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CAD Guidelines: We Have Them; Let's Use Them

Results of a Preliminary Practice Survey

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Chiropractic physicians who care for cervical acceleration/deceleration (CAD) patients with any degree of regularity are often confronted by representatives of third-party payers concerning the issue of alleged excessive utilization. The ensuing dispute is typically based on opinion, company policy, or misinformation, rather than the common practice patterns of chiropractic physicians within the community. There is a dearth of information available in the chiropractic literature to give assistance to anyone engaged in one of these disputes. In 1993, however, Dr. Croft published a set of management guidelines in the *ACA Journal*.¹ These guidelines have also been published as *Whiplash Injuries: the Cervical Acceleration/Deceleration Syndrome*,² and in a recent Canadian practitioner's guide to whiplash injuries sanctioned by the Canadian Chiropractic Association.³ This paper will endeavor to make a case for the general adoption of the Croft guidelines by practitioners and payers for evaluating the reasonableness of CAD treatment.

Development of Treatment Guidelines

Historically, a number of different methods have been employed in the development of guidelines. The RAND Corp. used the so-called *delphi* technique in developing cervical manipulation guidelines.² A panel of experts from divergent fields (including one of the authors of this paper) analyzed the evidence for support of treatment by cervical spine manipulation and ranked a large series of potentially treatable conditions accordingly.

Less scientifically formal methods have also been employed in recent times, and the results have not always been favorable, particularly when the chiropractic profession is not represented on the panel. For example, a couple of years back, the Insurance and Banking Commission of New Jersey commissioned the accounting firm PriceWaterhouse Coopers to study the "need for care." The panel included no experts on whiplash, and

most were not physicians. The resulting "care paths," which appeared completely arbitrary and without any scientific grounding, grossly limited chiropractic treatment for whiplash injuries. Despite several prominent members of this profession (including one of us) who wrote strong oppositional letters, they were adopted unchanged: essentially a *fait accompli*.

A September 2000 piece in *Smart Business Magazine* notes that the Securities and Exchange Commission had reported that partners at PriceWater houseCoopers, the world's largest accounting firm, routinely violated rules forbidding them from owning equity in companies they were auditing. "Thirty-one of PriceWaterhouseCoopers' 43 partners committed at least one violation, as did 6 of the 11 partners responsible for enforcing the investment and securities rules. In all, the SEC probe uncovered 8,064 violations: five partners were dismissed in the aftermath," the publication said.

Another method of guideline development comprises practice surveys. This method has also been used by RAND, and was utilized by the Spine Research Institute of San Diego to develop the Croft guidelines for the treatment of CAD injuries. A review of 2,000 cases, graded as to severity, i.e., grades I-V (see **Table I**), provided the basis for the Croft guidelines (see **Table II**). Subsequently, the Insurance Research Council (IRC) reported that the average number of treatments provided by DCs in cases of CAD trauma was 32.⁵ Considering that most CAD injuries requiring treatment will be graded either grade I, II, or III, this serves to validate the guidelines to some degree.

Table I : Grades of Severity of Injury

Grade I	Minimal: No limitation of motion; no ligamentous injury; no neurological findings.
Grade II	Slight: Limitation of motion; no ligamentous injury; no neurological findings.
Grade III	Moderate: Limitation of motion; ligamentous instability; neurological symptoms.
Grade IV	Moderate to Severe: Limitation of motion; some ligamentous injury; neurological symptoms; fracture or disc derangement.

Table II: Guidelines for Frequency and Duration of Care in Cervical Acceleration/Deceleration Trauma²

	Daily	3x/wk	2x/wk	1x/wk	1x/mo	T _D	T _N
Grade I	1 wk	1-2 wk	2-3 wk	<4 wk	₋ ¹	<11 wk	<21
Grade II	1 wk	<4 wk	<4 wk	<4 wk	<4 mo	<29 wk	<33
Grade III	1-2 wk	<10 wk	<10 wk	<10 wk	<6 mo	<56 wk	<76
Grade IV	2-3 wk	<16 wk	<12 wk	<20 wk	₋ ²	₋ ²	₋ ²
Grade V	Surgical stabilization necessary--chiropractic care is postsurgical.						
T _D = treatment duration; T _N = treatment number.							
¹ Possible follow-up at 1 month.							
² May require permanent monthly or prn (as needed) treatment.							

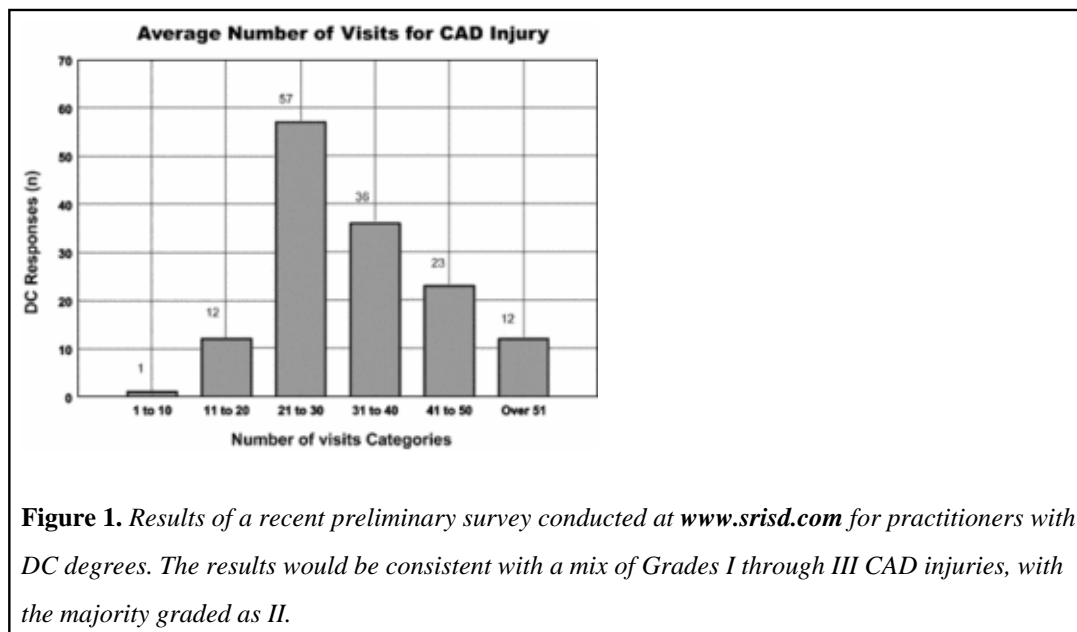
In a practitioner survey recently conducted in the state of Washington, the average number of treatments rendered under the general heading "trauma" was reported to be 34.⁶ Similarly, we have recently been informed by a representative of the Manitoba Auto Insurance Company that the average number of treatments rendered by DCs for whiplash was 33.⁷ Most recently, the grading system originally developed by Croft, and later adopted by the Quebec Task Force on Whiplash Associated Disorders (WAD), was validated in regard to its ability to predict outcome.⁸ We used the authors' breakdown of patients into grades of severity (14% grade I; 83% grade II; 3% grade III) and applied the guidelines. Based on maximal guideline allowance, the average number of treatments would again fall in the mid-30s, which is consistent with other data.

The fact that the average number of treatments is about 32-34, however, doesn't in any way imply that this is the optimal number of treatments. It is quite likely that less than optimal care was provided in many cases, since many DCs - like their medical counterparts - are not well trained in managing these cases. Optimizing treatment methods would very likely result in both reduced treatment duration and improved outcomes. Nevertheless, these numbers do represent current practice standards.

The Croft guidelines have been a part of our literature now for eight years. No competing guidelines relative to CAD treatment have been published during that time, with the exception of the Quebec Task Force Guidelines on WAD,⁹ but these are applicable only for patients who remain on disability (i.e., have not returned to work or their usual activities). If the patient is back at work or school, one must rely on other guidelines to determine whether treatment is reasonable. The Croft guidelines are applicable independent of disability status, and have now been adopted by several American state chiropractic organizations and associations, as well as in at least one Canadian province. They are the only widely published CAD

guidelines and they are based on actual practice patterns of chiropractic physicians, patterns that appear to be consistent throughout North America.

Most recently, we have been conducting an informal practitioner survey as a prelude to a more formally applied study. This study is ongoing and readers are encouraged to participate. At the website www.srisd.com, with an average current visitation frequency of over 6,000 per month - about 61 percent of whom are chiropractic physicians - we ask practitioners with DC degrees to estimate the number of treatment visits required for their average CAD patient. The results of this preliminary survey are illustrated in **Figure 1**. While our results, of course, don't allow us to draw firm conclusions about the breakdown of injury grades, or the appropriateness of care, they would be roughly concordant with a mix of grade I-III patients, with a smaller number of grade IV. I believe a significant portion of persons with grade I injuries self-treat only, and that the majority of those seeking care would be grade II. This is what most recent studies are showing.



Application of Guidelines

Reasonable and equitable peer review requires serious consideration of a patient's complaints and the physical and laboratory findings, along with a consideration of known risk factors and complicating features. It is scientifically, clinically and ethically unsound to apply any practice guideline without such consideration. The consanguineous marriage of statistics and guidelines - in the vacuum of clinical

information - provides nothing more than an example of a wrong question inviting an irrelevant answer. In the meantime, we do have guidelines which, like science, are thankfully self-correcting over time.

As with most guidelines, Dr. Croft's assume that the patient's response to care is the best measure of the need for care, and that complicating factors may increase the need for care. **Table III** is a partial list of factors that may complicate and prolong the need for care in the management of CAD cases. It is important to note that these guidelines are not intended as recommended treatment plans or prescriptions for care; many patients, particularly those without complicating features, will not require the maximum treatment numbers and duration allowed by these guidelines. Conversely, other patients, due to complicating factors such as advanced age, prior disease, etc., might require treatment approaches exceeding the guidelines. As always, a clinician's most important management compass is the patient.

Guidelines further allow clinicians to gauge their own clinical efficacy and, in some cases, to suspect that occult lesions may be present. Some patients may require upgrading or downgrading as more clinical or laboratory information becomes available.

Table III - Common Factors Potentially Complicating CAD Trauma Management

- Advanced age
- Metabolic disorders
- Congenital anomalies of the spine
- Developmental anomalies of the spine
- Degenerative disc disease
- Disc protrusion (HNP)
- Spondylosis Facet arthrosis
- Rheumatoid arthritis or other arthritides affecting the spine
- Ankylosing spondylitis or other
- spondylarthropathy
- Scoliosis
- Prior cervical spinal surgery
- Prior lumbar spinal surgery
- Prior vertebral fracture
- Osteoporosis
- Paget's disease or other disease of bone
- Spinal stenosis or foraminal stenosis
- Paraplegia or quadriplegia
- Prior spinal injury

Why and How Adopting Guidelines Can Benefit Patients and Providers

Until the Oklahoma Board of Chiropractic Examiners adopted these guidelines, file reviewers and IME doctors working for various insurance companies, HMOs, PPOs, etc., were left to their own devices for determining reasonable and customary treatment schedules. This often led to unreasonable denials of care based on individual biases and reliance on unscientific literature. For example, the theory that most CAD injuries resolve in 6-12 weeks simply hasn't been able to stand up to scientific scrutiny and is overly sanguine, yet extremely prevalent in defense circles. Similarly, many operate under the misconception that injuries are unlikely in the absence of significant property damage to the involved vehicles. Again, the evidence to support this view is lacking, while the countervailing evidence is overpowering.

Now, peer (file) reviewers and IMEs alike are required to follow the guidelines above, which allows for a more reasonable treatment schedule. Now, disputes are more focused and academic; for example, questioning the determination of one grade versus another.

One of us recently spoke to a chiropractic group in Florida. The organizer related an interesting story. It seems that several years ago, the state had adopted a peer review system that had identified his young associate as having overtreated one female patient. This alleged overtreatment was based on the opinion of one of the reviewers. Subsequently, the attorney general's office seized the chiropractor's records and launched a long and drawn-out investigation of possible insurance fraud. The potential ramifications of this investigation included - in addition to large attorney fees - loss of licensure and even prison time. This case dragged on for two or three years. Finally, the file reviewer was deposed by the associate's attorney. The attorney noticed that the reviewer's CV included a reference to having completed Croft's training program in whiplash. The reviewer was asked if the program was scientific and whether he subscribed to most of the theories taught, answering in the affirmative. He was then shown the textbook² and the patient's medical records and asked to determine the patient's grade of injury. He was then asked to look at the guidelines and state again whether her treatment had been either reasonable or excessive. Since she had undeniable neurological involvement, she fit into the grade III category. This reviewer then looked at the attorney and said, "I guess the treatment was reasonable." The AG's case was dropped. This type of thing could have been avoided had the state adopted these guidelines.

Discussion

In the absence of solid guidelines that are universally accepted and utilized by the profession, we can expect to continue to be subjected to the whims and caprice of peer reviewers and insurance claims representatives whose opinions are largely reflective of their employers' company policies and generally ungrounded in science. We can simply stand around with our hands in our pockets, hoping for the best, or we can take a stand and support a policy we consider to be in the best interests of our patients and our own welfare; one based upon sound, clinical experience, practice norms, and the best scientific evidence available.

It seems to us that the latter path is the only reasonable one. The Croft guidelines for the treatment of CAD injuries are scientifically sound with face validity provided from disparate sources. We believe it is in the best interest of this profession and the patients we treat to adopt the Croft guidelines for management of CAD trauma. This will provide for improved treatment management; help to identify excessive or

unnecessary care; allow for comparisons of different treatment methods; allow for fair and equitable peer review; and forestall the inevitable fate that awaits a profession without a formal and universally ratified guideline in this changing world of managed care. Unless we act in a unified manner, the New Jersey experience is likely to be repeated on a state-by-state basis. We urge DCs to make efforts to adopt these guidelines through their local societies, state associations, state boards of examiners, and national associations. The time to act is now.

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