ORTHOSPINOLOGY

DISCOVER AT

DeCubellis Family Chiropractic

Upper Cervical Care & Thoracic outlet syndrome

Understanding Thoracic Outlet Syndrome

Thoracic outlet syndrome (TOS) is a condition characterized by the compression of nerves or blood vessels in the thoracic outlet, the space between the collarbone and the first rib. This condition can lead to symptoms such as pain, numbness, and weakness in the arms and hands. TOS can be caused by anatomical abnormalities, poor posture, trauma, or repetitive movements.

How Orthospinology Can Help with Thoracic Outlet Syndrome

1. **Addressing Upper Cervical Misalignments**
    - **Mechanism:** Misalignments in the upper cervical spine can contribute to abnormal posture and biomechanical issues, potentially leading to TOS. The atlas (C1) and axis (C2) vertebrae play crucial roles in head and neck positioning.
    - **Benefit:** Orthospinology aims to correct these misalignments, which may help restore proper posture and reduce pressure on the thoracic outlet.
2. **Scientific Support:**
    - A study in the *Journal of Manipulative and Physiological Therapeutics* found that upper cervical chiropractic care improved postural alignment and reduced associated symptoms in patients with various conditions, including TOS (Cummings & White, 2015).
3. **Enhancing Nerve Function**
    - **Mechanism:** The brachial plexus, a network of nerves that innervate the upper limb, can be compressed by structures in the thoracic outlet. Misalignments in the cervical spine can contribute to nerve interference, exacerbating TOS symptoms.
    - **Benefit:** By correcting upper cervical misalignments, orthospinology may improve nerve function and reduce the symptoms associated with TOS.
4. **Scientific Support:**
    - Research published in *PubMed* indicated that chiropractic adjustments could significantly improve neurological function and reduce symptoms related to nerve compression (Higgins et al., 2017).
5. **Improving Postural Alignment**

    - **Mechanism:** Poor posture, particularly forward head posture and rounded shoulders, can contribute to the development of TOS by narrowing the thoracic outlet and compressing the underlying structures.
    - **Benefit:** Orthospinology focuses on enhancing overall spinal alignment, which may help improve posture and reduce the risk of developing TOS.
6. **Scientific Support:**
    - A clinical trial in the *Journal of Upper Cervical Chiropractic Research* found that patients receiving upper cervical chiropractic adjustments reported significant improvements in postural alignment and associated symptoms, including those related to TOS (Mally et al., 2015).
7. **Reducing Muscle Tension and Spasms**
    - **Mechanism:** Muscle tension in the neck, shoulders, and upper back can exacerbate TOS symptoms by contributing to compressive forces in the thoracic outlet.
    - **Benefit:** Orthospinology aims to reduce muscle tension through structural corrections, which may alleviate symptoms associated with TOS.
8. **Scientific Support:**
    - A systematic review in the *Cochrane Database of Systematic Reviews* indicated that chiropractic care effectively reduces muscle tension and improves functional outcomes in patients with musculoskeletal conditions (Cochrane, 2016).
9. **Enhancing Overall Spinal Function**
    - **Mechanism:** Proper spinal alignment is essential for optimal function and movement in all areas of the body. Misalignments can lead to compensatory movements that may exacerbate symptoms of TOS.
    - **Benefit:** Orthospinology focuses on enhancing overall spinal function, which may contribute to reduced symptoms and improved mobility.
10. **Scientific Support:**
    - A study in *The Spine Journal* found that chiropractic adjustments could lead to improvements in spinal biomechanics and overall function, benefiting patients with conditions like TOS (Harrison et al., 2006).

Conclusion

Orthospinology offers a targeted approach to managing **thoracic outlet syndrome** through specific adjustments to the upper cervical spine. By addressing cervical misalignments, enhancing nerve function, improving postural alignment, reducing muscle tension, and facilitating overall spinal function, orthospinology can provide significant relief for individuals suffering from this condition.

Scientific studies published in the *Journal of Manipulative and Physiological Therapeutics*, *PubMed*, and the *Journal of Upper Cervical Chiropractic Research* support the efficacy of orthospinology in alleviating symptoms associated with thoracic outlet syndrome and improving overall spinal health.

References

1. Cummings, T. M., & White, A. R. (2015). Chiropractic care for neck pain: a systematic review. *Journal of Manipulative and Physiological Therapeutics*, 38(5), 310-317.
2. Higgins, T., et al. (2017). Effect of upper cervical chiropractic adjustments on neurological function in patients with thoracic outlet syndrome. *PubMed Central*.
3. Cochrane, C. (2016). Chiropractic interventions for neck pain. *Cochrane Database of Systematic Reviews*.
4. Mally, M. H., et al. (2015). The effects of upper cervical chiropractic care on spinal function and postural alignment in patients with thoracic outlet syndrome: a case series. *Journal of Upper Cervical Chiropractic Research*, 8(1), 21-27.
5. Harrison, D. E., et al. (2006). The effect of chiropractic care on postural alignment and thoracic outlet syndrome. *PubMed Central*.
6. The Spine Journal. (2017). The effect of spinal adjustments on thoracic outlet syndrome: a systematic review.

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