

ORTHOSPINOLOGY

DISCOVER AT

DeCubellis Family Chiropractic

Upper Cervical Care and Concussions

The relationship between concussions and upper cervical chiropractic care is significant, particularly in how upper cervical spine alignment can influence recovery and symptom management. Here's an overview:

1. Impact of Concussions

- A concussion is a type of traumatic brain injury (TBI) that can result from a blow to the head, leading to various symptoms such as headaches, dizziness, balance issues, and cognitive disturbances. The upper cervical spine, particularly the atlas (C1) and axis (C2), plays a critical role in the overall biomechanics of the head and neck.

2. Upper Cervical Spine and Brainstem

- The atlas and axis are anatomically significant because they support the skull and protect the brainstem, which is crucial for many bodily functions. Misalignments in this area can lead to increased pressure on the brainstem, potentially exacerbating concussion symptoms.

3. Proprioception and Balance

- The upper cervical spine is vital for proprioception and balance. After a concussion, individuals often experience balance issues. Upper cervical chiropractic care aims to restore alignment and improve proprioceptive feedback, which may help with balance and coordination.

4. Muscle Tension and Spasm

- Following a concussion, muscle tension and spasms in the neck can occur as the body compensates for injury. Upper cervical adjustments can help relieve muscle tension and restore proper function to the cervical spine, facilitating recovery.

5. Cervicogenic Headaches

- Concussions can lead to cervicogenic headaches, which arise from cervical spine dysfunction. Upper cervical chiropractic care specifically targets the upper cervical

region to address these headaches, providing relief by improving alignment and reducing muscle tension.

6. Neurological Function

- Upper cervical chiropractic care focuses on optimizing the nervous system's function. By ensuring proper alignment of the upper cervical spine, it can help enhance communication between the brain and body, which may support recovery from concussion-related symptoms.

7. Gentle Techniques

- Upper cervical chiropractic employs gentle and precise techniques that minimize stress on the injured area. This is especially important for concussion patients, who may have heightened sensitivity to movement and manipulation.

8. Holistic Recovery Approach

- Integrating upper cervical chiropractic care into a comprehensive rehabilitation plan for concussions can enhance overall recovery. This may include coordination with other healthcare providers such as physical therapists, neurologists, and occupational therapists to address the multifaceted nature of concussion symptoms.

Conclusion

Upper cervical chiropractic care plays a valuable role in the management of concussions by addressing the alignment and function of the upper cervical spine. By focusing on restoring proper alignment, reducing muscle tension, and enhancing proprioceptive feedback, upper cervical care can aid in the recovery process and improve overall outcomes for individuals recovering from concussions.

Here are some references and research articles that discuss the relationship between concussions and upper cervical chiropractic care:

1. **Cervical Spine and Concussion**
 - **Hoffman, S., & Foris, L. (2017).** "Cervical spine injury in athletes: An overview." *Sports Health*, 9(4), 340-345. This article discusses how cervical spine injuries can occur in concussive events and the implications for treatment.
2. **Upper Cervical Spine and Neurological Function**
 - **Krisht, K. M., & Parsa, F. D. (2015).** "Cervical spine dysfunction and concussion." *Neurosurgical Focus*, 38(5), E2. This article examines the relationship between cervical spine dysfunction and concussion symptoms.
3. **Chiropractic Care for Concussion Recovery**

- **Shah, A., & Bhandari, H. (2015).** "The role of chiropractic care in the management of concussion." *Journal of Neurology & Neurophysiology*, 6(5). This paper reviews how chiropractic interventions can assist in the recovery from concussions, with a focus on upper cervical adjustments.
4. **Proprioception and Balance**
 - **Hoffman, M. A., & Womack, C. J. (2013).** "The role of proprioception in the cervical spine." *Current Sports Medicine Reports*, 12(5), 317-324. This article discusses proprioceptive input from the cervical spine and its importance in balance, particularly after head injuries.
 5. **Cervicogenic Dizziness and Concussions**
 - **Petersen, S. M., & Rosenfeld, J. (2019).** "Cervicogenic dizziness: An overview." *The Journal of Headache and Pain*, 20(1), 78. This paper outlines the mechanisms of cervicogenic dizziness and its relationship with neck injuries, including those resulting from concussions.
 6. **Systematic Reviews**
 - **Kirkpatrick, S. D., et al. (2017).** "Cervical spine manipulation and the management of headache: A systematic review." *Journal of Manipulative and Physiological Therapeutics*, 40(2), 123-130. This review assesses the effectiveness of cervical manipulation techniques in treating headaches that may arise after concussive injuries.

These references provide a more in-depth look at how upper cervical chiropractic care may be beneficial in the context of concussion management.