



Day Three: Lumbar Manipulation / Low Back Pain - diagnosis and management

Content Summary

- Review and refine movement analysis and manual procedures practiced on day two
- Lumbar spine anatomy and evidence as it relates to disc and nerve related disorders
- Review/integrate trunk/pelvis/hip movement analysis and reeducation for functional activities
- Discussion on somatic, referred, and radicular low back pain
- Refinement of lumbar manipulative procedures
- Identification of risk for low back-related long-term chronic pain and disability

Knowledge to Review/Acquire Prior to Class

1. CPG Interactive Learning Modules: Low Back Pain w/ Related (Referred) Lower Extremity Pain
Low Back Pain with Radiating Pain
2. CPG-related Procedure Options – Low Back Labs – Handout & Videos 5.5 and 5.8
3. PhysioU app – Orthopaedics: Lumbar disc disorder with lower extremity referred pain
Sciatica
4. PhysioU app – Exercise Patterns:
Back pain with related leg pain – Lateral shift & LB Extension exercises
Back pain with radiating pain – Back, hamstring, & nerve mobility ex's, Hip ER/Piriformis stretching

Selected References

George SZ. Characteristics of patients with lower extremity symptoms treated with slump stretching: a case series. *J Ortho Sports Phys Ther.* 2002;32:391-398.

O'Neill CW, Kurgansky ME, Derby R, Ryan DP. Disc stimulation and patterns of referred pain. *Spine.* 2002;27:2776-81.

Procedure Focus

Movement Analysis - Motor Control, Strength, & Endurance

- Trunk Flexors/Abdominals
- Trunk Sidebenders/Lateral Abdominals
- Trunk Extensors/Erector Spinae
- Trunk Rotators/Multifidi-Transverse Abdominis-Internal/External Obliques

Examination Procedures

- Repeated Movements Examination
- Sciatic Nerve Tension Testing
- Lower Quarter Neurological Status Exam
- Slump Test

Manual Therapy

- Soft Tissue Mobilization
 - Thoracolumbar Fascia
 - Multifidi/Segmental Myofascia
 - Psoas
- Spinal Mobilization/Manipulation
 - Lateral Shift Correction
 - Lumbopelvic Region Manipulation
 - Lumbar Sidebending/Rotation in Neutral
 - Lumbar Sidebending/Rotation in Extension
 - Lumbar Sidebending/Rotation in Flexion
 - PAs in Combined Movements - Extension
 - PAs in Combined Movements - Flexion

Exercise Training

- Trunk Motor Control, Strength, and Endurance Training