



Day Two: Lumbar Spine / Low Back Examination - demystified

Content Summary

- Review and refine movement analysis, manual procedures, and exercise training practiced on day one
- Lumbar spine anatomy and as it relates to segmental mobility examination and treatment
- Movement analysis and reeducation for bending-related activities
- Interpret low back clinical findings consistent with the ICF-based clinical guidelines
- Lumbar spine segmental mobility examination and manipulative procedures
- Low back, trunk and pelvic region exercises associated with the diagnostic classifications

Knowledge to Review/Acquire Prior to Class

1. CPG Interactive Learning Module: Low Back Pain with Mobility Deficits
2. CPG-related Procedure Options – Low Back Labs – Handout & Videos 5.6 and 5.7
3. PhysioU app – Orthopaedics: Lumbar degenerative joint disease / facet syndrome
4. PhysioU app – Exercise Patterns: Back mobility exercise; Hip extension exercises

Selected References

Delitto A, Erhard RE, Bowling RW. A treatment-based classification approach to low back syndrome: identifying and staging patients for conservative treatment. *Phys Ther.* 1995;75(6):470-485

Delitto A, George SZ, Van Dillen L, Whitman JM, Sowa G, Shekelle P, Denninger TR, Godges JJ. Low back pain: a clinical practice guideline linked to the International Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. *J Orthop Sports Phys Ther.* 2012;42(4): A1-A57

George SZ, Fritz JM, Silfies SP, Schneider M, Beneciuk JM, Lentz TA, Gilliam JR, Norman KS. Interventions for the Management of Acute and Chronic Low Back Pain: Revision 2021. Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability and Health From the Academy of Orthopaedic Physical Therapy of the American Physical Therapy Association. *J Orthop Sports Phys Ther.* 2021;51(11):CPG1-CPG60.

Godges JJ, Norman KS, George SZ, Fritz JM, Silfies SP, Schneider M, Beneciuk JM, Lentz TA, Gilliam JR. Low back pain decision tree. *Orthopaedic Practice.* 2022;34:262-267.

Procedure Focus

Movement Analysis

- Standing Transverse Plane - Internal Rotation/External Rotation - Pelvis & Hip Symmetry
- Lumbar Sidebending Movement / Pain Relationships
- Lumbar Spine, Pelvic Girdle, and Lower Extremity Coordination with Bending Movements

Examination Procedures

- Transverse Plane Examination (ASIS Compression/Distract)
- Hip Rotational Mobility Examination
- Lumbar Sidebending and Quadrant Overpressures
- Unilateral PAs
- Transverse Process Assessment in Flexion & Extension

Manual Therapy

- Soft Tissue Mobilization and Contract/Relax Stretching
 - Posterior Gluteus Medius Myofascia
 - Multifidi/Segmental Myofascia
- Spinal Mobilization/Manipulation
 - Lumbopelvic Region Manipulation
 - Lumbar Sidebending/Rotation in Neutral
 - Lumbar Sidebending/Rotation in Extension

Exercise Training

- Transverse Plane Innominate Self-correction
- Hip Internal Rotation Stretching
- Hip External Rotation / Piriformis Stretching
- Lumbar Rotation Self-Mobilization