

American Back Society Meeting: Vancouver, Dec. 7-9, 2000 (Part I)

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Philip Greenman, DO, began the conference with a remark that proved to be the theme of the symposium: "The only thing I am sure about is that whoever thinks he has the answer is surely wrong; we are here to share our ignorance." When back doctors say things like that, they are not being pseudo-humble - they really mean them. There is no need to express false humility when it comes to spine-related health disorders, when it is so easy to be truly humbled.

Management of Acute Disc Herniation

Paul Bishop, DC, PhD, MD, FRCSC, set the stage for his talk by providing data that sciatica patients are much more likely (by 40 percent) to receive surgery in the United States and Canada, compared with rates in other countries. Is surgery overused in North America, or underutilized elsewhere? As a sidebar, he discussed a randomized prospective trial showing there is no clinical benefit to the surgery after two years, although his citation to that effect seemed rather dated.¹ Dr. Bishop also offered up an oft-quoted factoid that is capable of both use and abuse: the frequency of disc surgery is proportional to the number of surgeons (although society does wish to make work for underemployed spinal surgeons, nor does it wish to deny surgery to those needing it in underserved communities).

Of course, the decision to operate or not should depend on a good explanation of the pathophysiology: is the sciatica the direct result of mechanical pressure on nerve roots, as in the largely "dethroned" Mixter-Barr crushed nerve model;² or is it better explained by a chemical, possibly autoimmune, mechanism?³ The Vancouver Hospital, where Dr. Bishop works, has a spine program that has developed a standardized assessment and treatment protocol for managing disc herniation patients with sciatica, conforming to guidelines developed by Bigos et al.⁴ These guidelines are no doubt familiar to chiropractors, since manipulation was strongly supported in them. Each patient is seen by a conservative physician and a surgeon; red flags and other complicating factors are ruled out; those patients not showing progressive neurological deficit get an exercise program and NSAIDs, and re-evaluation at four-week intervals. This has resulted in lowering the surgery rate significantly. (I know what you readers are asking, but if Dr. Bishop commented on whether his patients receive chiropractic treatment, I didn't hear it.)

Differential Diagnosis of Back Pain

We are used to Scott Haldeman, DC, MD, PhD, taking to the lectern to deliver controversial, iconoclastic, and even *realistic comments*, while everyone else seems lost in esoteric and self-congratulatory myopia. But at this meeting, as suggested by his opening remark - "I am going to give a talk with very little science" - it was back to basics: differentially diagnosing low back pain. There would be no point in trying to capture for this column this part of the talk, which moreover reflects a chapter Dr. Haldeman has just written for a book that should not be hard to find. However, I would like to cull from Dr. Haldeman's talk a few controversial, iconoclastic and

realistic points, despite his stated goal of sticking to basics. (It's funny how no matter how hard people try, they just wind up being themselves-even Al Gore.)

Guidelines for managing back pain, although they provide a decent starting point, do not provide enough detail; they are too simplistic. What value is it to state, "We must be able to recognize red flags for infection," without identifying the specific red flags? It is not so much whether patients "have" an infection, but whether they have *risk factors* for infections: steroid use, night sweats, recent proven infections, weight loss, recent invasive procedures, etc. Dr. Haldeman went on to comment that we have tests "coming out of our eyeballs," many of no value and many widely abused. The primary issue concerning any proposed clinical test is: Does it influence the clinical course? Society cannot afford to pay for measuring irrelevant clinical phenomena.

Cervicogenic Headache

David Sudderth, MD, of Fort Meyers, Florida, like Dr. Haldeman before him, commented that his talk was going to be "clinical, not scientific." Indeed, after recognizing that there wasn't even a clear, universally accepted definition of what constituted a cervicogenic headache, he proceeded to speak nonetheless from his own clinical sense to just that question. After ruling out less benign causes of headache (HIV, cancer, infection, etc.), we try to be aware of headaches that accompany signs of neck involvement: neck motion brings on the headache; there is tenderness in the suboccipital region; the cervical ROM is limited; there is pain in the shoulder and trapezius area, and so on.

Although Dr. Sudderth mentioned Nilsson's *JMPT* article showing manipulation to be effective in treating cervicogenic headaches,⁵ he basically stuck to medical treatments he thought effective, such as drugs and surgical decompression of nerve roots. During the question-and-answer session following his talk, Dr. Sudderth mentioned that he refers some of his patients to chiropractors for manipulation and other chiropractic approaches.

(I must digress a bit. At one point, if I am not mistaken, Dr. Sudderth suggested that even the distinction of cervicogenic from tension headaches is not entirely clear. That is very interesting, if for no other reason than that the same investigator who reported in *JMPT* that manipulation seemed useful for cervicogenic headache, concluded in *JAMA* that "as an isolated intervention, spinal manipulation does not seem to have a positive effect on episodic tension-type headache" [Bove, 1998 #898]. The conclusion of the *JAMA* article, to the effect that spinal manipulation is not useful for tension headaches [all that many will ever hear of it, and certainly the only part that made its way to radio and TV audiences] is very misleading. If aspirin were found ineffective in the treatment of MS, would it make sense to conclude that drugs are not useful for MS? The upper cervical distractive move I use for tension or cervicogenic headache, unlike the toggle recoil and diversified moves the article mentioned, almost always gets a good outcome. Pardon the digression, but that is a privilege that goes along with being an op-ed kind of clinician-columnist, and not simply a symposium-coverage-guy. Right, Joe?)

The Sacroiliac Joint

I have always been intrigued with leg checks and pelvic torsion. I'm even bold enough to sometimes think I have kind of figured the whole thing out. For that reason, I was especially interested in physical therapist Diane Lee's talk on "Pelvic impairment: a new model for diagnosis and treatment," and her hands-on workshop on the same theme. She provided a ton of references during her talk, and a pretty hefty and well-annotated article at her workshop. In what seemed to have been something of a symposium mantra, Diane Lee declared in effect that on her team, featuring Vleeming and others, she is "the clinician, not the scientist or researcher," and would

approach the subject matter from that point of view. (One wonders how much the absence of Nikolai Bogduk, scheduled for this symposium, empowered the various speakers to impugn mere science?)

Although only a decade ago it was still fashionable to deny the possibility that the SI joint could create clinical problems (indeed, it was often held at that time to be immovable), times have really changed. Ms. Lee did not have to waste a lot of time validating the clinical reality of pelvic girdle dysfunctional syndromes, and so was able to move rapidly to her main point, her organizing principle so to speak: "Ask and ye shall receive the right answers - provided, of course, you have asked the right questions." If you ask: "What structure is responsible for a patient's pain?" - you know, that "Bogduk" sort of question - then scientists will haul in the advanced imaging, injection, and surgical techniques to answer it. However, in the end, we might still be left wondering, "What is hurting." Perhaps a different question, like "Why is the low back or pelvis painful?" would generate more clinically useful answers, and lead inexorably to patient dysfunction.

We can see where this is going. Pain generators, pain schmeners, we're interested in *abnormal movement and muscle function*, which leads to abnormal load sustenance and transfer. It even leads to Dorman's "slipping clutch" analogy, as described in a previous *Dynamic Chiropractic* column: "The function of the SI joint resembles that of a clutch, engaged on the stance load and disengaged on the swing leg during locomotion. 'Bracing on stance and unlocking of the sacroiliac joint on the swing leg constitutes the normal mechanical function of the joint in humans.' An episodic failure of self-bracing would be due to weakened posterior SI ligaments and would account for the poorly-understood phenomena of sudden falling (tendency for one leg to buckle, or give way) during walking."⁶

Chiropractors seem to have bet the family farm on the proposition that "structure determines function," but they had best take note that many, if not most allied health professionals who work in the same field, have come to a very different conclusion. What they are saying is that it is equally true that "function determines structure," so that functional rehabilitative methods had best be emphasized. For example, according to Lee, abnormal lumbopelvic muscle function leads to abnormal "form and force closure" of the SI joints, which leads to instability and/or hypomobility.

Oddly enough, Ms. Lee was simultaneously able to acknowledge the abundance of literature showing motion palpation of the SI joint to be nonreproducible, and yet insist upon its clinical value: "We can clinically feel movement, but we can't prove that we can." I guess it's OK to say stuff like that, once you've identified yourself as the clinician, and not the "scientist or researcher on the team." (I understand her dilemma, having been there and done that. As an instructor in chiropractic technique, I sometimes stray, in spite of myself, into teaching examination methods that have not only not been validated, but which have been *invalidated*.) According to Ms. Lee, the question should not be about *how much* SI movement the patient has, but if there is *symmetry* in the left and right joints? It certainly would be interesting to see if palpators could attain higher concordance if the question were not about left/right SI joint fixation, but a left/right qualitative difference in SI movements.

Watch for Part II of this column in a future issue of *Dynamic Chiropractic*.

Reference

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