

How the Straight Leg Raise and Crossed Straight Leg Raise Sign Influence Patient Reported Outcome Measures in Patients with a Lumbar Disc Herniation

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BACKGROUND

- Lumbar radiculopathy, most frequently due to a lumbar disc herniation (1), has an estimated prevalence of up to 43% (2) and is commonly assessed using the straight leg raise test (SLR) (3)
- The SLR test has a low specificity, limiting its diagnostic accuracy (4)
- The crossed SLR test (XSLR) is more specific (5), with a positive result indicative of a disc herniation (6)
- Combining multiple clinical tests with knowledge of a patient's psychosocial background, assessed using PROMs scores, improves diagnostic accuracy (7) and aids in selecting the best management plan for each patient

METHOD

- Inclusion criteria: Patients with an MRI-confirmed lumbar disc herniation who presented with LBP and lumbar radiculopathy
- Collected data: clinical examination outcome, level and side of disc prolapse, interventions, PROMs scores (VAS, ODI, EQ5D, GAD7, PHQ9, spinal surgery expectations)
- Statistical analysis was performed using SPSS

AIM

- To assess the significance of the outcome of the SLR and XSLR test on PROMs scores in patients with an MRI confirmed lumbar disc herniation

RESULTS

- 216 patients were included in this study (102 negative SLR (NSLR), 94 positive SLR, 20 positive SLR and XSLR)
- Patients with a positive clinical test on examination had 'worse' PROMs scores, with a positive XSLR sign associated with the 'worst' PROMs scores
- For each PROM, t-test analysis reported a significant difference between the NSLR and SLR groups and NSLR and XSLR groups ($P < .01$).

CONCLUSION

- PROMs scores indicating a lower health-related quality-of-life, increased levels of disability, pain, anxiety and depression and greater expectations are associated with a positive SLR or XSLR test.

References

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