

# UNLEASH®

“SENTIO™ MMG provides me the ability to assess real-time nerve status and reliably localize peripheral nerves by delivering higher sensitivity and specificity than EMG, all while reducing the overall cost of care.”

“The CONDUIT™ Interbody System’s roughened nanoscale surface facilitates fusion, while its pore design combined with 80% porosity creates a “snowshoe effect” designed to distribute the load more evenly.”



Dr. Puya Alikhani, MD

## UNLEASHED: Prone Lateral & MIS TLIF featuring SENTIO™ MMG, CONDUIT™ Interbody System & VIPER PRIME® Screw System

### Dr. Puya Alikhani, MD

Associate Professor of Neurosurgery | University of South Florida

#### Patient History:

- 65-year-old male presents with back pain and radiculopathy to lower extremities
- Pain in the right leg worse than the left
- Failed conservative treatment
- VAS score- back: 10, leg: 6
- ODI: 56

#### Surgical Intervention: L4/5 Prone Lateral (Prone Trans-Psoas) and L5/S1 MIS TLIF with Percutaneous Posterior Fixation utilizing UNLEASH™ Procedural Solutions

#### UNLEASH® Lateral in Prone Position (L4/5)

- INSIGHT® Lateral Access System – provides a clear pathway through the psoas
- SENTIO™ MMG – used to localize and create directionality to L4 nerve root
- CONDUIT™ Lateral Interbody (12 H, 22 W, 60 L, 16° Lordosis)
- VIPER PRIME® Screws

#### UNLEASH® MIS TLIF (L5/S1)

- VIPER PRIME® Pedicle Screw-Based Retractor
- SENTIO™ MMG – used to localize the exiting L5 nerve root
- CONDUIT™ Curved TLIF Interbody
- VIPER PRIME® Screws

#### Outcome Data (6 months post-op results):

- VAS back 1
- VAS leg 0
- ODI 6

#### Why Prone Lateral?

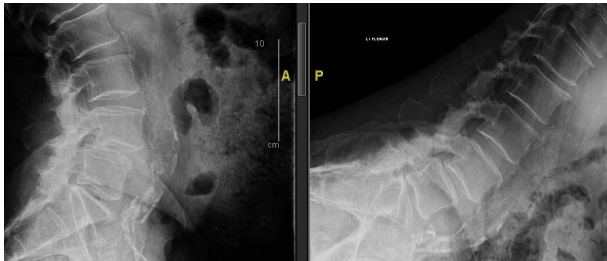
- One stage operation - no need to reposition which reduces operative time and cost
- Create lordosis - body has natural tendency to reshape in lordosis when prone
- Surgeon’s familiarity in prone position - can perform osteotomy and screw placement posteriorly before moving to the prone lateral portion of the procedure

## Pre-Op Images:



### MRI:

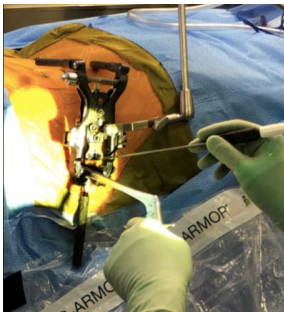
- mild to moderate central stenosis
- severe stenosis
- nerve root compression under the facets



### Dynamic X-Ray:

- spondylolisthesis of L4/L5
- degenerative disc at L4/5 and L5/S1

## Intra-Op Images:



## Post-Op Images:



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1. SEM Report. 1/28/2019. ADAPTIV #103546250
2. VAL2016-043 Strut diameter summary rev 0. 11/20/2017.
3. SENTIO Nerve Distance Whitepaper. 2/14/2020. 095489-180720 DSUS/EMEA

167608-210219 DSUS



SENTIO™ MMG is an IONM device that provides information directly to the surgeon to help assess objective neurophysiologic status in real-time 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
- Unlike EMG signals, MMG signals are not affected by electrical noise in the OR
- Does not require needles or anesthesia
- Surgeon driven and controllable
- Cost efficient - more affordable than EMG



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.<sup>1,2</sup>



The VIPER PRIME® System is a technique for percutaneous pedicle screw placement that enables surgeons to target pedicles and insert screws in one single instrument pass.