

American Back Society: Millennium Meeting Sums It All Up

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I have covered the American Back Society's meetings for *Dynamic Chiropractic* for several years. As I write this, my column about the December 9, 1999 meeting in Las Vegas is 10 days overdue. I have not looked at my 16 pages of single-spaced notes, taken on a notebook computer in real time, since December 11. As always, it is very difficult, given space limitations, to decide what to report and what to omit. Sometimes I decline to include material that closely resembles inclusions from previous columns, since the cast of characters at ABS meetings is quite stable from meeting to meeting. Obviously, I do not discuss presentations that did not interest me or that I think would not interest most readers of DC. Nevertheless - remember the 16 pages - a person could really take in a lot in three days with the ABS, even more than one or two columns' worth of material.

Every chiropractor should find a way to attend an ABS meeting sometime. In my first column for DC, I wrote something about that initial experience worth recalling: "At ABS symposia, I leave the meeting with a sense of belonging to a very large and talented community, united not by titular distinctions but rather by shared purpose. Chiropractors, medical doctors, physiotherapists, nurses and other allied health professionals may arrive at the meeting seeing themselves somewhat as separate practitioners, but leave with a renewed sense of kindred commitment to a single task: better patient care."¹

Haldeman: Cooperation Cometh

Dr. Scott Haldeman's talk was titled, "A Century of Progress in Spinal Care: How Much Progress Have We Really Made?" His talk was actually far more optimistic in tone than his published abstract,² in which he states that the primary failure has been in defining the cause of back pain, and thus difficulty in defining optimum care. Even more importantly, there has been a failure to "impact the frequency, severity, and, above all, disability associated with back pain in modern societies."² These do not appear to be minor failings.

In his talk, Dr. Haldeman concentrated on the complex interplay of theory, science and clinical science during the 20th century. In the early 1900s, practice dominated theory. There was limited science, no clinical research, and practice drove theory. By the middle of the century, theory dominated science, practice dominated clinical research, and theory was king. Now, at the end of the millennium, science drives theory, clinical research dominates practice, and science is king. And that, of course, is a good thing, because procedures not supported by clinical research will fade away. "New treatments will have to be validated so that the 'sales pitch' becomes a reality," Dr. Haldeman said. In his warmly received closing comments, Dr. Haldeman predicted that in the 21st century, "cooperation is king," unlike the 20th century, in which "there was a feudal level of war between professions and specialists of different persuasions."²

Bogduk: Goodbye, Herniated Disc

Enter Dr. Nikolai Bogduk. I guess he doesn't think 20th-century researchers did such a bad job of identifying the generators of back pain. I have commented in previous columns that he strongly believes that in the majority of cases, the pain generators have been identified, notwithstanding the oft-heard saying that "90% of the time, the pain generator is unknown." This time, Dr. Bogduk was even more emphatic than usual, presenting his thoughts under the title "Back Pain Research This Century: How Concepts Have Evolved or Not, as the Case May Be." He started out by declaring the diagnosis of disc herniation "the most evil concept perpetrated on patients this century."

Why such a bitter attack on what has been called the "dynasty of the disc, dating back to the time of Mixter and Barr"?³ The disc, so long as it was regarded as an inert, leftover embryonic structure (a "chordoma," c. 1900), was not and could not be seen as a pain generator except as herniated. Although the idea of discogenic pain was suppressed into the 1980s, it has now become abundantly clear that discogenic pain does not equal herniated disc. Moreover, according to Dr. Bogduk, the great majority of so-called sciatica cases actually represent somatic referred pain related to internal disc disruption. Nonetheless, herniated disc theories have been more popular because they lead to surgical procedures, unlike the diagnosis of lower-extremity referred pain, which leads to conservative care (but don't say "manipulation" around Dr. Bogduk, if you catch my drift).

What's more, the prolapsed disc could at least be seen: "Disc prolapse and its diagnosis spawned the application and development of myelography, CT, MRI and discography...culminating most recently with the recognition that these investigations do little more than reveal normal age changes in patients," Dr. Bogduk notes.⁴

Although there is a true lumbar sciatica (radiculopathy), it remains for Dr. Bogduk an ugly term. Disc prolapse is responsible for most sciatica, but not for most low back pain (fewer than five percent of lumbar spine disorders). The intellectual, financial and technology infrastructure has focused on this five percent to the great detriment of the other 95% upon whose backs - literally - this infrastructure was made possible.

As early as 1949, Inman and Saunders had suggested the disc itself could hurt without prolapsing, but this concept remained confused and unpopular until relatively recently. "There are still practitioners who believe and insist that discogenic pain is the same as radicular pain caused by disc prolapse. It is not. Discogenic pain arises from the disc itself, which is externally intact."⁴ It had once been thought there were no nerves in discs, and Dr. Bogduk recalled how vigorously people objected upon being shown slides of nerves in discs, expostulating, "But we were taught that there were no nerves in these discs."

Using selective nerve blocks,⁵⁻¹⁵ Dr. Bogduk and his coworkers claim to have identified the pain generators in all but 25% of low back cases: 40% internal disc disruption; 20% sacroiliac; and 10% posterior joints. If the posterior joints are blocked under double-blind conditions (using normal saline distractors), the evidence is there, but the condition is not as common as thought, despite 26 years of "rubbish procedures ablating the facet nerves." (See, for example, reference 16 at the end of this column.) One wonders how chiropractors might interpret this finding.

To end his talk on a cheery note, Dr. Bogduk warned that altruism, ego and messianism all lead to

ineffective treatments that fill the need to be interventionist. People learn untested techniques, and "someone is out there making a lot of cash." I put it to the readers of DC to consider his closing comment in the abstract of his talk: "After nearly a century of various investigations and treatments being applied to patients with acute back pain, it has been shown that minimal intervention, with confident, caring conviction, explanation and reassurance, together with an insistence to resume normal activities, is as good as any other treatment, and is the only treatment with five years of follow-up with success."⁴

In part II of this article, I will review two more presentations by Dr. Bogduk at this meeting: one a fresh look at cervical disc anatomy, the other a commingling of biomechanics and discography.

Foster: Non-Discogenic Sciatica

What should follow a full-scale assault on the concept of nonradicular sciatica? How about a talk by Dr. Mark Foster on "Treatment of Nondiscogenic Sciatica"? Recognizing the subject to be "a real minefield after Dr. Bogduk," Dr. Foster defined sciatica to be pain down the leg in the distribution of the sciatic nerve, usually due to a herniated disc or something else as little as 1.4% of the time (e.g., see reference 17).

The differential diagnosis includes facet syndrome (spinal stenosis, foraminal encroachment, or inflammation), intraabdominal/intrapelvic masses, sacroiliac dysfunction, piriformis syndrome and peripheral neuropathy. Facet syndrome is always part of a disc syndrome, since the intervertebral foramen loses height in proportion to the loss of disc height. Although it would be an exaggeration to say Dr. Bogduk would reserve the term sciatica for situations involving a herniated disc, one wonders if he could support the more inclusive classification of Dr. Foster. Perhaps with Dr. Bogduk in mind, he commented "There is always a part in any patient I see that I cannot scientifically justify."

Tannenbaum: Selective COX-2 Inhibitors

There was something of a revolution in the NSAID business in 1999, with the ready availability of new drugs that are capable of selectively blocking cyclo-oxygenase 2 (COX-2) without interfering with cyclo-oxygenase 1 (COX-1). Dr. Hyman Tannenbaum reviewed the history of this development and explained why it has been so significant for the pharmaceutical industry and patients. COX enzymes promote the synthesis of prostaglandin and thus potentiate inflammation, whereas COX inhibitors are anti-inflammatory.

Although the pharmacology can get complicated (COX-1 is constitutive, COX-2 is inducible, etc.), the primary message is: COX-2 bad (increases musculoskeletal pain), COX-1 good (enables protection of the gastrointestinal tract). Therefore, a selective COX-2 inhibitor should prevent some of the worst side effects of the traditional NSAID (aspirin, etc.), such as gastrointestinal ulcers, bleeding or perforations, seen in up to four percent of patients treated for one year. In a previous ABS meeting, Dr. Simons discussed the complications and costs of NSAID therapy for rheumatoid arthritis alone: 10/1000 hospitalizations due to gastrointestinal toxicity, costing \$200 million each year; 2,600 deaths among these rheumatoid patients alone; and about 20,000 deaths per year among all patients taking NSAIDs for various soft-tissue (usually arthritic) disorders.¹⁸

Dr. Tannenbaum commented that seven pharmaceutical companies are developing COX-2 selective drugs, and discussed the various trials of the most popular drugs under study: Celebrex (celecoxib)

and Vioxx (rofecoxib). In these studies, the safety factor is judged in the elderly population, e.g., octogenarians. The discontinuation rates due to gastrointestinal and other adverse reactions for Celebrex is equal to placebo. The rate is 1.7% for conventional NSAIDs, compared with only 0.2 for Celebrex. According to one study in which Celebrex was found useful for rheumatoid arthritis, "the incidence of endoscopically determined gastroduodenal ulcers in placebo-treated patients was four (4%) of 99, and the incidences across all dosages of celecoxib were not significantly different."¹⁹ Other studies²⁰ have found about the same safe and effective results in osteoarthritis.

In bringing this information to the readers of *DC*, my intention is not to advocate the approach of other health care professions, but simply keep chiropractors abreast of recent developments in allied fields. It is too soon to say what the long-term effects of these new drugs will be. Dr. Tanennbaum, hoping to inspire doctors to do better in this next millennium, closed with Voltaire's famous quote that "doctors prescribe drugs about which they know little, for diseases about which they less, to patients about whom they know nothing."

Part II of this account of the 1999 meeting of the American Back Society will cover:

1: the work and presentations of McKenzie and Donelson on the McKenzie approach; 2: a riveting talk by David Wolens on the myofascial pain syndrome: fact or fiction?; 3: some serious disagreement among surgeons on the future of back surgery, especially the new thermal techniques for shrinking discs; 4: the intriguing Dr. Derby on spinal diagnostic studies; and 5: more Dr. Bogduk.

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