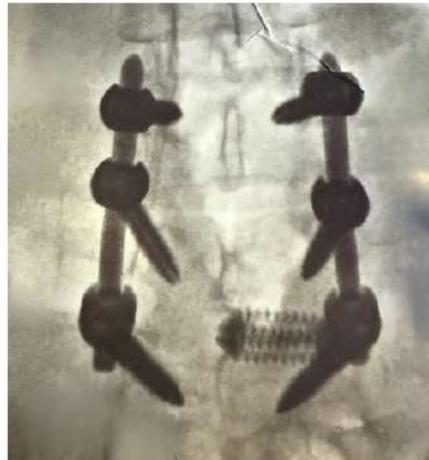
28x9x10mm  
6° cage



6.5mm x 45

6.0mm x 45

7.5mm x 40



6.0mm x 45

6.0mm x 45

7.5mm x 40



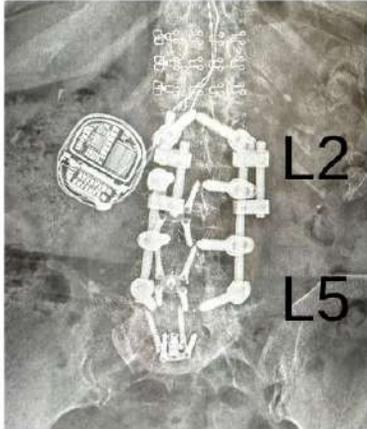
75mm Lordotic Rod



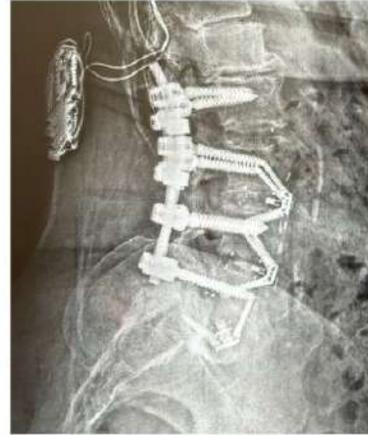
# 3D PRINTED PEDICLE SCREW

64 y/o L2-3 Post-Laminectomy Syndrome

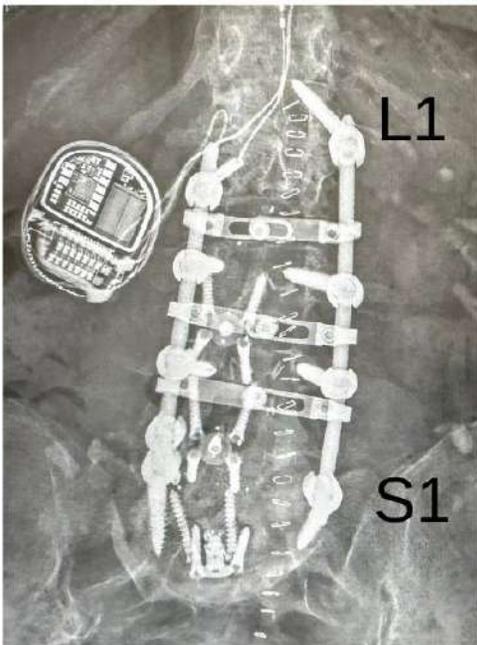
DOS 12/29/25



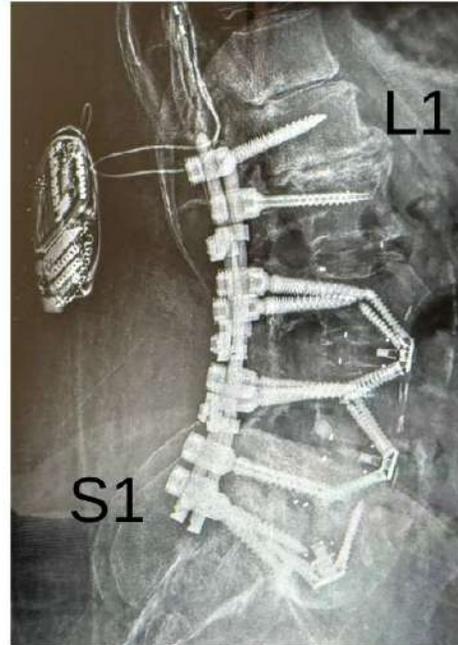
4.75mm x 40  
6.5mm x 40  
6.5mm x 45



6.0mm x 40  
6.5mm x 40



6.5mm x 45  
7.0mm x 35



6.5mm x 40  
7.0mm x 35



130 & 150mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

65 y/o L3-4 Unilateral Symptoms

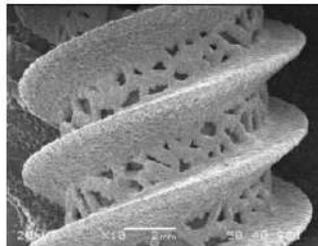
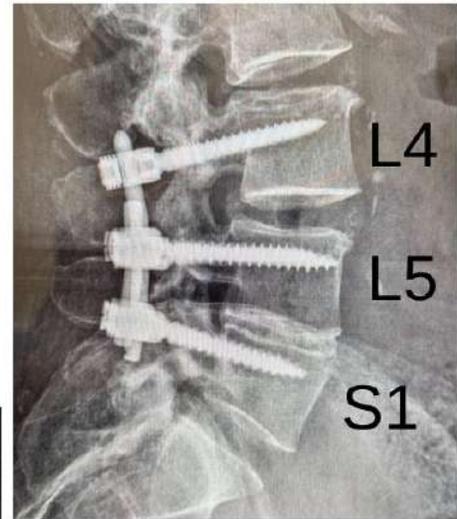
DOS 12/31/25



6.5mm x 50

7.0mm x 45

7.0mm x 45



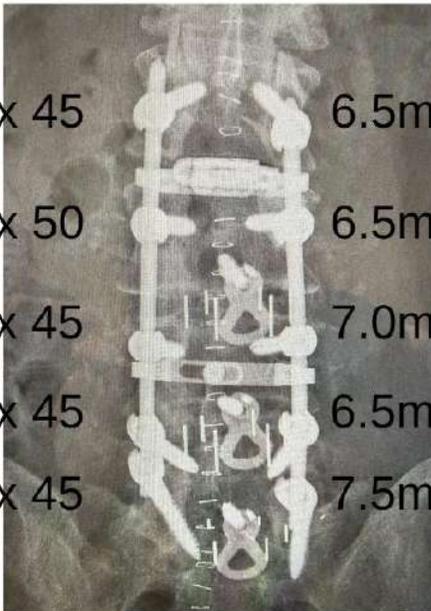
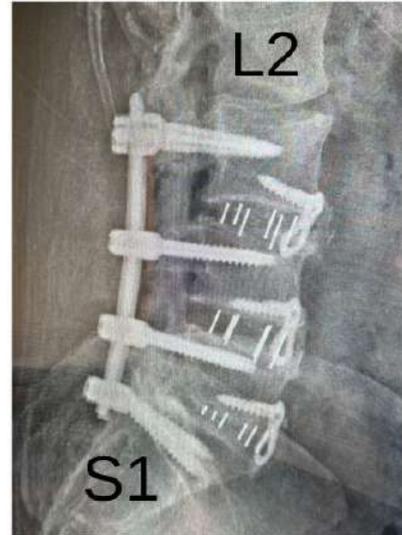
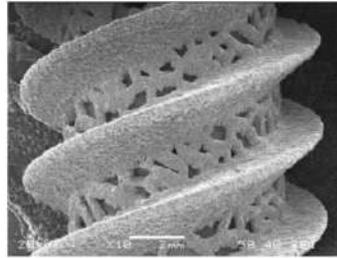
70mm Lordotic Rod



# 3D PRINTED PEDICLE SCREW

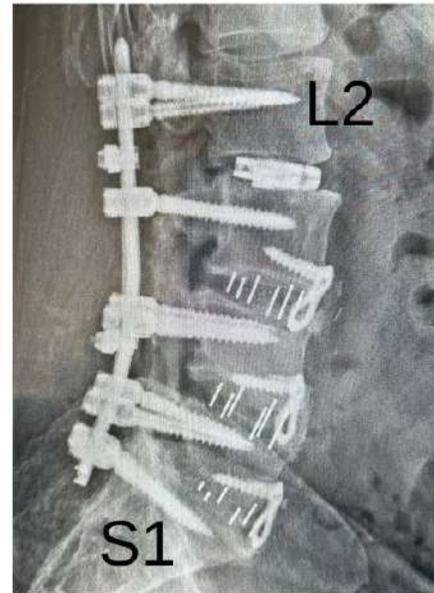
64 y/o L2-3 Stenosis and Revision

DOS 1/19/26



6.5mm x 45  
6.5mm x 50  
6.5mm x 45  
7.0mm x 45  
7.5mm x 45

6.5mm x 50  
6.5mm x 50  
7.0mm x 45  
6.5mm x 45  
7.5mm x 45



Stacked



31x9x9mm  
6° cage



150mm Lordotic Rod

52 y/o Post-Laminectomy Syndrome & Degenerative Disc

L4/L5

DOS 1/21/26

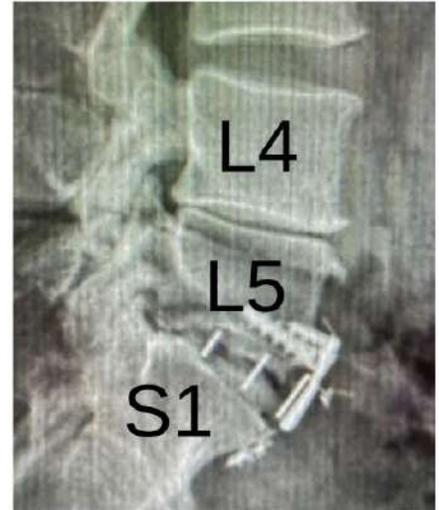


2007

5.5mm x 25 Screws



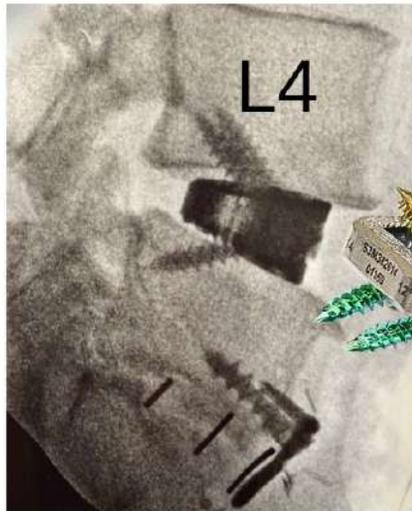
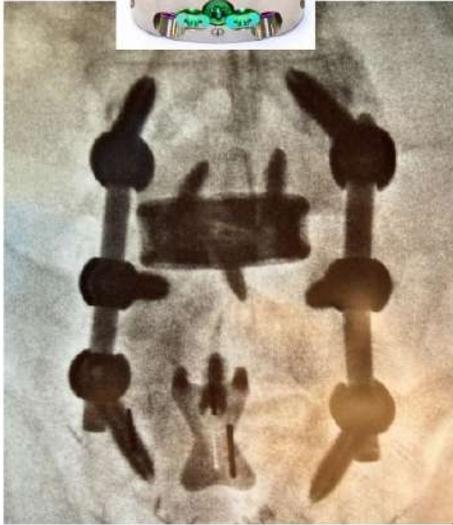
32x21x14mm cage  
18°



L4

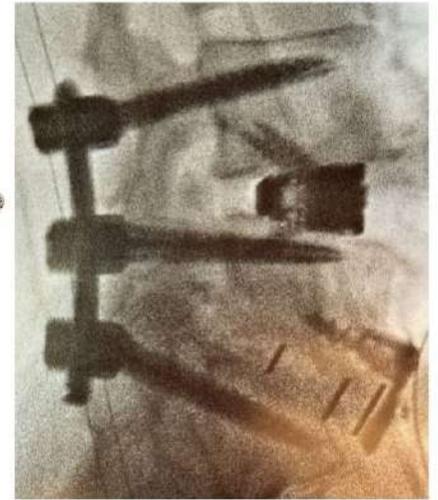
L5

S1



L4

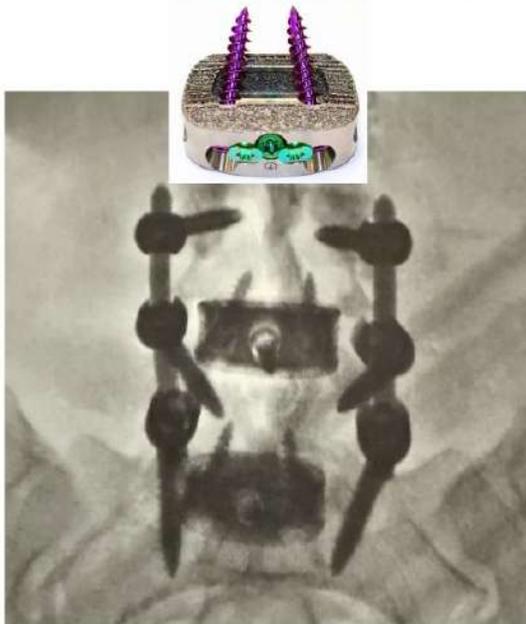
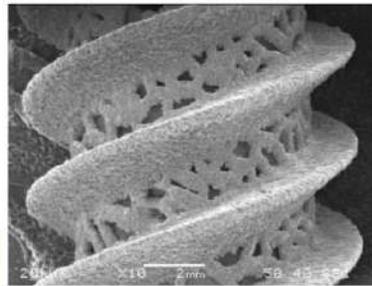
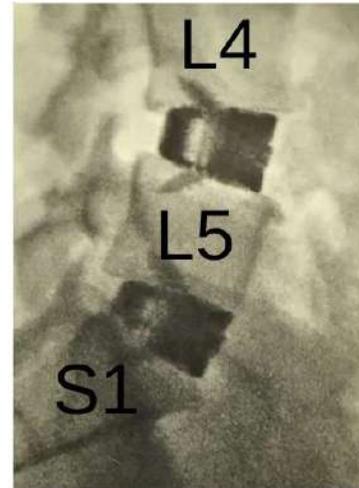
6.0mm x 45 x 6



65 & 70mm Lordotic Rod

# 3D PRINTED PEDICLE SCREW

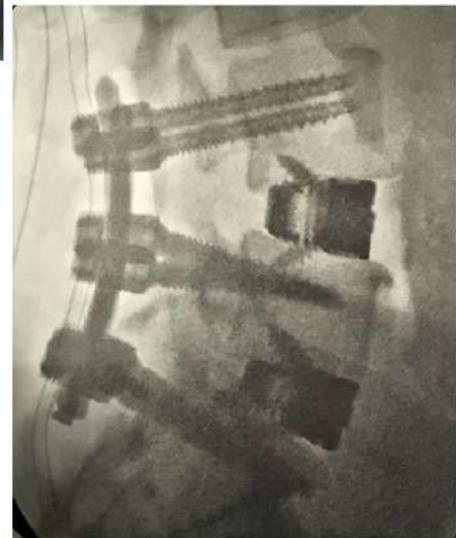
50 y/o L4-S1 Degenerative Disc  
DOS 1/26/26



6.0mm x 45

6.0mm x 40

6.0mm x 40



70mm Lordotic Rod



# ***EMINENT SPINE***

**Eminent Spine is dedicated to manufacturing biomechanically sound spinal implants and focusing on surface technology.**



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