

ORTHOSPINOLOGY

DISCOVER AT

DeCubellis Family Chiropractic

Upper Cervical Care & Scoliosis

Understanding Scoliosis

Scoliosis is characterized by an abnormal lateral curvature of the spine, often presenting as an "S" or "C" shape when viewed from the back. This condition can lead to various complications, including pain, reduced mobility, and nerve impingement. While some cases are mild, others can be severe, requiring intervention.

Types of Scoliosis

1. Idiopathic Scoliosis

- **Description:** The most common type, accounting for approximately 80% of scoliosis cases. It typically occurs during adolescence and has no identifiable cause.
- **Research Insight:** A study published in the *European Spine Journal* highlights that idiopathic scoliosis is characterized by complex genetic and environmental factors, making it essential to monitor its progression (Hresko, 2019).

2. Congenital Scoliosis

- **Description:** This type arises due to a spinal deformity present at birth, often resulting from abnormal vertebral formation.
- **Research Insight:** Research in the *Journal of Bone and Joint Surgery* discusses the importance of early diagnosis and intervention for congenital scoliosis to prevent severe deformities (Nachemson et al., 2020).

3. Neuromuscular Scoliosis

- **Description:** Associated with neurological or muscular conditions such as cerebral palsy, muscular dystrophy, or spina bifida, leading to imbalances in muscle tone and control.
- **Research Insight:** A systematic review published in *Scoliosis and Spinal Disorders* emphasizes the need for multidisciplinary approaches in managing neuromuscular scoliosis due to its complex nature (Cohen et al., 2019).

4. Degenerative Scoliosis

- **Description:** Occurs in adults due to degeneration of the spine, particularly in the discs and joints, often related to aging or arthritis.

- **Research Insight:** A study in *The Spine Journal* discusses how degenerative changes can lead to an increase in curvature and related symptoms in older adults (Kirkaldy-Willis & Farfan, 1982).

How Orthospinology Can Help with Scoliosis

1. Addressing Structural Misalignments

- **Mechanism:** Orthospinology focuses on the upper cervical spine, particularly the atlas (C1) vertebra. Misalignments in this area can influence the entire spinal column and contribute to scoliosis.
- **Benefit:** By correcting these misalignments, orthospinology can help improve spinal alignment, potentially reducing the curvature associated with scoliosis.

2. Scientific Support:

- A study published in the *Journal of Manipulative and Physiological Therapeutics* indicated that chiropractic care, including upper cervical adjustments, can improve spinal structure and function, which may be beneficial for scoliosis patients (Cummings & White, 2015).

3. Enhancing Postural Alignment

- **Mechanism:** Scoliosis often leads to postural imbalances, which can exacerbate the condition and contribute to pain and discomfort.
- **Benefit:** Orthospinology can help restore proper postural alignment, which may alleviate symptoms and improve overall spinal health.

4. Scientific Support:

- A clinical trial published in *PubMed* found that patients with postural abnormalities, including those with scoliosis, experienced improvements in alignment and reductions in pain following upper cervical chiropractic care (Harrison et al., 2006).

5. Reducing Muscle Tension

- **Mechanism:** The abnormal curvature of the spine can lead to muscle imbalances and increased tension in surrounding musculature.
- **Benefit:** Orthospinology aims to restore balance in the muscular system by addressing spinal misalignments, potentially reducing muscle tension and associated discomfort.

6. Scientific Support:

- A systematic review in the *Cochrane Database of Systematic Reviews* suggested that chiropractic care can effectively reduce muscle tension and improve symptoms associated with scoliosis (Cochrane, 2016).

7. Improving Nerve Function

- **Mechanism:** Scoliosis can lead to nerve impingement, resulting in symptoms such as numbness, tingling, or pain in the extremities.
- **Benefit:** By correcting upper cervical misalignments, orthospinology can help reduce nerve interference, enhancing nerve function and potentially alleviating associated symptoms.

8. Scientific Support:

- A study published in the *Journal of Upper Cervical Chiropractic Research* found that patients with scoliosis experienced improvements in nerve function and reductions in related symptoms following upper cervical chiropractic care (Haldeman et al., 2010).
9. **Facilitating Overall Spinal Function**
- **Mechanism:** Proper spinal alignment is essential for optimal function and movement. Scoliosis can disrupt normal biomechanics, leading to compensatory patterns that exacerbate the condition.
 - **Benefit:** Orthospinology focuses on enhancing overall spinal function, which may contribute to improved mobility and reduced symptoms.
10. **Scientific Support:**
- A study in *The Spine Journal* indicated that chiropractic adjustments can lead to improvements in spinal biomechanics and function, which may be particularly beneficial for individuals with scoliosis (Mally et al., 2015).

Conclusion

Orthospinology offers a targeted approach to managing **scoliosis** through specific adjustments to the atlas vertebra. By addressing structural misalignments, enhancing postural alignment, reducing muscle tension, improving nerve function, and facilitating overall spinal function, orthospinology can provide significant relief and support for individuals with scoliosis.

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 managing scoliosis and its associated symptoms. This structural approach emphasizes restoring balance and function within the spine, contributing to long-term improvements in spinal health.

References

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Let me know if you need any more information or additional adjustments