

# Myofascial and Articular Approach to Treatment of Children and Adolescents Developing Idiopathic Scoliosis

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**BACKGROUND:** Causes of Adolescent Idiopathic Scoliosis (AIS) remain obscure, despite agreement that heredity plays a role [1]. Muscular research has focused almost entirely on paraspinal muscles [2]. A few clinicians identify asymmetrical muscle tension at some angle to the spine that distorts spinal alignment [3]. No reports were found that elaborate the fascia, specifically the fascial spiral, as a factor in development and treatment of AIS.

**METHODS:** Twenty-two children and adolescents developing AIS were treated over 15 years in the normal course of patient care. Length of care ranged from 4 months to 6 years. Striking common patterns of asymmetrical myofascial tension and joint dysfunction were identified and treated. Myofascial trigger point release and Fascial Manipulation™ were performed with the patient seated, sidelying, prone, and supine. Osseous manipulation, muscle energy, and activator were used to treat joint dysfunction. Exercises and orthoses/supports were used to reduce asymmetrical stresses on the spine.

**RESULTS:** A fascial spiral was the unifying pattern: tension extending from asymmetrical pronation of ankles to the twisted pelvis, crossing the spine to tether the rib cage hump. Increased fascial tension correlated with increased curvature. Graphs document ligamentous laxity and common patterns of myofascial and joint dysfunction [Figures 3,4,5]. Treatment of asymmetrical myofascial tension, and associated joint dysfunction often results in decreased curvatures reduced rib humps.

[Figures 6-13]. Figures 3-13: link: <http://stretchatwork.com/abstract/abstract.html#fig3>].

**CONCLUSIONS:** Results indicating successful treatment of AIS by treating asymmetrical myofascial tension are encouraging. Further research is important to illuminate the role of myofascial asymmetry and other factors in the development of AIS. **REFERENCES:**

1. Machida M. Cause of Idiopathic Scoliosis. Spine 24: 2576-2583, 1999.
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3. Otman S, Kose N, Yakut Y. The efficacy of Schroth's 3-dimensional exercise therapy in the treatment of adolescent idiopathic scoliosis in Turkey. Saudi Med J 26(9): 1429-1435, 2005.

