Dynamic Chiropractic

EDUCATION & SEMINARS

On the Fundamentals and Philosophy of Evidence-Based Care, Part 2

REVIEW OF THE AMERICAN BACK SOCIETY ANNUAL MEETING IN LAS VEGAS

Robert Cooperstein, MA, DC

Manual Therapy for Cervicogenic Headache

I attended an afternoon workshop represented by physical therapist Chris Showalter. By a show of hands, we learned the participants included three chiropractors and seven medical doctors representing various specialties. Curiously, there were neither osteopaths nor physical therapists present, other than the presenter. He mentioned that "Jull, 1994" was an important resource. After the conference, I found this to be a chapter in a book titled *Manual Therapy Masterclasses - The Vertebral Column*. The publisher, Elsevier, has made the first chapter, by Jull, available for free at its Web site.[1]

Although the cervicogenic headache can be difficult to diagnose from history and may be intra- or extracranial, reproduction of the headache by sustained postures or movement of the upper cervical spine will help. There generally is decreased cervical range of motion in the direction ipsilateral to the headache, as well as tenderness upon suboccipital palpation. Hard neurological signs are uncommon. Whatever the challenge is posed by diagnosis, there is good evidence that cervicogenic headache does respond well to manual therapy.[2]

During the workshop, Mr. Showalter reviewed guidelines adopted by the Australian Physical Therapy Association in April 2000 for identifying patients at risk for VBAI with manipulation. The guidelines resemble what we have seen in chiropractic, except that the provocative maneuver is purely rotatory, rather than involving some degree of extension. I commented from the floor that most of the North American chiropractic colleges have come to the conclusion that no screening test has been demonstrated to detect patients at risk and asked whether the Australians, in reviewing the same body of evidence, had come to a different conclusion. The discussion that ensued was not altogether productive, seeming to exacerbate rather than ameliorate the tension and air of controversy that invariably attends the stroke issue. For example, the presenter cited the recent article by Cagnie, et al.,[3] which suggests that spinal manipulative therapy can cause stroke by dislodging atherolsclerotic plaque. The presenter was not aware of the refutation by Haneline and Rosner.[4]

At one point, I did something I almost never do, which was to volunteer to be a subject for examination and treatment. I happened to be sporting a cervicogenic headache that day; the result of having unwisely surrendered my neck for science some months prior. As an instructor in spinal manipulation, I find the best feedback I can provide to students occurs when I allow them to manipulate me. One day, frustrated that I could not get either of two students to deliver a competent, cleanly accelerated force to my neck, I suggested one of them should use more force. They did just that, producing a severe and chronic cervical problem and headache that I brought to Mr. Showalter's attention. He

proceeded to confirm the diagnosis and followed up with a mobilization technique that at least did not make it worse.

(As for my neck and headache, these problems continued to bother me for a few more weeks, until serendipity stepped in. A student offered me, on behalf of the CBP club, a traction device to test out, in the expectation that a favorable outcome might facilitate its introduction into our clinic system. About two treatments with this thing pretty much cleared my cervical symptoms and headache, and I do owe that darn club something.)

The William H. Kirkaldy-Willis Memorial Lecture

The highlight of the Friday morning presentations was the William H. Kirkaldy-Willis Memorial Lecture, as presented by Dr. Charles Burton, a close friend and associate. K-W died on May 7, 2006 in Sidney, British Columbia, Canada. His model of the spinal "degenerative cascade" is well-known enough to be tested at the chiropractic national board level. K-W's many publications on the spine covered lumbar spondylosis and stenosis, lumbar instability, lateral nerve entrapment and failed back surgery.

Burton on Inappropriate Surgeries

Following the eulogy for K-W, Dr. Burton followed up with a presentation that his mentor would very much have appreciated under the title "Failed Back Surgery Patients: The Alarm Bells are Ringing." Although he covered a lot of ground in this lecture, Burton's primary intent seemed to be alerting us to the folly of using instrumented surgery to accomplish spinal fusion - a practice in which "metal rods are screwed into the spine to weld it in place." These rigid devices often are used to treat mere pain in the absence of progressive neurological deficit, and those who claim surgical success with this procedure seem oblivious to the actual clinical outcome.

There are other surgical procedures that can stabilize the spine without using multi-level pedicle-screw fixation. These include motion preserving procedures like arthroplasty and reconstructive spine surgery. There are doctors who fail to disclose their treatment options to patients, thus performing inappropriate or even unnecessary surgeries without having obtained informed consent. The only good news is that pedicle-screw fixation seems to have already reached its peak usage - some quarter million procedures per year - and now seems to be on the wane.

Aside from surgeries for spinal instability, Dr. Burton also had no kind words for common surgeries for lateral canal stenosis. Although he had no problem with procedures in which part of the pedicle is removed, he doubted "pedicles were put here by God to provide a place for pedicle screws." He believes the artificial discs are "still primitive."

Dr. Burton's final major point was that the development of genomic science promises for the practice of 21st-century medicine what antibiotics provided for the practice of the 20th century. Indeed, one reads at his Web site, www.burtonreport.com, the following: "It has now been published in the spine literature that genetics are the dominant factor in producing disc degeneration, with acquired physical stress and environmental factors being of lesser importance."[5] There, he referred to the important and seminal article of Heithoff, et al., on the subject.[6]

Genomic spine disorders are congenital conditions affecting the entire spine, not unlike a collagen

disorder. Some 50 percent of all patients have an identifiable genomic spine disorder. Dr. Burton seemed quite distressed at never having heard any discussion at a meeting of the American Back Society (ABS) of a genetic or genomic predisposition to back conditions, even though "there are backs that are poorly equipped to walk on Planet Earth."

Derby on Minimally Invasive Treatment of Internal Disc Disruption

At meetings of the ABS, I always pay close attention to Dr. Derby's talks. This year's talk focused on a history of various procedures developed to diagnose and treat mild disorders of the intervertebral disc. He said the whole field of dealing with mild structural changes in the disc, which paradoxically might be associated with very serious symptoms, began with Dr. Harry Crock. Upon exploring this point, I found Crock listed at Burton's Web site as a member of the Spine Hall of Fame, right up there with K-W and others.

Dr. Derby had remarks, in turn, on intradiscal heating (IDET), nucleoplasty (using radiofrequency to "vaporize" nuclear content) and a newer procedure that he calls "nuclear tissue modification."[7] This entails the injection of a variety of substances into the disc using a thin-gauge needle, such as disc restorative solution (DRS). The contents of DRS will be well-known to readers of *Dynamic Chiropractic:* glucosamine, chondroitin sulfate and hypertonic dextrose. The pilot study showed clinical outcomes superior to IDET. Dr. Derby believes discal injections like this to be the way of the future. We will see.

Mootz and Hansen on Changes in the Health Care System

Dr. Mootz presented before the main scientific session and Dr. Hansen joined him for an afternoon workshop covering the general theme of how changes in the health care system can impact the chiropractor's practice. Dr. Mootz, one of the very few chiropractors employed at the governmental level, began by advising, "I am from the government and I am here to help."

These doctors are involved in the state of Washington with the Center of Occupational Health and Education (COHE), a successful effort to reduce disability and return injured workers back to the job. A key component has been the incentive program which encourages best-care practices to provide effective health delivery without delay as soon as an injury occurs. Participating doctors, to receive incentives, agree to report the injury within two days, prescribe clearly as to what the worker can and cannot do, communicate with the employer by telephone and carefully re-evaluate the situation if the worker has failed to return to work at the four-week mark.

The philosophy behind the program is that the policy world has to develop financial incentives to get providers to practice better, instead of clubbing them over the head with tools that really are better directed against non-compliant doctors; hence the implementation of an incentives program for good doctors, rather than the more traditional emphasis on punishing bad doctors.

Although I have not received a promotional flyer yet, I would expect the next meeting of the American Back Society to take place in early December 2007. Check for updates at www.americanbacksoc.org. Attending meetings of the ABS has been one of the most important influences on me during my quarter century involvement with chiropractic. I always come home energized and reminded that I am part of a very large community involving many health care professions with different but overlapping perspectives on the spine, all committed to solving the riddle of back pain and functional disability.

The trait I most admire in almost all the presenters is their frankness and their ease in sharing with us the degree to which the spine and its diseases remains a great mystery.

Editor's Note: To view Part 1 of this series "(On the Fundamentals and Philosophy of Evidence-Based Care, Part 1," *Dynamic Chiropractic,* July 2, 2007), visit www.chiroweb.com/archives/25/14/06.html.

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