RAPID RESEARCH

@physicaltherapyresearch

October 2023

Inside This Week:

Spinal Stenosis

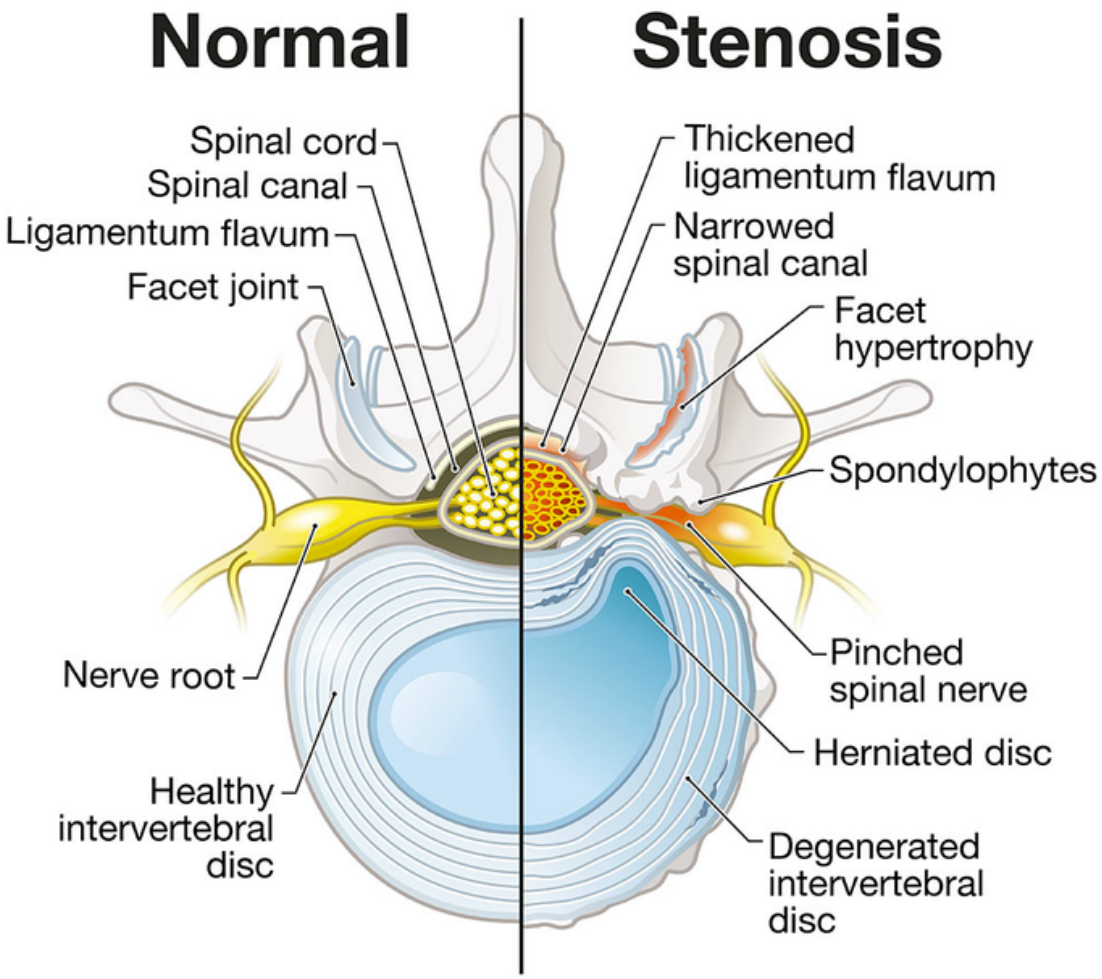
- Non-operative Treatment for Lumbar Spinal Stenosis with Neurogenic Claudication
- Effectiveness of Nonsurgical Treatment Methods for Lumbar Stenosis
- Conservative v. Surgical Treatment for Lumbar Stenosis

NON-OPERATIVE TREATMENT FOR LUMBAR SPINAL STENOSIS WITH NEUROGENIC CLAUDICATION

OCTOBER 2023

Click for Full Text (Ammendolia et al. 2021)

This Cochrane review determined the effectiveness of non-operative treatment of LSS with neurogenic claudication.



KEY FINDINGS

156 papers assessed and 23 new trials identified.

Results:

Moderate-quality evidence from 3 trials that:

Manual therapy & exercise provides superior short-term improvement in symptoms & function vs. medical care or community-based group exercise.

Manual therapy, education and exercise via cognitive-behavioral approach has superior outcomes in walking distance (immediate to long term) vs. with self-directed home exercises.

Glucocorticoid + lidocaine injection is more effective than lidocaine alone in improving statistical, but not clinically important improvements in pain and function in the short term.

MAIN TAKEAWAYS

Moderate-quality evidence demostrates a multimodal approach which includes, manual therapy and exercise, with or without education, is an effective treatment for lumbaar stenosis.

Epidural steroids are not effective for the management of LSS with neurogenic claudication.

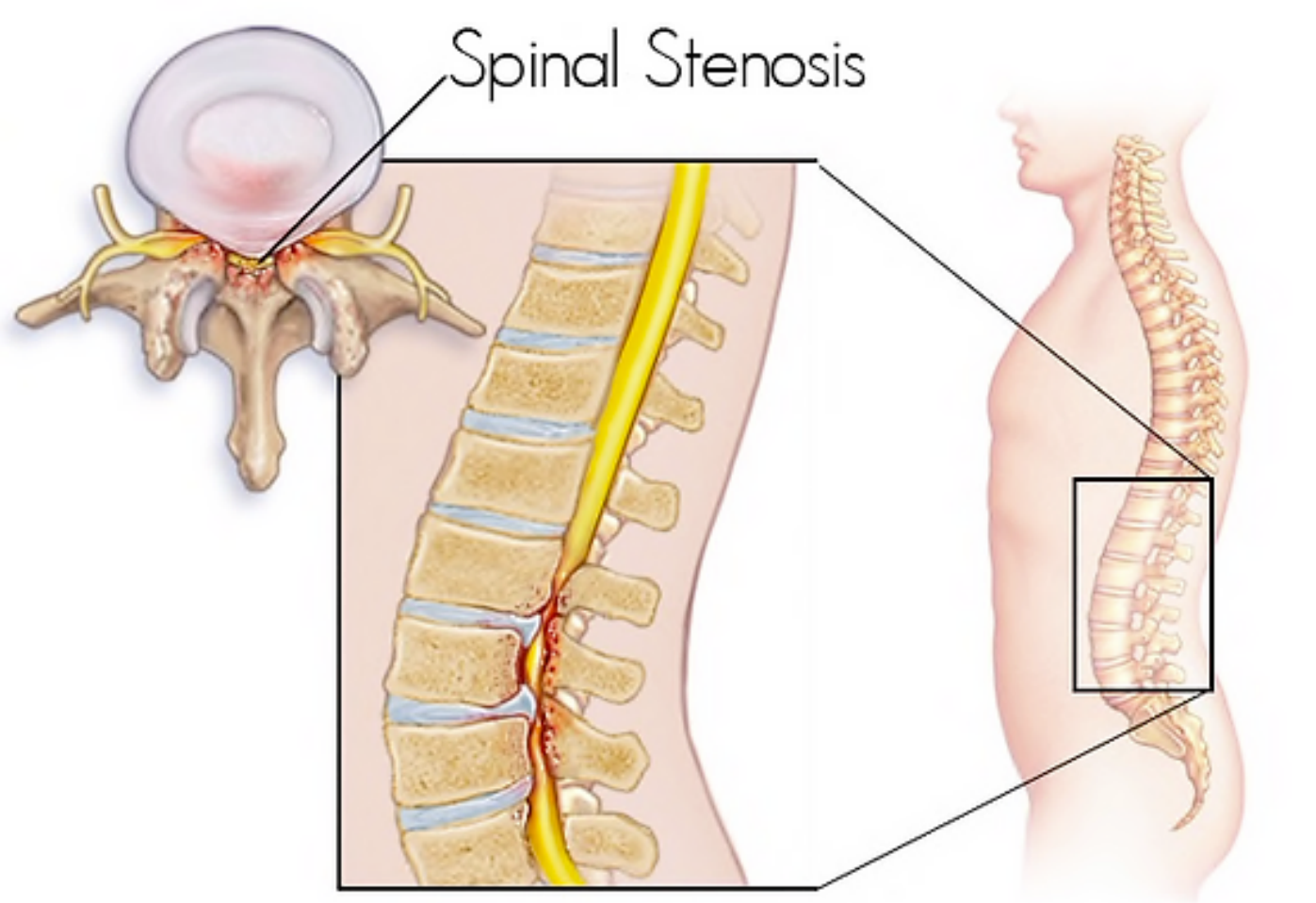
All other non-operative interventions provided insufficient quality evidence to make conclusions on their effectiveness.

EFFECTIVENESS OF NONSURGICAL TREATMENT METHODS FOR LUMBAR STENOSIS

OCTOBER 2023

Click for Full Text (Schneider et al. 2021)

This research compared clinical effectiveness of 3 nonsurgical interventions for patients with Lumbar Spinal Stenosis (LSS) The most common reason for spine surgery in older adults.



KEY FINDINGS

OCTOBER 2023

259 participants | 3-arm randomized clinical trial | 6-week intervention (Medical care, group exercise, & manual therapy/individualized exercise). w/ follow-up at 2 & 6 months.

Findings:

2 months:

Manual therapy/individualized exercise had greater

- Improvement of symptoms and physical function vs. medical care.
- Proportion of responders (≥30% improvement) in
  - Symptoms and physical function (20%) vs. medical care (7.6%)
  - Walking capacity (65.3%) vs. medical care (48.7%)
  - Group exercise (3.0%) vs. medical care (46.2%)

6 months:

No between-group differences in mean outcome scores or responder rates.

MAIN TAKEAWAYS

A combination of manual therapy/individualized exercise provides greater short-term improvement in symptoms and physical function and walking capacity than medical care or group exercises.

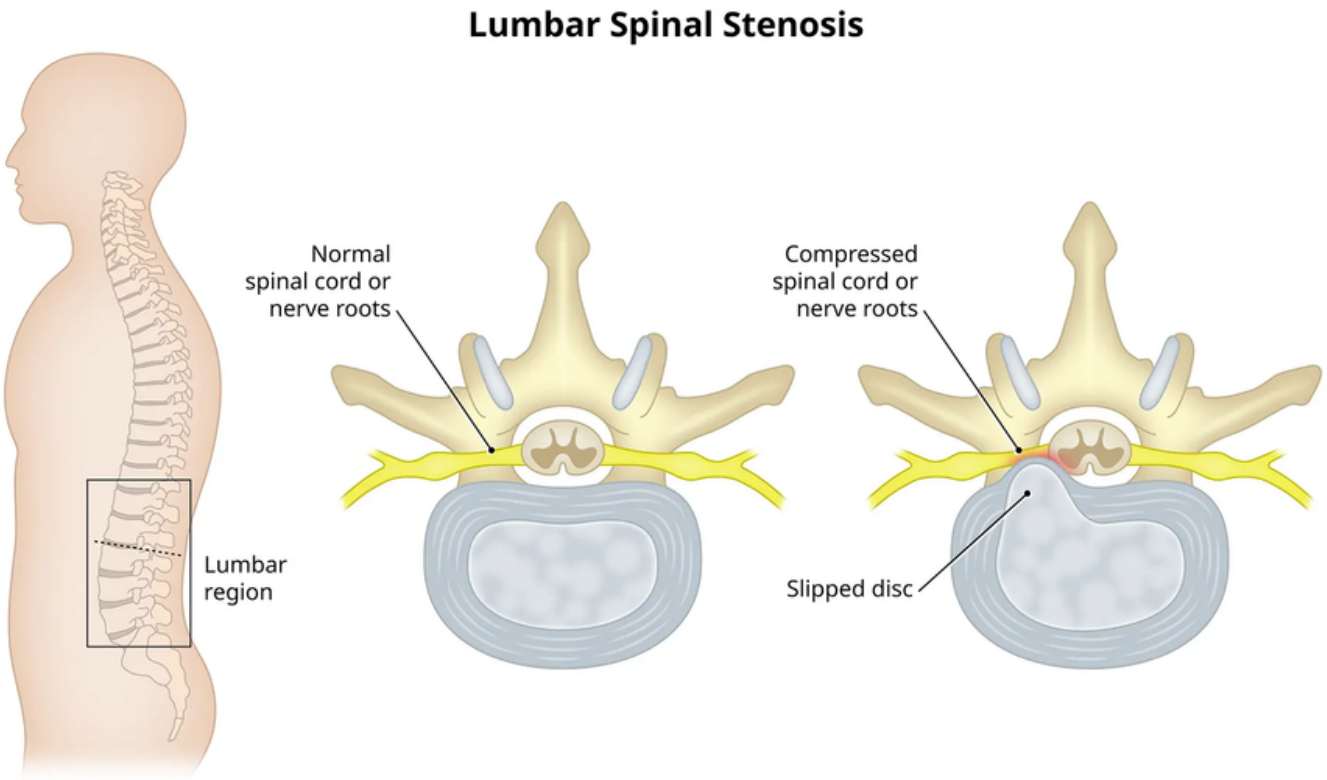
All 3 interventions were associated with improvements in long-term walking capacity.

CONSERVATIVE V. SURGICAL TREATMENT FOR LUMBAR STENOSIS

OCTOBER 2023

Click for Full Text (Zaina et al. 2017)

This study evaluated the effectiveness of different types of surgery compared with different types of non-surgical interventions in adults with symptomatic Lumbar Spinal Stenosis (LSS).



KEY FINDINGS

5 RCTs with 643 participants included.
Primary outcomes included:
quality of life, disability, function & pain at 6 months, 2 years, 5+ years.

Findings:
Direct decompression with or w/o fusion vs Non-operative care showed no significant differences at 6 mos and at 1 year. 2 yr favored surgery.

No difference in pain outcomes for decompression vs bracing and exercise at 3 mo, 4 yrs, and 10 yrs.

No difference at 6 wks in disability for decompression vs. steroid injection.

Adverse events (10%-24% of surgeries), including:
spinous process fracture, coronary ischaemia, respiratory distress, haematoma, stroke, risk of reoperation and death due to pulmonary edema.

MAIN TAKEAWAYS

We have very little confidence to conclude whether surgical treatment or a conservative approach is better for lumbar spinal stenosis, and we can provide no new recommendations to guide clinical practice.

However, it should be noted that the rate of side effects ranged from 10% to 24% in surgical cases, and no side effects were reported for any conservative treatment.

No clear clinical benefits were observed with surgery versus non-surgical treatment.

GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

Leave Review