

# Chiropractic Care (CSMT) and "The Aging Spine"

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## Abstract

A retrospective, single case study of a postmenopausal patient is presented below. The approach to chiropractic care was based on the chiropractic premise that discarthrosis of the dorsal and lower cervical spine is accompanied by a restriction of the intervertebral movement, and that amplitude of the intervtebral movements is increased after CSMT in the aging spine.

## Introduction

The patient is a 73-year-old postmenopausal female who presented with severe vortex head pain, suboccipital pain, and bilateral upper trapezium pain. Headache onset was approximately four years prior and a recent onset (two weeks) of bilateral shoulder pain prompted her to schedule an appointment. She reported some limited success with a prescribed "migraine medication." Incidentally, she had undergone chiropractic care "all her life" until four years ago, when she reportedly outlived her previous chiropractor.

Review of past medical history was negative for surgeries or osteoporosis (recent DexaScan revealed patient at top 10 percent of age group) or inflammatory arthropathies. The patient's goal in therapy was chiropractic spinal manipulative therapy (CSMT) for curative pain relief. Radiographic review of the cervical spine failed to yield any significant osteopathology, and chiropractic examination failed to yield any relative contraindications to cervical CSMT.

Radiographic review of the thoracic spine yielded dorsal 4 thru 7 with osteophyte processes and increased kyphotic curvature. Dorsal 5 yielded a wedge-type vertebra. Postural examination yielded a markedly anterior head carriage, reduction in statue appearance and increase in the anteroposterior curvature of the dorsal spine. Dorsal and cervical fixations with hypomobile joint play were demonstrated on motion palpation study. Active range of cervical and dorsal motion yielded marked limitations; extension was greatly reduced.

## Discussion

In the cervical spine in particular, adjustments bring about an increased distribution of intervertebral movement in the sagittal, frontal and transverse planes. Reduction of joint mobility in this case is not necessarily due to arthritic changes; it is a common manifestation of aging. The gravitational requirement in a weight-bearing or orthostatic position may lead to decomposition, coupled with poor soft-tissue-supporting structures, and may increase a physiological or even pathological curvature. The aging spine of a postmenopausal patient may generally be observed as a hyperkyphotic dorsal spine. Osteoporosis may contribute to wedge-type spontaneous fracture of the dorsal region or anterior end plate and require radiographic screening to rule out this pathology. This is a "medical necessity" prior to provisions of CSMT of an osteoporotic spine. The dorsal hyperkyphotic is accompanied by a compression of the thoracic cage fixed in expiration, and a cervical hyperlordosis or forward projection of the head and neck.

A global disturbance in the spinal statics is known in chiropractic to first have a regional presentation (such as headache symptoms), and then that static or postural fault in turn may hasten the development of local degenerative pathology and dorsal hyperkyphosis.

In aging patients (I use the term "seasoned" in my office), the therapeutic key for those exhibiting these tendencies is in improving the static or postural fault in the dorsal hyperkyphosis as primary, and where intervertebral and costovertebral movements are restricted.

Adjustments of the dorsal aging spine may not be comfortable in the prone position; hence, a supine position with head elevated at 30 degrees may be more comfortable. The fulcrum of the intervertebral movement being located in the posterior joints, the vertebrae is forced into extension. As a result of the increased elasticity or suppleness of the dorsal spine toward extension, the aging patient will be able to straighten him/herself up again.

Mobilization preformed by a therapist, or even the patient, may restore some degree of extension of the dorsal spine. CSMT does not straighten the spine, but allows the patient to actively utilize the extensor muscles. However, only CSMT, the passive maneuver carried beyond the static barrier of resistance, will permit the dorsal spine to recuperate to the maximum range of extension.

The frequency and duration of the CSMT depend on the chiropractic provider's findings at the time of examination; however, with adhesive development or shortening of the anterior longitudinal ligament (ALL), multiple adjustive therapy sessions should be arranged.

This 73-year-old patient completed approximately 12 chiropractic care sessions; eight focused only on the dorsal spine for CSMT, while the remaining four focused on the cervical spine, once dorsal pain improved. The provider's goal was not to aggravate any pain spasm pain cycle by adjusting a compensatory region.

The patient completed initial pain care with follow-up at six weeks, and was scheduled for rehabilitative care once every 3-4 weeks over the next three months. She did not require any prescription migraine control after her initial session.

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