

Frequency & Duration of Chiropractic Care for Headaches, Neck and Upper Back Pain

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ABSTRACT

Objective: To determine the validity of claims that headaches, neck pain, and upper back pain should resolve in 6 to 12 visits with Spinal Manipulative Therapy (SMT) or Mobilization and to derive an evidence-based Frequency and Duration program for these conditions.

Methods: Searches were performed in PubMed, CINAHL, Mantis, and the Index of Chiropractic Literature (ICL) for Randomized Clinical Trials (RCTs) on headaches, neck pain, and upper back pain for which the treatment was SMT and/or Mobilization. From these headaches, neck pain, and upper back pain RCTs, pain data, the number of subjects and the number of visits were analyzed.

Results: Fifty-four RCTs with SMT and/or Mobilization as the treatment for headaches, neck pain, cervicobrachial pain and/or upper back pain were located. Seven of these were follow-up studies, which resulted in 47 RCTs to be analyzed. The total NRS data indicated only a 46.5% improvement in 7.7 average

visits. Using a constant linear extrapolation of dose response in these studies, a mean of 17 visits was needed to resolve headaches, neck pain and upper back pain. Using an initial examination visit, linearly extrapolated visits, once per week stabilization care for 4 weeks, and 2 follow-up examination visits, a provided 24 visits were needed to document, stabilize, and resolve the average headache, neck pain, cervicobrachial pain, and/or upper back pain case.

Conclusions: Pain data from RCTs did not support claims of restricting Chiropractic care to 6-12 visits for headaches, neck pain, cervicobrachial pain, and/or upper back pain. In fact, assuming a constant linear dosage response, the data indicated a minimum of 24 visits on average would be needed to document, resolve, and stabilize these conditions.

Key Words: *Chiropractic, headaches, neck pain, upper back pain, spinal manipulation, spinal manipulative therapy, mobilization, randomized clinical trials, frequency, duration*

Introduction

The economic burden due to neck disorders is second only to low back pain in workers' compensation costs in the United States and other developed countries.¹ It has been reported that neck disorders are rising and that 54% of the population has experienced neck pain within the past six months.^{2,4}

In the past 20 years, Osteopaths, Physical Therapists, and Medical Manual Therapists have utilized Chiropractic type manual methods to treat neck pain patients. These manual methods are described as "high-velocity low-amplitude" spinal manipulation therapy (SMT).

However, there is also the technique of "mobilization manipulation," which composes a multitude of passive movements to the spinal joints and soft tissues utilized by PTs and DCs.⁵

The risks for serious complications from SMT and Mobilization applied to the cervical spine such as vertebrobasilar arterial insufficiency (VBAI) has been reported to be extremely low at about 6 in 10 million or 0.00006%.⁶ In fact, in a 2008 report of 818 strokes in Ontario hospitals from 1993 to 2002, Cassidy et al.⁷ stated that they found "no evidence of excess risk of vertebrobasilar artery stroke associated with chiropractic care compared to primary care."

It has been suggested that uncomplicated "Mechanical Neck Pain" might be the safest situation in which SMT and

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