

Changes in clinical and radiographic parameters after a two-week regimen of chiropractic manipulation combined with soft tissue therapy and neuromuscular rehabilitation in 7 adult idiopathic scoliosis patients

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BACKGROUND

The term Adult Idiopathic Scoliosis (Adult IS) is used to describe any lateral spinal curvature of unknown origin in a person greater than 18 years of age. Although the majority of curvatures progress in adulthood, the rate generally slows and seldom increases. While spontaneous improvement has never been reported in any study involving skeletally mature patients, this does not mean that scoliosis in an adult is permanent, or that their quality of life cannot improve.

Presented is a review of files chronicling the results of a novel two-week regimen of chiropractic manipulation combined with soft tissue therapy and neuromuscular rehabilitation in 7 patients with adult idiopathic scoliosis.

CASE PRESENTATION

Patient population

The authors conducted a retrospective review of 7 consecutive case files of patients (2 males, 5 females; median age 29 years) with adult idiopathic scoliosis who presented for treatment between 1-1-2011 to 1-1-2012 at a private practice in Dallas, Texas. All cases were initially diagnosed in adolescence.

Clinical and radiological outcomes

Primary clinical outcome measures included digital spirometry;³¹ scoliometry³² in Adam's position at T6, T12, and L3; timed one-legged stability with eyes closed (TOLSWEC);³³ and, computerized dual inclinometry.

Primary radiographic measurements included Cobb angle, vertebral rotation,^{34,35} and apical lateral deviation.³⁶

Questionnaires included Visual Analogue Scale (VAS) at pre- and post-treatment, the RAND SF-36 pretreatment and at follow-up, and SRS-22³⁷ at follow-up.

Procedure

Radiographs were taken to obtain the cervicodorsal, thoracic, and/or lumbar Cobb angle(s), and for treatment purposes. Each patient underwent twenty treatment sessions over a two week period (2 times day/five days) for an average length of 180 minutes/session.

Treatment sessions were divided into three phases. The first phase of treatment addressed soft tissue deformations and improving spinal flexibility, the second phase influenced spinal biomechanics, and the third impacted neuromuscular function.