

Stenosis/Spondylolisthesis/Extension dysfunction

*These patients will have pain with most extension movements (standing, walking, lying prone or supine with knees straight)

*It is important that the patient is able to perform a posterior pelvic tilt and maintain pelvic neutral in standing

*Segmental mobility tests of the sacrum and lumbar vertebrae should always be checked by the PT to assess for hypomobility; Hypermobility tests should also be performed.

Goals for treatment:

1. Patient will have a good understanding of positions and activities to avoid, symptom relieving positions and activities, pelvic neutral.
2. Increase lumbar flexion with joint mobilizations, soft tissue mobilization, and stretching.
3. Restore normal joint motion with mobilization of hypomobile segments and stabilization of hypermobile segments
4. Patient will be able to stand, walk and perform all functional activities in pelvic neutral position.

A. ROM: Sidelying flexion mobilizations to increase flexion.

B. Flexibility: Focus on stretching the lumbar erector spinae and iliopsoas, which will usually be tight with these patients. Work to ensure adequate flexibility of the hip musculature.

C. Soft tissue management: Mobilize soft tissue in lumbosacral region progressing from neutral to flexed position when tolerated.

D. Proprioception: Focus on pelvic tilts and maintaining a neutral pelvic/spine position progressing from supine or quadruped to standing and walking.

E. Strengthening: Strengthen lumbar and abdominal stabilizers.

F. ADL/Functional Activities: Educate and train for proper bending, standing, and lifting techniques.

G. Modalities: Use only if pt is unable to tolerate exercise or manual interventions secondary to pain (IFC with ice or heat)