Dynamic Chiropractic

WHIPLASH / NECK PAIN

Another Controversial Canadian Whiplash Study

CCGPP ISSUES FORMAL RESPONSE

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Recently, a study supported by Health Canada, the Canadian Institutes for Health Research, the Workplace Safety and Insurance Board of Ontario, and the Alberta Heritage Foundation for Medical Research[1] was released concerning whiplash injury and the results of early intervention. The conclusion of the study would lead one to believe that virtually any treatment would not only be ineffective, but actually delay recovery.

The conclusions presented by the authors of the Canadian study will be debated for years, and more research is needed concerning whiplash/soft-tissue injury. In the meantime, we are very concerned about the potential inappropriate reaction of the third-party-payor industry to this isolated study, which could adversely affect patient care.

We wish to remind all physicians, patients and the insurance industry that authorization or denial of care should never be based upon the results of a singular piece of evidence, especially one that is so contradictory to the clinical experience of tens of thousands of practicing physicians. Additionally, significant literature exists pertaining to both the benefits of joint mobility and the deleterious effects of joint immobility. Our main concern lies with the potential for acute pain patients to be undertreated, based upon the recommendations of this study, allowing their conditions to develop into a chronic pain state, resulting in unnecessary pain and higher future treatment costs.

It should be noted that "evidence" includes not only research, but also the unique factors relating to each patient, risk factors/stratification, response to care, documentation, the process of care, existing guidelines, etc. Similar to guidelines, specific research should serve as background information only to assist physicians in the decision-making process. This paper should not be used punitively or as a prescription for care. Singular pieces of evidence should not be used as stand-alone measures for the authorization or denial of care or the formation of contract benefits.

The movement toward a "best practice" health care model includes not only research/evidence, but also clinical decision-making and patient values/preferences. While we appreciate the efforts made by the Canadians to improve patient care, we feel this paper should not have been released without considering the other important pieces of the best practice model.

Editor's note: The study critiqued in this article was published in the June 2007 issue of *Arthritis Care & Research.* It replicated a previous study[2] by the same authors, but utilizing an independent population and a different medical insurance scheme. A thorough analysis was conducted by Michael Freeman, PhD, DC, MPH, et al.,[3] in response to the original Canadian study. In that analysis, Dr. Freeman and colleagues stated the following (excerpted as follows):

> "As editors of biomedical journals that focus on musculoskeletal pain and injury, we

read first with interest and then growing concern the recent publication by Côté, et al., regarding patterns of initial treatment and resulting recovery rates for whiplash injury in Saskatchewan. ... These authors have concluded that, because patients who initially treat more frequently with chiropractors and general practitioners go on to have longer recoveries than those who treat less, the cause of the prolonged recovery is the treatment.

"Not once in this paper did the authors mention the common-sense conclusion that patients with more severe injuries tend to both treat more frequently initially and take longer to recover from their injuries. The authors' conclusion that treatment for a painful injury prolongs the duration of the injury is unsupported beyond the misinterpretation of their data and possibly misrepresentation of their results."

"Although the authors claim to have controlled for an unbelievable number of variables in their analysis (at least 26 pertaining to symptoms alone), the authors reveal some of the unexplained aspects in their data presented in Table 2 with regard to differences between groups beyond frequency of care. For example, the baseline mean level of headache pain (0-100 scale) for the group of subjects treating with only a chiropractor for more than 6 visits ("high utilization") was reported at 34.7. This was more than twice as high as that of the "low utilization" group (1-6 visits) at 15.8. The authors do not tell how their subgroup stratification of 112 and 115 subjects, respectively, controlled for such an enormous disparity between the two groups, or how it would have affected the power of their study. The difference reported in headache pain intensity between the low and high utilization chiropractic groups is not an isolated finding; in fact, in all 6 measurements of pain intensity for the 3 different comparison groups (GP 1-2 vs. >2 visits, DC 1-6 vs. >6 visits, and GP and DC 1-6 vs. >6 visits), the higher utilization group reported higher levels of initial pain in every one of 18 measurements.

"There were other important differences between the low and high utilization groups, such as their pre-crash health status. More than twice as many of the high utilization DC group subjects sought chiropractic care in the year prior to the crash in comparison with the low utilization group (14.7% vs. 6.8%); this is not surprising giving the fact that 53.6% of the high utilization group had pre-crash neck pain, versus 38.3% of the low utilization group. Additionally, half as many subjects in the high utilization DC group rated their pre-crash health as "excellent" versus the low DC utilization group (19.6% vs. 39.1%). It is clear from the authors' own data as represented in Table 2 that the higher utilization groups hurt more and had more pre-existing problems than the lower utilization groups.

"Here is yet another common-sense conclusion overlooked by the authors: Patients with relatively poorer pre-crash health are more likely to be more significantly injured in a crash in comparison with their healthier counterparts, and they are also more likely to require more initial treatment as a result. Contrast this with the authors' conclusion that it is the 'clinicians who promote frequent visits.'

"It is not surprising in the least that the more significantly injured and more fragile patients went on to suffer more persisting symptoms following an injury, regardless of their frequency of treatment. What is surprising is how Côté, et al., twisted this common-sense finding into a new paradigm of healthcare: The more treatment a patient receives, the sicker he or she gets. The authors cite no publications to support their new theory of the dangers of healthcare.

"It appears that, despite their frequent claims to the contrary, the authors' method of stratifying their subjects by treatment frequency resulted in a hopeless confounding of their data by injury severity, because more severely injured patients always will be more likely to seek care more frequently. It is a shame that a paper with such plainly obvious and fatal flaws has appeared in the *Archives of Internal Medicine*. It is our opinion that this paper should not have been published."

References

1. Côté P, et al. Early aggressive care and delayed recovery from whiplash: isolated finding or reproducible result? *Arthritis Care & Research* 2007.
2. Côté P, et al. Initial patterns of clinical care and recovery from whiplash injuries: a population-based cohort study. *Arch Intern Med,* 2005;165(19):2257-63.
3. Freeman MD, et al. Greater injury leads to more treatment for whiplash: no surprises here. *Arch Int Med* 2006;166(11):1238-9.

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