Dynamic Chiropractic

Report of the American Back Society Meeting in Vancouver (Part II)

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Whiplash

Skepticism about whiplash is hardly new. There have been, according to Dr. Croft, company doctors in the 19th century who would pejoratively label patients who had been in train accidents as suffering from "railway spine."[1] We have seen a flurry of articles during the last few years debating the significance, even the very existence of chronic whiplash syndrome. The debate really kicked into high gear with the release of the Quebec Task Force (QTF) report in 1995. The QTF found 97 percent of whiplash victims had "recovered" at the end of one year, and not surprisingly this report has been used by insurers to argue against compensation for chiropractic care.[2] (Freeman, et al., published a refutation in *Spine*.[3])

It is within this historical context that we must consider Dr. Anton's discussion of the QTF, which he said "bravely" attempted to clarify the whiplash situation, and his responses to some of the criticisms. One of his opening comments told us exactly where the doctor would go with his talk: "We have data on the incidence of whiplash-related *claims*, but not really on its *frequency*." And so we were not surprised that his talk would eventually get around to the Saskatchewan study by Cassidy, et al.,[4] which found that after no fault insurance was introduced, eliminating compensation for "pain and suffering," the number of claims diminished. Regarding this most recent study, Dr. Anton stated, "There have been criticisms, and there have been responses," especially to the criticism that the study had incorrectly equated recovery with claim closure: "They looked at other factors as well." In the end, according to the speaker, "There are irreconcilable conflicts between the biomedical, medicolegal/insurance and psychosocial models of the problem," and he calls for a comprehensive model that acknowledges all three.

Discography and Annulography

Discography is a procedure that involves injecting a small amount of radio-opaque fluid into the nucleus of the disc. Not only do the leakage patterns identify structural damage in the annulus, but provocation of concordant pain during the procedure - pain that is identical to the incoming patient complaint - is thought to confirm the spinal level related to the patient's pain. All this stated, there remains much controversy among discographers and fellow travelers on the subject of false positives. Carragee, in a series of recent papers, has revived debate on Holt's earlier and well-known position: "cervical discography was without diagnostic value, and was prompting overdiagnosis and serving as an excuse for unnecessary surgical treatment."[5] In particular, Carragee[6] finds that pain intensity during discography is strongly influenced by the subject's psychosocial and medicolegal status, and by the technical aspects of the procedure, irrespective of the patient's structural state. In other words, it is all too easy to wind up with false positives, due to

the patient's subjective state or procedural mistakes.

While going over the controversy, Conor W. Neill,MD, stated that without a gold standard for the putative disc pathology, there is no way to calculate true and false positives and negatives for provocative discography. Although he has used MRI in just that way, he did not report on his results in doing so. Reanalyzing Carragee's data,[7] by reducing the pressure limit that was regarded as significant, O'Neill was able to lower the false positive rate in lumbar discography, or the number of asymptomatics that were found to have abnormal discograms. In passing, Dr. O'Neill noted that the dye could also be injected into the annular fibers, and not merely the nucleus, to identify concentric tears.

Can an Educational Booklet Change Pain and Behavior?

Dr. R. Donelson usually addresses the American Back Society on matters pertaining to the McKenzie approach to back pain, which stresses determining a "directional preference" for patient movements: avoiding movements that peripheralize symptoms, and engaging in movements (usually, but not always extension) that centralize symptoms. Patients are not only treated in-office, but are encouraged to perform exercises at home according to these same rules. Although Donelson has previously reported on the directional preference phenomenon in a single clinical evaluation,[8] and there is some evidence for the value of ongoing care,[9] no one had previously studied the clinical value of the McKenzie home exercise program.

According to Donelson, although patient education is considered valuable for treating low back pain, outcome studies have not found educational literature effective. He does not find this surprising, since little is known about low back pain, and little would be known about how to educate patients to treat themselves. However, Snook and Webster[10] did find that teaching patients to alter specific biomechanical behaviors (in this case, avoiding early-morning flexion) was valuable, as compared to more general educational approaches that stress attitude and give advice like "stay active."

Therefore, Donelson and his colleagues set out to determine if a patient education pamphlet teaching McKenzie principles could alter the biomechanic behavior of chronic low back patients, and reduce their chronic pain. As part of a dissertation project, Udermann, et al., (Syracuse University department of exercise science) recruited 62 chronic low back pain subjects, with over 10 years of pain on average; 50 were available for followup nine months later. Each subject was given a booklet on treating their own low back pain with exercises and postural work. At the nine-month mark, 87 percent were still exercising, 82 percent reported less back pain, and 60 percent were pain-free. Mean pain severity and number of episodes also dropped.

Rehabilitation Protocols for the Surgical Patient

Physiotherapist Carole McFarland conducted a workshop on rehabilitation protocols for postsurgical low back patients. There is not much literature on the postoperative patients, compared with nonsurgical patients. Surgeons themselves, when they send a patient into rehab, have no idea what will happen to be there. According to McFarland, the most important consideration during the rehabilitation of the acute postsurgical patient is to immediately re-evaluate and return the patient to the referring doctor if unexpected serious signs and symptoms develop: Lhermitte's sign, Babinksi reflex, etc. The preoperative diagnosis is a critical consideration in selecting the movements that will best augment the recovery, and it is important to address all the involved tissues in designing a rehab program. However, McFarland's comment that "There should be a treatment intervention for every positive finding on the examination" was

not persuasive to me.

McFarland finds that inclinometric readings tell very little about the real motion that is occurring in the spine, because the gross number may reflect hypermobility at one or more segments and camouflage hypomobility elsewhere. Moreover, the movement may occur in multiple planes, as when a patient attempting a pure lateral bend rotates out of the frontal plane.

Adherent nerve roots are treated, in an effort to restore "neural mobility," by desensitizing the patient to stretches of the area, performed so as to restore "normal joint alignment" (a strategy readers of *Dynamic Chiropractic* can well appreciate). Manual therapy must be monitored to make sure there is not neurological worsening. Among the variety of treatment procedures McFarland recommends, we may list end-range stretches, retraining posture, unlearning old bad habits, and learning to appropriately recruit muscles through working with balance and coordination. In addition, the patient is given exercises to perform at home.

Spinal Imaging

I always attend Dr. Parker's workshop on spinal imaging. There would be no point in summarizing his theme, because this type of presentation invariably amounts to a fairly random assortment of interesting slides and comments, without a "theme" in the usual sense of the term. But here are a few of Parker's comments:

- HIZs (high intensity zones) are actually annular fissures.
- Bigger disc lesions regress more quickly, due to phagocytic attack; all the more reason to adopt a "wait-and-see" plan. Unless pain is unbearable or there are irreversible complications, there is no reason to have surgery.
- Following surgery, it is not uncommon to see that the erector spinae have become infiltrated with fat, leaving the patient a "lifetime back cripple."
- Jensen[11] showed there are many false positives in MRI of the spine; but, according to Parker, after three years, many will have developed radiculopathy.
- Lumbar discography is "enjoying a renaissance." The contrast dye is injected into the nucleus, and a CT scan is obtained to determine if the dye is contained there or tracks along radial tears (HIZs). Moreover, to be considered clinically significant, there must be concordant pain. The diagnosis of internal disc disruption requires a positive discogram and concordant pain. Early discography is no substitute for MRI, because it is invasive.
- Most of the time imaging studies do not change the course of care, so cost-effective imaging requires not ordering the image unless it is likely to change the course of care. A Canadian doctor commented that advanced imaging is primarily a pre-operative test in Canada.

Grand Rounds

I once wrote a whole column about the weirdness of grand rounds at ABS meetings, in which I commented: "Grand rounds at the ABS has become a fairly automatic affair, mostly featuring two types of patients: the first one is mechanically boring, while the other has a history of having been surgically abused"[12] (Available on line at www.chiroweb.com/archives/13/19/31.html - in all honesty, still a pretty good read.) Well, with the elapse of six years, things have changed, and the patients have once again become interesting; less likely to be psychosomatic or surgical failures.

On the other hand, there is still something weird about these grand rounds, or perhaps, the real world of back care they represent. Only rarely does one of the participants recommend truly interdisciplinary care (a team approach), although multidisciplinary care (concurrent but separate treatments) is more common. Simple referrals predominate. Grand rounds at the ABS underscores

the fact that the back business remains quite discordant. Even here, where all the participants are on their best behavior to be respectful, mindful, and appreciative of all the other professions represented, the practitioners almost always recommend the treatment they happen to customarily offer. (Surprise, surprise.) So whatever the problem, the prolotherapist suggests prolotherapy; the opioid expert advocates opioids; the McKenziite suggests Mackenzie work; the physiotherapist suggests PT; the osteopath suggests osteopathic muscle balancing; and so on. But there are two exceptions:

The two panelists least likely to recommend their forte are the surgeon and the chiropractor, certainly their only point of commonality. I understand why the surgeon, who has endured two days of barbs about "unnecessary surgery," is so cautious about proffering his trade. But the case of the chiropractor, whom never recommends traditional chiropractic care, is more complex; nothing but ancillary, nonadjustive, and usually nonmanual care. I can't tell whether the chiropractor really wouldn't try manipulation, or shall we say chiropractic adjusting, even if a previous round of chiropractic care had failed; or is just being too politically correct to blurt out the truth: "I would adjust the patient." I am reasonably certain that most of us, deep down, are arrogant enough to expect success even where the previous chiropractor has failed, thanks to our own special tricks of the trade. In all honesty, when I sit there during grand rounds, furiously typing away on some little computer-thing, it is impossible not to cast myself in the role of the chiropractor on the panel. *What would I say?* I guess it could be a nerve-racking experience to be up there . . . best not to be excessively judgmental . . . but the spectacle of uncharacteristic chiropractors is a weird spectacle to behold.

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