

Neck Pain Task Force Releases Findings

AMONG THE COMPREHENSIVE FINDINGS IS THE GROUNDBREAKING STUDY ON VERTEBRAL ARTERY DISSECTION AND STROKE RISK.

Kathryn Feather

After six years and an exhaustive review of published neck pain research, including almost 32,000 research citations and more than 1,000 relevant studies, the Bone and Joint Decade 2000-2010 Task Force on Neck Pain has released its findings, which address prevention, diagnosis, treatment and management of neck pain, in a special supplement of the journal *Spine*.

The task force also conducted several original studies, including "Risk of Vertebrobasilar Stroke and Chiropractic Care: Results of a Population-Based Case-Control and Case-Crossover Study." According to the task force, their findings suggest the risk of suffering a stroke following a cervical manipulation is attributable to a vertebral artery dissection (VAD) that is already in progress prior to the adjustment. The dissection likely results in neck pain that brings the patient to the chiropractor's office seeking relief.

The authors also documented only a handful of stroke cases following chiropractic cervical manipulation in a massive study population spanning nearly 100 million person-years. Even more impressive, the data suggest that while spinal manipulation may increase the risk of an embolism in those with a VAD in progress, which can then lead to a stroke, the association between the stroke and the office visit was no higher in patients who sought the care of a chiropractor than in patients who sought the care of a general physician.

The study results were released confidentially at the May 2007 WFC Biennial Congress in Portugal and were subsequently presented at several other national venues, including the Florida Chiropractic Association National Convention & Expo in August 2007 and the World Congress on Neck Pain, held in Los Angeles last month.

Task Force Findings: Executive Summary

According to the summary by Scott Haldeman, DC, MD, PhD; Linda Carroll, PhD; J. David Cassidy, DC, PhD, DrMedSc; Jon Schubert, CMA; and Ake Nygren, DDS, MD, DrMedSc, "Members of the Neck Pain Task Force feel that the most productive use of this review is to inform and empower the public - more specifically, people with neck pain or who are at risk of developing neck pain. The most valuable outcome and contribution will be a change of attitudes and beliefs about neck pain and its prevention, diagnosis, treatment and management."

The task force hopes to promote a new conceptual model for neck pain. According to the executive summary, "The model is centered on persons with neck pain or who are at risk for neck pain. The model describes neck pain as an episodic occurrence over a lifetime with variable recovery between episodes. It outlines the options available to deal with neck pain; the factors that determine available options, choices and consequences; and the short-and long-term impacts of neck pain."

The task force also developed a new classification system for evaluating the severity of neck pain. The grading system is intended to help in the clinical environment and in the interpretation of scientific evidence.

- Grade I: No signs or symptoms suggestive of major structural pathology and no or minor interference with activities of daily living; will likely respond to minimal intervention such as reassurance and pain control; does not require intensive investigations or ongoing treatment.
- Grade II: No signs or symptoms of major structural pathology, but major interference with activities of daily living; requires pain relief and early activation/intervention aimed at preventing long-term disability.
- Grade III: No signs or symptoms of major structural pathology, but presence of neurologic signs such as decreased deep tendon reflexes, weakness, and/or sensory deficits; might require investigation and, occasionally more invasive treatments.
- Grade IV: Signs or symptoms of major structural pathology, such as fracture, myelopathy, neoplasm, or systemic disease; requires prompt investigation and treatment.

Included in the supplemental issue of *Spine* are more than a dozen papers that provide the clinician with valuable information on the prevention, diagnosis, treatment and management of neck pain.

Abstract summaries are reproduced as follows:

- A New Conceptual Model of Neck Pain: Linking Onset, Course and Care. "Based on extensive multidisciplinary review and discussion of scientific literature, the authors propose a new model for conceptualizing the onset, course and care of neck pain. The model outlines the options available to the person dealing with neck pain; factors that determine available options, choices and consequences; and the short- and long-term impacts of neck pain."
- The Burden and Determinants of Neck Pain in the General Population. "Our best evidence synthesis of the burden and determinants of neck pain in the general population showed that neck pain is common. Risk factors identified for neck pain include genetics, poor psychological health, smoking and exposure to environmental tobacco smoke during childhood. Disc degeneration was not identified as a risk factor."
- The Burden and Determinants of Neck Pain in Whiplash-Associated Disorders After Traffic Collisions. "A best evidence synthesis of the literature on burden and determinants of whiplash associated disorders (WAD) was conducted. The evidence suggests that emergency room visits due to WAD have increased over the past 30 years. The evidence of determinants for WAD is sparse, but personal, societal and environmental factors are of importance."
- The Burden and Determinants of Neck Pain in Workers. "We conducted a systematic review on the burden and determinants of neck pain in workers. Neck pain is associated with significant activity limitations in the working population. Neck pain results from complex interactions between individual and workplace physical and psychosocial risk factors. We found no evidence supporting the implementation of prevention programs in the workplace."
- Course and Prognostic Factors for Neck Pain in the General Population. "Neck pain in the general population follows a persistent or recurrent course. Psychosocial factors were the strongest prognostic factors, for example, poor psychologic health and responding to neck pain with worry, anger or frustration predicted poorer outcome. General exercising was unassociated with prognosis."
- Course and Prognostic Factors for Neck Pain in Whiplash-Associated Disorders (WAD). "Our best evidence synthesis on prognosis for recovery in traffic-related WAD is based on 47 scientifically admissible studies. The evidence indicates that approximately 50% of adults with WAD reported neck pain symptoms one year after injury. Recovery is multifactorial; prognostic factors included initial symptom severity, psychological status and compensation or legal

factors."

- Course and Prognostic Factors for Neck Pain in Workers. "Between 60% and 80% of workers with neck pain reported neck pain one year later. Our best evidence synthesis of prognosis for workers with neck pain identified few modifiable prognostic factors. Having some influence over one's work and being physically active are promising prognostic factors in this population."
- Assessment of Neck Pain and Its Associated Disorders. "The evidence supports screening protocols in emergency care for low-risk patient and CT-scans for high-risk patients with blunt neck trauma. Validity is lacking for most tests used commonly for nonemergency neck pain without radiculopathy."
- Treatment of Neck Pain: Noninvasive Interventions. "Our best evidence synthesis shows that manual and exercise interventions, low-level laser therapy and acupuncture are likely to offer short-term relief for persons with neck pain; written advice or referral, collars and passive modalities are likely ineffective for whiplash-associated disorders or other neck pain. Evidence regarding treatment of radicular symptoms is lacking."
- Treatment of Neck Pain: Injections and Surgical Interventions. "A comprehensive evidence-based review of the literature found evidence that the surgical treatment of cervical radicular symptoms may be reasonably considered in patients with severe impairments. However, there is no compelling evidence that one surgical technique was clearly superior to others for radiculopathy. Surgical treatment and percutaneous procedures for neck pain alone, without radicular symptoms and without clear, serious pathology, seem to lack scientific support."

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