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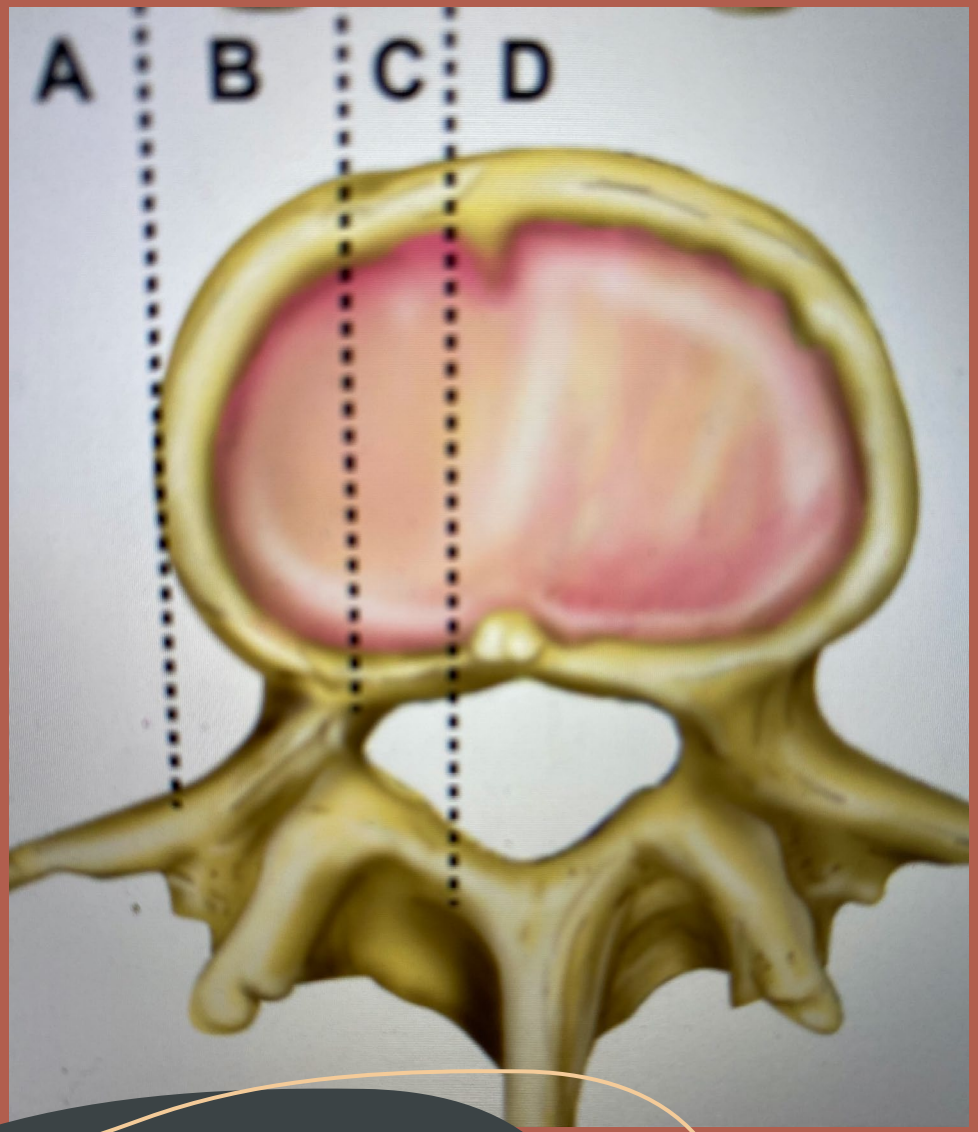
DISCLOSURES -

- CONSULTANT - ABBOTT , BOSTON SCIENTIFIC , CORNER LOC , ETHOS LABS , PAINTEQ, SPR
- SPEAKER - ABBOTT , BOSTON SCIENTIFIC , CORNER LOC , ETHOS LABS , PAINTEQ, SPR



CURRENT LANDSCAPE : Lumbar Spinal Stenosis (LSS)

- **14 million people with symptomatic LSS**
- **LSS can lead to compression of neural elements and manifest as low back and leg pain.**
- **Traditionally lost in triaging process of pain generators**
- **LSS = Central / Lateral recess / foraminal stenosis**

MIST GUIDELINES

CONSENSUS

Symptomatic LSS is a diagnosis that requires both radiographic evidence and presence of neurogenic claudication symptoms (Grade B, Level I, Consensus strong)

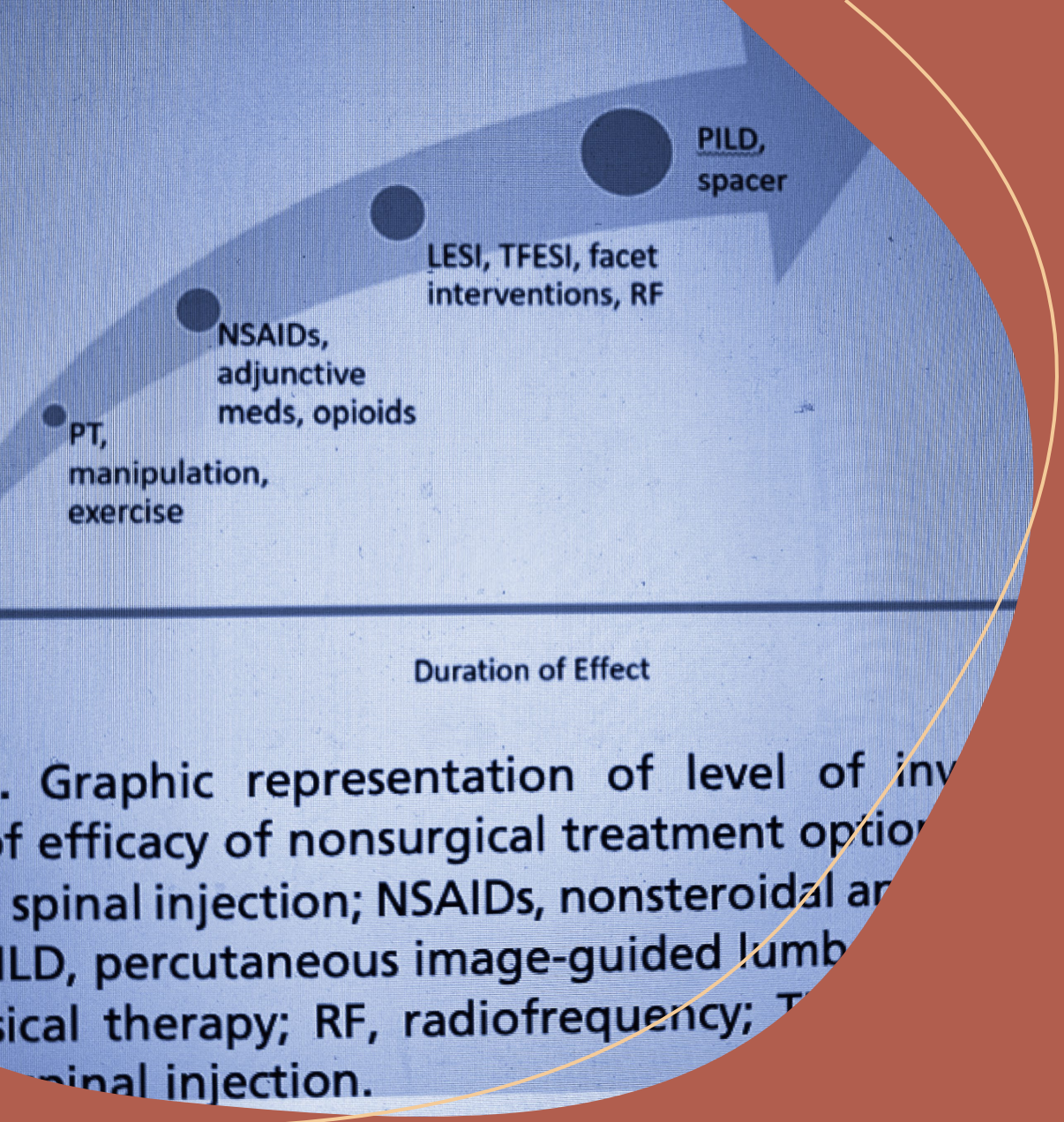
LSS- The past and now !

- **Traditionally been treated with a variety of conservative (pain medications, physical therapy, epidural spinal injections) and invasive (surgical decompression) options.**

- **Recently, several minimally invasive procedures have expanded the treatment options for the interventional pain physician**

MIST guidelines

- Low-quality evidence for using NSAIDs, neuropathic pain medications (MSAs), and opioids as monotherapy in the treatment of spinal stenosis
- Poor evidence supporting the use of axial bracing for the treatment of neurogenic claudication and spinal stenosis (Grade C, Level II, Consensus moderate)



. Graphic representation of level of inv
f efficacy of nonsurgical treatment optio
spinal injection; NSAIDs, nonsteroidal ar
LD, percutaneous image-guided lumb
ical therapy; RF, radiofrequency; T
inal injection.

Moving the Algorithms

- Tweaking the Algorithms
- Early Decompression
- How early is early ?

Indirect Decompression

1. PILD - Percutaneous Image-Guided Lumbar Decompression

2. INTERSPINOUS SPACERS

PILD - Percutaneous Image-Guided Lumbar Decompression

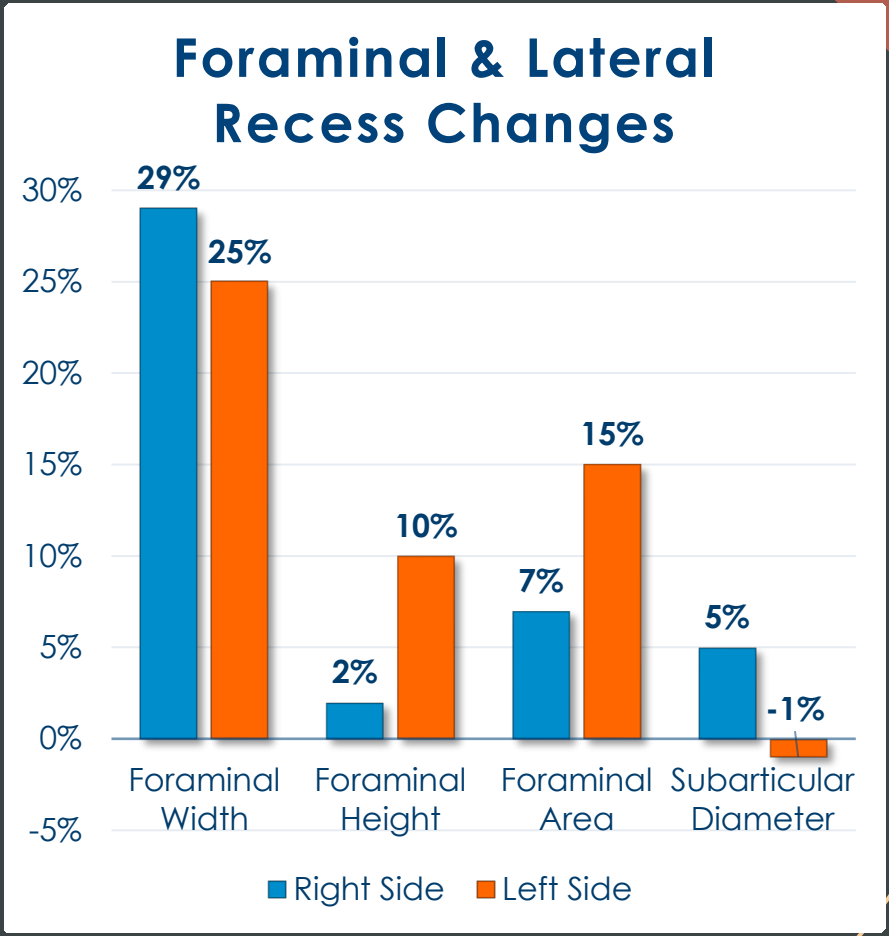
- **PILD by definition treats LSS secondary to LF hypertrophy**
- **LF hypertrophy has been defined as ligamentum thickness of >2.5 mm on MRI evaluation**
- **PILD is indicated for patients with central stenosis due to LF hypertrophy and neurogenic claudication**

PILD

- 2012- First RCT- n=38→ ESI or PILD. Improved ODI, ZCQ for 12 weeks of the study.
- 2016- MIDAS encore ->6m and 12 m results
- The PILD group had a 58% responder rate compared to 27% for the LESI group (P < 0.001).
- PILD was superior to LESI with no difference in safety, while subjects also experienced a durable outcome with PILD over 1 year compared with LESI

Interspinous spacers

- Interspinous spacers were developed as a less invasive strategy to avoid many of the risks of traditional laminectomy and eliminate the complication of post-laminectomy syndrome.
- The basic premise of these devices is to limit extension at specific levels of the spine thus minimizing the physiologic effects of acquired spinal degeneration.



Interspinous spacers

- An inherent advantage of ISS is its versatility to potentially improve stenosis at both the central and neuroforaminal canals
- Moreover, ISS use is reversible–with no bearing on the patient's ability to proceed with a surgical decompression.

Clinical Interventions in Aging

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ORIGINAL RESEARCH

Five-year durability of stand-alone interspinous process decompression for lumbar spinal stenosis

This article was published in the following Dove Press journal:
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Number of times this article has been viewed

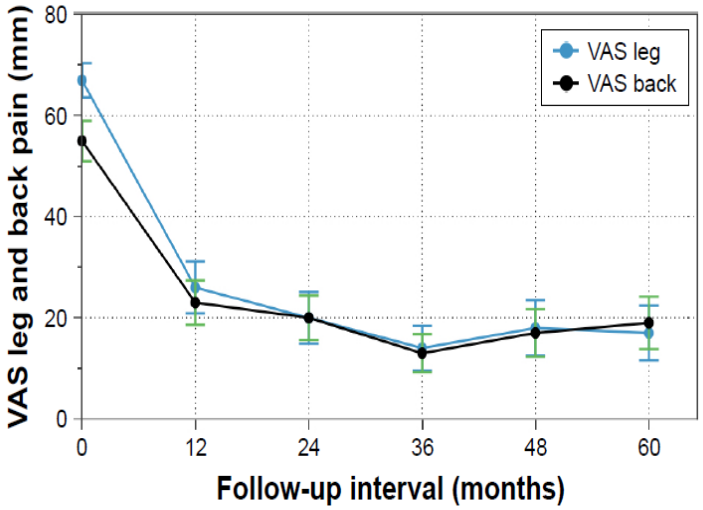
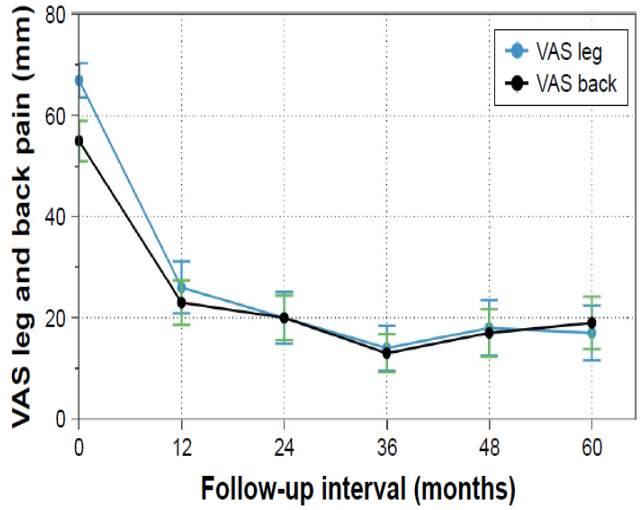


Figure 2 Time course of results for leg and back pain severity by VAS.
Note: Results reported as mean (95% CI).
Abbreviation: VAS, visual analog scale.



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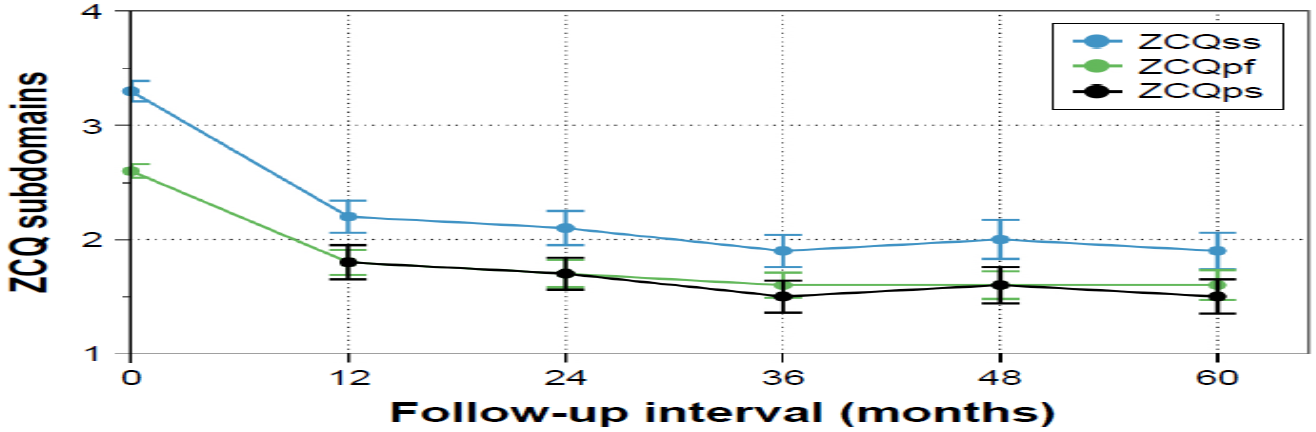


Figure 1 Time course of results for each subdomain of the ZCQ: ss, pf, ps.

Superion ISS(S-ISS) is supported by 5-year Level 1 Evidence

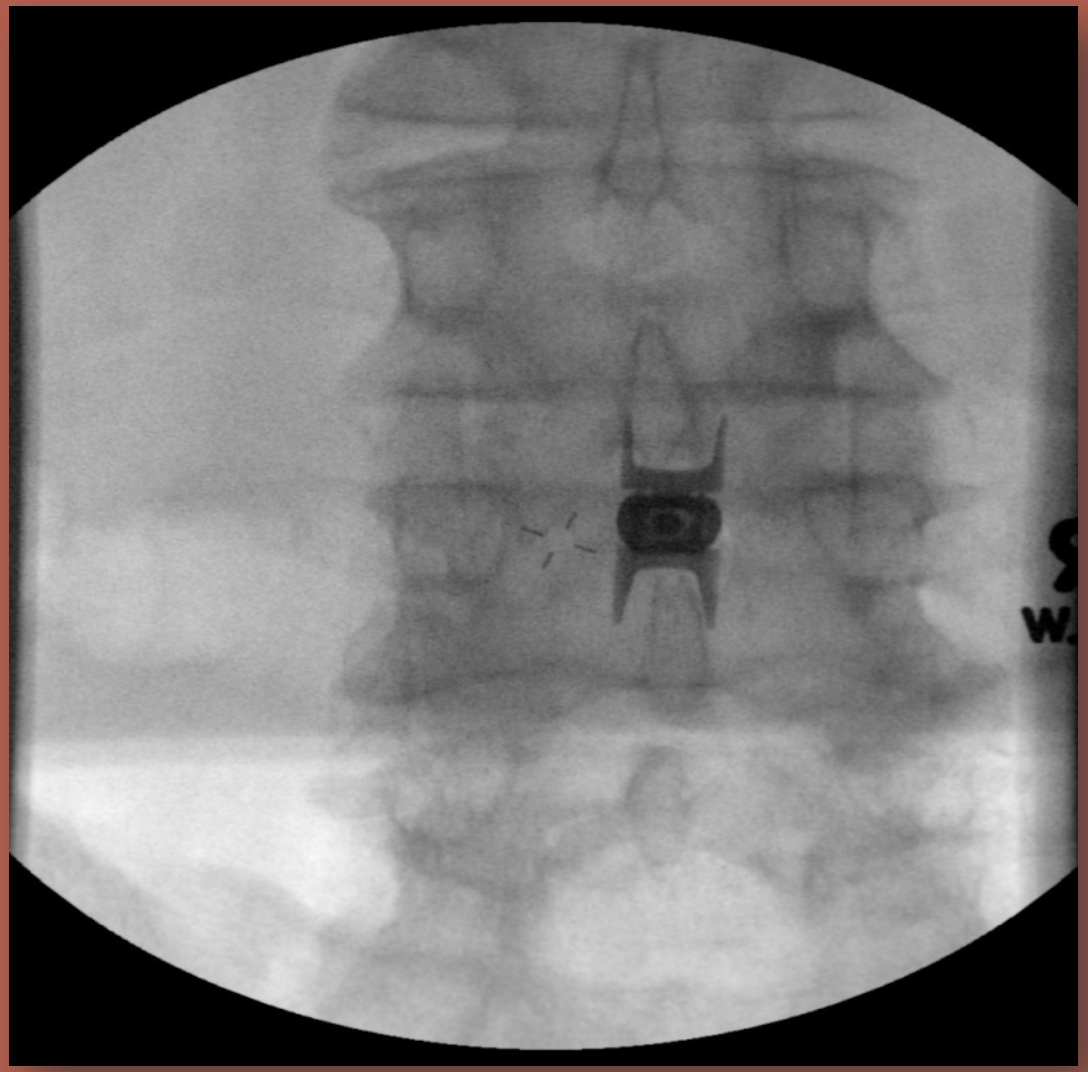
66%
BACK PAIN
improvement[1]*

75%
LEG PAIN
improvement[1]*

85%
OPIOID
reduction[2+]

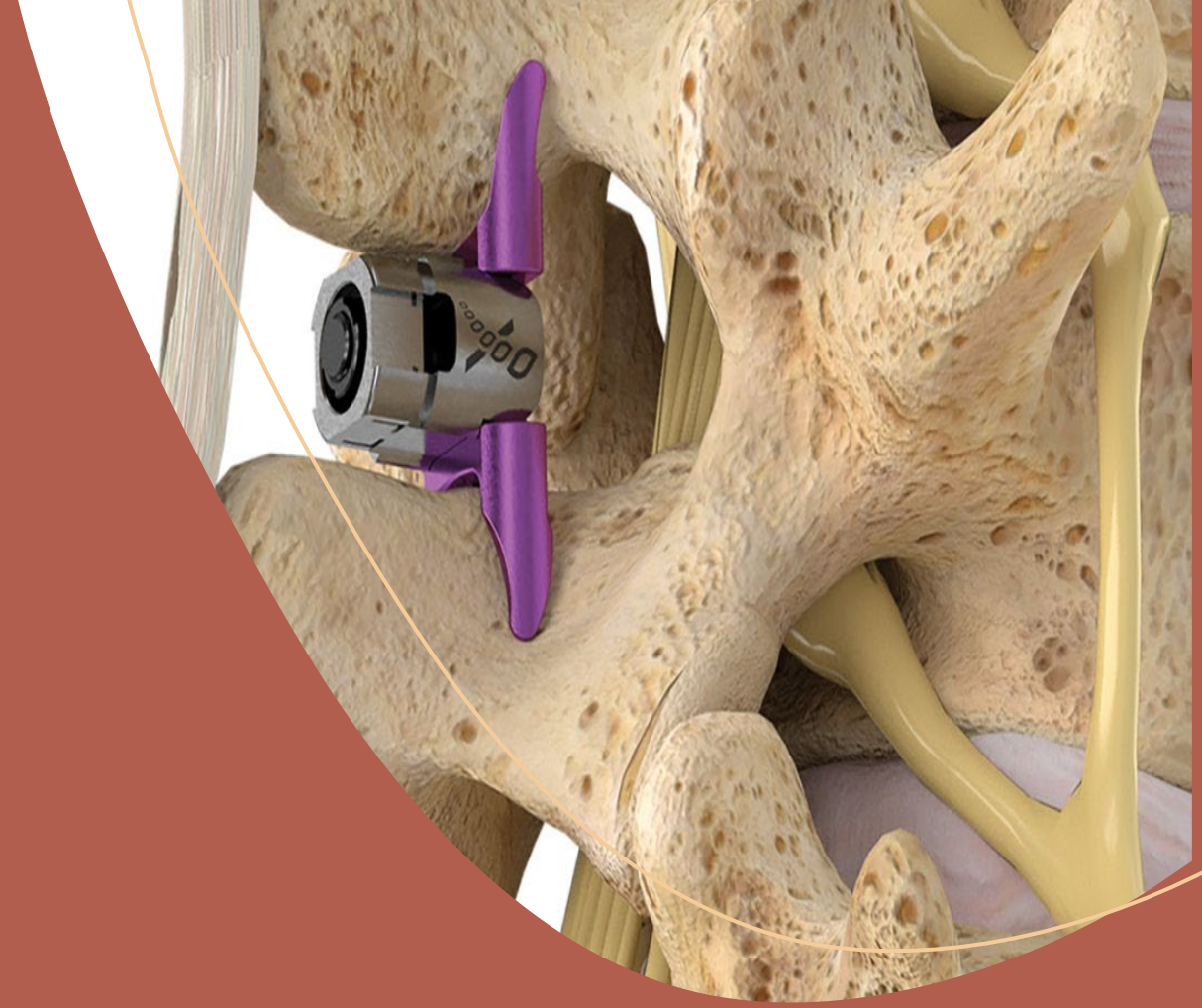
90%
PATIENT
satisfaction[1]*

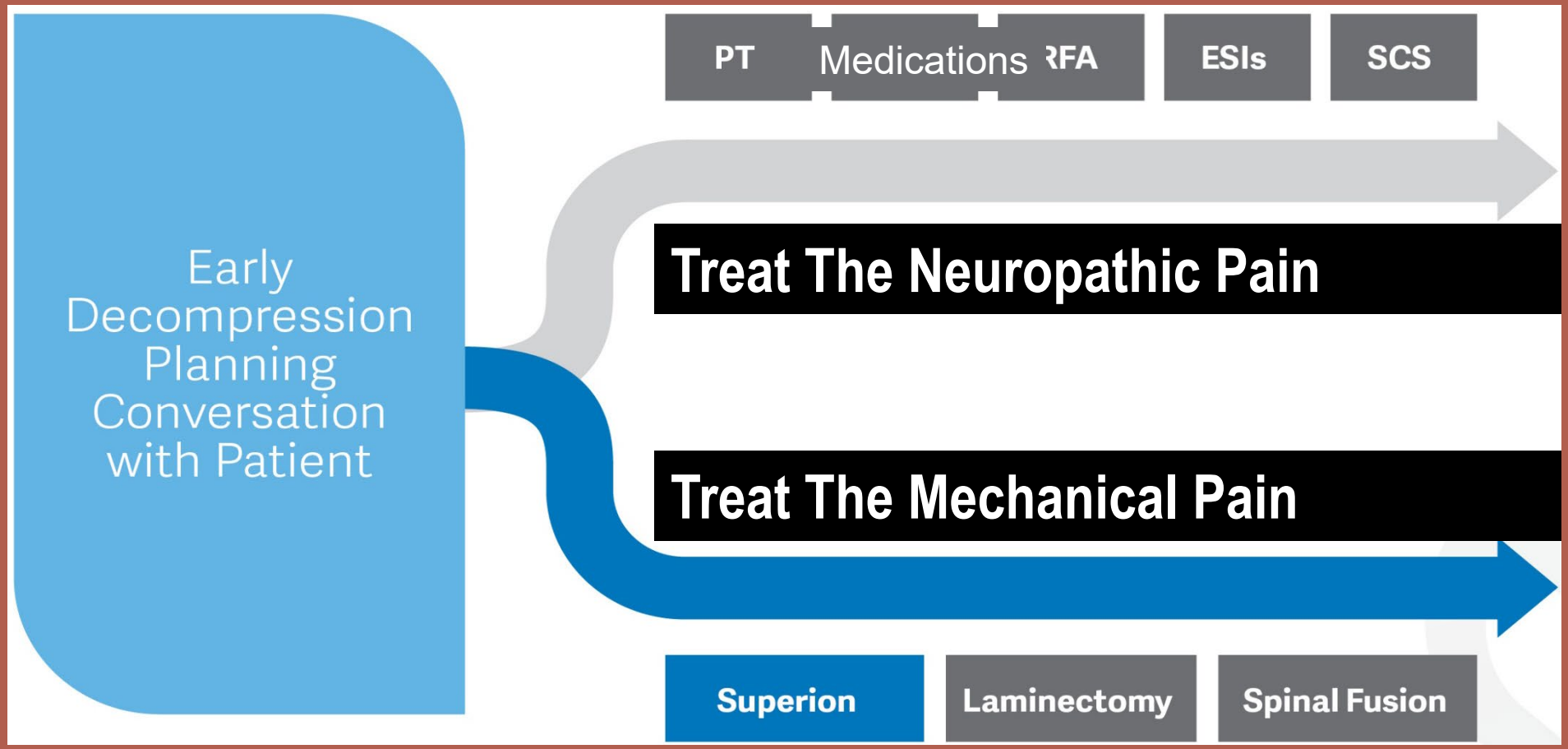
Clinically proven to treat all forms of moderate LSS: Central, Lateral and Foraminal



S-ISS

- **The safety and efficacy of the S-ISS Procedure is supported by 5-year Level I Evidence**
- **S-ISS treats all Lumbar Spinal Stenosis, not just central canal stenosis**
- **Definitive endpoint by single implant placement, requiring no removal of anatomy**




Early Decompression Planning Conversation with Patient
PT
Medications
RFA
ESIs
SCS
Treat The Neuropathic Pain
Treat The Mechanical Pain
Superion
Laminectomy
Spinal Fusion

SUMMARY !

1. TRIAGE THE SPINE PAIN GENERATORS
2. STEROIDS DO NOT REVERSE THE MECHANICAL PROBLEM
3. UNDERSTAND THE BIOMECHANICS OF THE DEGENERATIVE CASCADE
4. A NEW TOOL IN OUR TOOLKIT

THANK YOU !