



## **Day Nine: Cervical Spine / Manual Therapy and Exercise for Cervicogenic Headache**

### Content Summary

- Review and refine movement analysis and manual procedures practiced on day seven and eight
- Upper cervical spine anatomy and mechanics as it relates to head and neck movements and pain
- Interpret head and neck clinical findings consistent with the ICF-based clinical guidelines
- Manual therapy to address upper cervical mobility impairments
- Therapeutic exercises for head and neck movement coordination impairments and mobility deficits

### Knowledge to Review/Acquire Prior to Class

1. CPG Interactive Learning Module: Concussion & Mild Traumatic Brain Injury
2. CPG-related Procedure Options – Neck Labs – Handout & Videos 2.4, 2.5, and 2.6

### Selected References

Jull G, Trott P, Potter H, Zito G, Niere K, Shirley D, Emberson J, Marschner I, Richardson C. A randomized controlled trial of exercise and manipulative therapy for cervicogenic headache. *Spine*. 2002;27:1835-1843.

Quatman-Yates CC, Hunter-Giordano A, Shimamura KK, Landel R, Alsalaheen BA, Hanke TA, McCulloch KL. Physical Therapy Evaluation and Treatment After Concussion/Mild Traumatic Brain Injury: Clinical Practice Guidelines Linked to the International Classification of Functioning, Disability and Health From the Academy of Orthopaedic Physical Therapy, American Academy of Sports Physical Therapy, Academy of Neurologic Physical Therapy, and Academy of Pediatric Physical Therapy of the American Physical Therapy Association. *J Orthop Sports Phys Ther*. 2020;50(4):CPG1-73.

## Procedure Focus

### Movement Analysis

- Head and neck positional symmetry with daily activities
- Upper cervical mobility and movement/pain relations

### Manual Therapy

- Vertebrobasilar Insufficiency Evaluation
- Alar Ligament Integrity Test
- Sharp-Purser Ligament Integrity Test
- Suboccipital Myofascia Soft Tissue Mobilization
- C1 Lateral Translation
- C1 Anterior Glide/Occiput Posterior Glide
- Occiput/C1 Contract/Relax of Segmental Extensors and Sidebenders
- Occipital Distraction
- C1/C2 Contract/Relax
- C1/C2 Rotation

### Exercise Training

- Upper Cervical Self Mobilizations / Neck Self SNAGs
- Deep Neck Flexor Training
- Deep Neck Extensor Training