APTA RESPONDS TO AMERICAN HEART ASSOCIATION CERVICAL MANIPULATION PAPER

Physical Therapists Prepared to Identify Benefits, Risks of Neck Manipulation for Appropriate Patients

ALEXANDRIA, VA, August 7, 2014 – The American Physical Therapy Association (APTA) appreciates the efforts of the American Heart Association (AHA) to bring to light the benefits and risks of cervical or neck manipulation, but believes the scientific statement released today is significantly limited in its scope, context, and ability to reduce the burden of stroke on society. The physical therapy community recognizes the rare but significant risks associated with cervical manipulation—a treatment that can address conditions such as headache and neck pain, which are highly prevalent in our society—and is committed to educating the public about the appropriateness of neck manipulation for particular patients.

It is estimated that 22% to 70% of the population will have neck pain at some time in their lives.\(^1\) Approximately 44% of patients experiencing neck pain will develop chronic symptoms, and many of them will develop some level of disability.\(^2\)

To date, many scientific studies support cervical manipulation for the treatment of head and neck pain of mechanical origin, or for problems that originate in spinal joints, discs, vertebrae, or soft tissues. For instance, a 2007 systematic review of 88 randomized controlled trials in the Journal of Rheumatology\(^3\) concluded that exercise combined with manipulation or mobilization demonstrated both pain relief and functional improvement in adults with acute, subacute, or chronic mechanical neck disorders. A study in the medical journal Spine\(^5\) concluded that manipulative therapy and exercise can reduce the symptoms of headaches of cervical origin and that the effects are long lasting.

“Physical therapists are well aware that manipulation on very rare occasions has been associated with cerebral vascular accidents or strokes,” said Timothy W. Flynn, PT, PhD, OCS, immediate past president of the American Academy of Orthopaedic Manual Physical Therapists, an organization that works closely with APTA and its Orthopaedic Section on issues related to manipulation and mobilization. “In fact, physical therapists in the United States, along with our international colleagues, have developed a clear framework designed to mitigate this risk.”

Guidelines for manual therapy treatment of the cervical spine have been available for the last 2 decades to assist practitioners in clinical decision making.\(^6,7\) In 2012, a clinical reasoning framework\(^8\) was developed by the International Federation of Orthopaedic
Manipulative Physical Therapists to provide guidance for the assessment of patients for the likelihood of stroke in advance of cervical manipulation. Identified risk factors associated with an increased risk of stroke include history of trauma to the cervical spine, history of migraine-type headache, hypertension, cardiac or vascular disease, diabetes, blood clotting disorders, history of smoking, and recent infection. The framework aims to place risk in an appropriate context that is informed by the best available evidence, with a strong emphasis on the clinical decision-making process.

“While physical therapists recognize the risks associated with cervical manipulation, it is important to view the American Heart Association statement in context,” explained Flynn. “Anti-inflammatory drugs, injections, and surgery for the treatment of neck pain or headaches have much larger risks than manipulation.” For instance, the US Food and Drug Administration (FDA) recently issued a warning about the dangers of administering epidural injections of corticosteroids to relieve neck and back pain. According to the FDA, the off-label use could result in blindness, stroke, paralysis, and death.

In addition, a 2007 AHA scientific statement indicated that for patients with a prior history of or at high risk for heart disease, certain pain relievers known as COX-2 inhibitors could increase risk for heart attack, stroke, and high blood pressure. Also, a 2013 study in Spine found that patients who had cervical spine surgery were at significant risk of cardiac and breathing problems as well as gastrointestinal, neurological, blood cell, and urinary tract complications. In addition, there was a greater risk of death after cervical spine surgery among patients older than 65 who had a history of heart problems.

Incidents of stroke associated with cervical manipulation of the spine are rare. In a 2002 review of 64 cases of cerebrovascular ischemia, or lack of blood flow to the brain, associated with cervical spine manipulation, researchers concluded that strokes after manipulation appear to be unpredictable and should be considered a rare complication of this treatment approach. In addition, a 2010 systematic review in the scientific journal Manual Therapy found no strong evidence linking the occurrence of adverse events to cervical manipulation and/or mobilization.

APTA agrees that patient safety must come first when determinations regarding treatment options are made. “The physical therapy community is committed to educating patients and practitioners about the risks and benefits of cervical manipulation,” added Flynn. “Physical therapists understand the small risk of stroke associated with cervical manipulation, and they base decisions regarding the select use of this procedure on a detailed and ongoing evaluation and a treatment plan that is consistent with patient preferences.”

The American Physical Therapy Association represents more than 88,000 physical therapists, physical therapist assistants, and students of physical therapy nationwide. Learn more about conditions physical therapists can treat, and find a physical therapist in your area at www.MoveForwardPT.com. Consumers are encouraged to follow us on Twitter (@MoveForwardPT) and Facebook.

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