



Day Four: Buttock & Hip / Observational Gait Analysis

Content Summary

- Movement analysis and reeducation of walking
- Hip anatomy and evidence as it relates to examination and treatment
- Interpret hip clinical findings consistent with the ICF-based clinical guidelines
- Manual therapy for hip mobility deficits
- Therapeutic exercises for hip movement coordination impairments and mobility deficits

Knowledge to Review/Acquire Prior to Class

1. CPG Interactive Learning Modules: Non-Arthritic Hip Joint Pain
Hip Pain and Mobility Deficits/Hip Osteoarthritis
2. CPG-related Procedure Options – Hip Labs – Handout & Videos 6.2, 6.3, and 6.4
3. PhysioU app – Orthopaedics: Labral tear
Hip osteoarthritis
4. PhysioU app – Exercise Patterns:
Hip osteoarthritis – Hip stretching exercises
Thigh muscle strain & Hip pain with radiating pain – Hamstring and sciatic nerve mobility

Selected References

Cibulka MT, White DM, Woehrle J, Harris-Hayes M, Enseki K, Fagerson TL, Slover J, Godges JJ. Hip pain and mobility deficits - hip osteoarthritis: 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.* 2009;39(4): A1-A25 and 2017 Hip Osteoarthritis Clinical Practice Guideline Revision - *J Orthop Sports Phys Ther* 2017;47(6):A1-A37

Enseki K, Harris-Hayes M, White DM, Cibulka MT, Woehrle J, Fagerson TL, Clohisy JC. Nonarthritic hip joint 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.* 2014;44 (4):A1-A32

Martin RL, Cibulka MT, Bolgla LA, Koc Jr TA, Loudon JK, Manske RC, Weiss L, Christoforetti JJ, Heiderscheit BC, Voight M, DeWitt J. Hamstring Strain Injury in Athletes: Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability and Health From the Academy of Orthopaedic Physical Therapy and the American Academy of Sports Physical Therapy of the American Physical Therapy Association. *J Orthop Sports Phys Ther.* 2022;52(3):CPG1-44.

Procedure Focus

Movement Analysis

Walking - with a focus on spine inter-regional relations

Examination Procedures

Piriformis Stretch Test and Palpation/Provocation

Mobility and Muscle Flexibility: Hip Flexion
 Hip Internal Rotation
 Hip External Rotation
 Hip Abduction
 Hip Extension

Lower Limb Nerve Mobility

Resistive and Stretch Tests: Lateral Hamstring
 Medial Hamstrings
 Hip Adductors
 Rectus Femoris

Manual Therapy

Soft Tissue Mobilization and Contract/Relax Stretching:

 Piriformis, Gluteus Maximus & Medius, and the other Hip External Rotators

Joint Mobilization:

 Hip Flexion Mobilization with Movement
 Hip Internal Rotation Mobilization with Movement
 Femoral Anterior Glides

Exercise Training

 Hamstring/Sciatic Nerve Mobility Exercises
 Hip Stretching (Extension, Flexion, External Rotation, Internal Rotation)
 Buttock and Thigh Motor Control, Strength and Endurance Training