

UNLEASH™

UNLEASHED: Deformity Correction Leveraging the CONDUIT™ Lateral and TLIF Interbody Systems and EXPEDIUM® Pre-Contoured Rods

Patient History:

- Scoliosis was a lifelong ailment.
- Tried physical therapy, aqua-therapy, chiropractic care and acupuncture to no avail.
- Could not stand up straight, which impacted nearly everything the patient did on a day to day basis.

Surgical Intervention: Staged Deformity Correction leveraging the UNLEASH™ Lateral Solution, CONDUIT™ TLIF Interbody, and EXPEDIUM® Pre-Contoured Rods

- Stage 1: L1-2, L2-3, L3-4 LLIF
 - TeDan Phantom XL3™ Lateral Lumbar Access System
 - CONDUIT™ Lateral Interbody
 - SENTIO™ MMG
- Stage 2: T4-pelvis with L4-5 and L5-S1 TLIF
 - CONDUIT™ TLIF Interbody System
 - EXPEDIUM VERSE® Spine System and Screws
 - EXPEDIUM® Pre-Contoured Rods

Outcome Data:

- After a two-day surgery, the patient is now walking straight for the first time in 50 years!
- Ambulated within 48 hours of surgery
- Estimated blood loss for entire surgery - 1500cc (including posterior component)
- Used prescription pain medication for 2 weeks post-operatively → by 4 months post-op, reduced pre-operative prescription pain medication use by 50%
- Patient discharged 7 days post-operatively to rehab
- Resumed normal activities by 2 months post-op

“In my experience, CONDUIT™ Lateral Interbody enables reliable and consistent correction.”

“I am able to dial in the desired correction with high fidelity using EXPEDIUM® Pre-Contoured Rods.”



Dr. Vijay
Yanamadala, MD

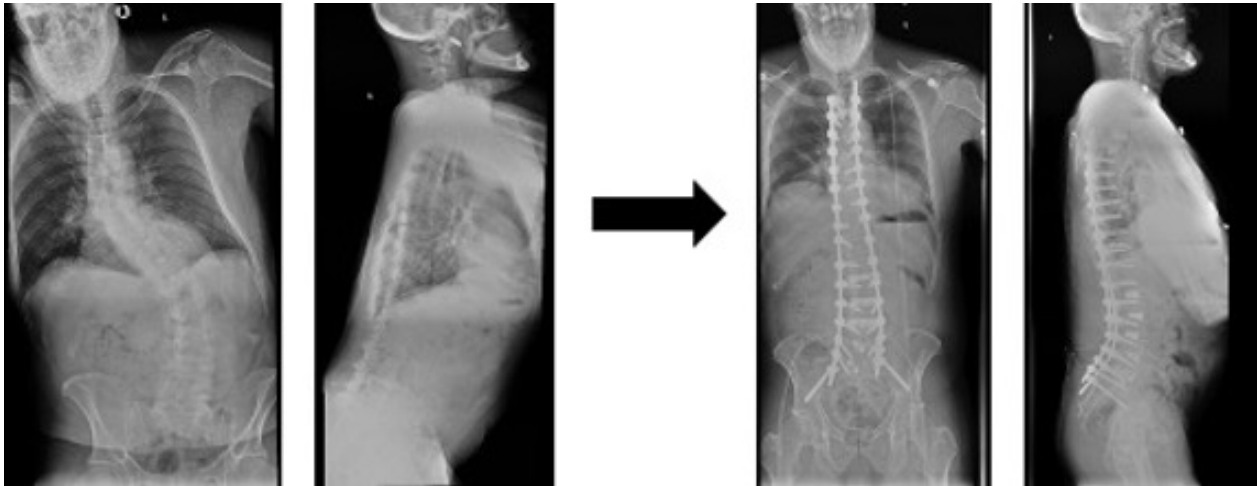


SENTIO™ MMG is an IONM device that provides information directly to the surgeon to help assess neurophysiologic status by measuring and comparing MMG (mechanomyography) signals throughout a surgical procedure.

Why SENTIO MMG?

- Nerve mapping and localizing the peripheral nerve as well as creating directionality is of the utmost importance in lateral surgery
- MMG delivers higher sensitivity and specificity than EMG 1
- Unlike EMG signals, MMG signals are not affected by electrical noise in the OR
- Does not require needles or anesthesia
- Surgeon driven and controlled
- Cost effective - more affordable than EMG as MMG does not require a technician to interpret results

Post-Op Images:



The **CONDUIT™ Interbody System** is the first 3D printed cage platform with nano-scale features cleared by the FDA. It consists of 3D-printed cellular titanium implants that feature 80% porous macro-, micro-, and nanostructures, designed to mimic cortical and cancellous bone, and facilitate fusion.^{2,3}



EXPEDIUM® Pre-Contoured Rods

INCREASED FATIGUE LIFE

In a benchtop study, 5.5 mm Cobalt Chrome pre-contoured rods had a significantly higher fatigue strength over manually bent Cobalt Chrome rods.^{4*}

DESIGNED TO REDUCE ROD MANIPULATION

Pre-contoured rods are designed to require less manual bending than straight rods and to reduce notching done intraoperatively.⁵

OPTIMIZED COUNTOURS

We worked with multiple deformity surgeons around the world to optimize our contours to meet the needs of more patients.⁶

With this portfolio expansion, we offer a more comprehensive set of contours.

Dr. Vijay Yanamadala is presenting on behalf of DePuy Synthes. The presentation reflects the opinions of the individual presenter, and the steps described may not encompass the complete steps of the procedure. Additionally, other surgeons may prefer different techniques, approaches, etc., as individual surgeon experience in his/her clinical practice, as well as patient needs, may dictate variation in procedure steps. Accordingly, results from any case studies reported in this presentation may not be predictive of results in other cases. Before using any medical device, review all labeling, including without limitation; the Instructions For Use (IFU), and relevant package inserts with particular attention to the indications, contraindications, warnings and precautions, and steps for use of the device(s).

1. DePuy Synthes. SENTIO Nerve Distance Whitepaper. 2/14/2020. 095489-180720 DSUS/EMEA
2. DePuy Synthes. SEM Report. 1/28/2019. ADAPTIV #103546250
3. DePuy Synthes. VAL2016-043 Strut diameter summary rev 0. 11/20/2017.
4. Yamada, K., Sudo, H., Iwasaki, N., Chiba, A. (2019). Mechanical analysis of notch-free pre-bent rods for spinal deformity surgery. Spine. 45(6):E312-E318.
5. DePuy Synthes. Rod Contoured Bend Count Memo. August 25, 2020. Adaptiv #103721725 Rev. 1.
6. DePuy Synthes. EXPEDIUM® Pre-Contoured Rods VOC Summary Memo. November 11, 2019. Adaptiv #103622252 Rev 1.

*Benchtop studies are not indicative of clinical performance.

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Please refer to the instructions for use for a complete list of indications, contraindications, warnings and precautions.