Dynamic Chiropractic

BACK PAIN

ABS Meets in San Francisco

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The gathering that showcases the most clinically effective back care takes on the unseemly chore of delineating the most cost-effective options

SAN FRANCISCO, Calif. -- The American Back Society (ABS) meeting in December was an interesting one. Moderator Dr. Kenneth Light was certainly right when he opened the meeting by stating that society demands not only "excellent, but cost-effective back care." Accordingly, this symposium, conceived under the rubric "Cost-Effective Back Care," allowed the scientific and clinical issues that generally dominate ABS meetings to be partially eclipsed by a focus on economic issues. The Society's best back doctors had customarily gathered twice a year to showcase and propagate the most clinically effective back care. Now, these same doctors -- not without a certain tone of resentment -- were mandated to take on the unseemly chore of delineating the most cost effective options. Some of the talks explicitly addressed economic issues, but even those speakers with a direct clinical thrust seemed compelled to indelicately tack onto their talks something like this: "Well, that's the best way to diagnose and treat this patient ... and, uh, here's how we can keep the costs down ... I guess."

Their hearts weren't really in it. No physician likes the idea of rationing health care, which is where the logic of cost-effectiveness inextricably leads. From society's point of view, is it for the greater good that an injured worker receives a $50,000 back surgery, even when it is likely to have a good outcome based on all the clinical criteria, or that 100 workers each participate in a preventive back care class that will cost $500 each? Should we invest $1100 in an MR, or authorize 22 chiropractic visits at $50 each, given that we can't afford both? Indeed, just who are "we"?

The Clinton administration would have us believe that in the master plan we get the back surgery and the back classes, the MR and the adjustments, but the ABS participants seemed far from convinced. Giving full voice to his cynicism, one doctor pointed out that the most effective way to limit society's medical costs would be to eliminate all the doctors, hospitals, and drug companies -- but then the quality of life might go down to an unacceptable level. Another warned of a new "brain-drain," like the one that accompanied the introduction of socialized medicine in England and occasioned the mass exodus of physicians from that country. One doctor predicted, contrary to the Clinton's emphasis on physician generalists, that there will be continued leadership by specialists, with all that implies for cost containment.

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Several of the doctors complained about being "pilloried" for the escalating cost of health care in the US, where physicians' fees only account for 25 percent of the total costs of health care. Drugs, hospitalizations, etc., make up the other 75 percent. Others bemoaned the recent virtually precipitous decline in their incomes as the age of managed care becomes ascendant. There was

virtual unanimity that a considerable share of the push toward cost-cutting in health care comes from insurance companies, as a poorly-disguised ploy to raise their profit margins under the cloak of a disingenuous social concern. Most assuredly, these suddenly philanthropic insurance companies will feel no irresistible urge to cut premiums when and if medical costs go down.

This was, in a word, a gigantic ABS meeting, featuring an unprecedented number of faculty, workshops, and evening presentations, and an equally unprecedented variety of perspectives on back problems (including, for example, talks like Dr. Robert Anderson's on "Shaman's possessed by spirits and patients possessed by witches: Report from Zimbabwe"). In this symposium's vastness, my account cannot hope to more than capture its flavor and comment upon a few presentations that were of special interest to me.

A number of cost-saving suggestions and consistent themes emerged as the symposium took shape. I am going to list several of them, and then discuss a few of the presentations, somewhat arbitrarily, in more detail.

- Avoid unnecessary surgeries. Dr. Philip Greenman, speaking for Ed Simmons (not present) in words commonly associated with the latter, said that a successful surgical outcome requires "the right patient, with the right diagnosis, receiving the right surgery, done at the right level, by the right surgeon."

- Likewise, at all costs, avoid "salvage" (second and third) surgeries, which rarely come out well (Dr. Segil).

- Stress patient education, ergonomics, and ADL (activities of daily living) following an injury, rather than passive or overly-aggressive treatments (Dr.White).

- Get used to working with a clinical diagnosis, rather than insisting on an exact and possibly very expensive -- and often wrong -- structural diagnosis (Dr. Minkow).

- Demote the MRI to the status of adjunct for surgical intervention, once the decision to operate has been made on some other clinical basis. If once upon a time the MRI was the clinical entity, and later on merely reflected it, now the MRI is to simply describe it for the sake of surgical precision (Dr.Segil).

- Practitioners in a multi-disciplinary and referral setting must get used to actually utilizing each others findings (test results, diagnoses, treatment plans) rather than starting from scratch each time. "Multidisciplinary" patient care must amount to more than redundant patient care (Dr. Minkow).

- Categorize and quantify the various risk factors for failure to improve, in order to channel patients into specific therapeutic situations with an optimal prognosis (Dr. Minkow).

- Computerize, computerize, computerize! (Dr. Minkow).

- Completely revamp the workers' compensation system, a thoroughly failed system (Judge O'Brien).

- Stop confusing the back pain with the back problem (Mr. Saunders).

- Intensive early treatment of an injury, even when relatively expensive, is preferable to allowing an undertreated patient to lapse into chronicity (Minkow).

- Regard chiropractic as the first line of defense, rather than the last resort when all other treatments have failed, for back pain (Dr. Burns).

This last point in particular needs some discussion. Blunt enough? Stephen Burns, DC, professional cohort of Drs. Kirkaldy-Willis and David Cassidy in Canada, covered the clinical and cost-effectiveness of chiropractic care and also of back school. He was armed with the recently published Manga report, commissioned by the government of Ontario to advise on the appropriate place of chiropractic in the management of low back pain. Imagine if you, a chiropractor, went to sleep and dreamed of a major, extensively-documented report that would eventually conclude that there is "an overwhelming case in favor of much greater use of chiropractic services in the management of low-back pain." That's the Manga report.

In looking at the cost-effectiveness of a treatment modality, we must look not only at the physician costs, but at the disability and other expenses related to the back problem, both direct and indirect. Although most studies show that chiropractic and medical costs are not vastly different in terms of treatment expenses, chiropractic care costs society much less overall because it excels in reducing the long and short-term disability expenses -- lost days on the job, lost income, and even lost vocations. It minimizes chronicity, which is really what runs up bills.

In what amounted to good-naturedly throwing down the gauntlet before the medical attendees, Dr. Burns advocated that the chiropractor, as the most clinically adept and cost-effective provider, be the first line of defense when a person sustains a back injury. Surprisingly, no one called him on this during the question and answer session. At previous ABS symposia, I have seen chiropractors who claimed very little, sustain surprisingly intense and even irrelevant cross-examination; but never have I seen a chiropractor who claimed so much engender so little opposition, not even a single question. I'm not sure what this means.

I need not recount what Dr. Burns said about various well-trodden areas, such as manipulation vs. mobilization, the physiology of the audible, the effects of manipulation, the indications for SMT, and other subjects that are well-known to "DC" readers. However, I believe it would be worthwhile to recapitulate some of his points that are less commonly made:

- Rotary, side-posture adjustments of the lumbar spine are exceedingly unlikely to cause a disk herniation, since the lumbar facets fracture at only 3^{o} of rotation, whereas herniations occur at about 15^{o} (Dr. Farfan's personal positions notwithstanding).

- The cost/benefit ratio for upper cervical adjustments remains very favorable, in spite of the very low incidence of vertebral artery injuries, less than one per million adjustments in the United States.

- There is more evidence on the value of SMT for low back pain than for any other treatment; chiropractic is the most studied profession to treat low back pain.

- There is no evidence that chiropractic care is preventive of anything. It has been shown to have abortive, but not so far prophylactic value.

I attended Dr. Dorman's workshop on the pelvic ligaments, because I am a sucker for any discussion which I think could somehow relate to the "PI ilium," with which I have been obsessed for about a decade. (Once I get a grip on that particular subluxation, then it's on to L5, and who knows what could follow from that?). Dr. Dorman believes that the pelvic and spinal ligaments and fascia function as springs to store the energy of locomotion, echoing the work of Gracovetsky (The Spinal Engine). Indeed, he has found that if various upper body areas are immobilized while a subject walks on a treadmill, the rate of oxygen consumption increases, reflecting less efficiency in conserving the momentum generated by the lower extremities. I found in the idea that the lumbodorsal fascia and spine store the energy expended by the pelvis and lower extremities in locomotion some rationalization for my practice of mobilizing the lumbothoracic transitional area in virtually all patients. In fact, the defining characteristic of the geriatric gait is that straight-ahead, shuffling stiffness, wherein the pelvic and shoulder girdles do not counterbalance angular momentum and conserve the energy of locomotion.

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Apart from Dr. Dorman's excellent discussion of pelvic ligamentous disorders and the prolotherapy for which he has become a leading expert and proponent, displayed a peculiar penchant for inventing new words. Chiropractors don't so much make up words as invest them with new, proprietary meanings, e.g., "subluxation," "adjustment," "innate intelligence." By contrast, Dr. Dorman always uses words precisely, as they are defined in the dictionary. Where none will do, he either makes up a new term or borrows one from someone else who has already done so, the more obscure the better. In turn, we learned of "posain" (positional pain), "tensegrity" (coined by Buckminster Fuller in 1926 to refer to tension plus integrity), "nulliness" (a numb-like feeling different from numbness in that touch is agreeable), and "asymlocation" (asymmetric location).

This last term requires some more explanation. Dr. Dorman doesn't like the osteopathic term "dysfunction," because it seems to suggest symptoms that are often absent at some point in progressive musculoskeletal pathologies. He suggests the alternative term "asymlocation" to represent abnormal, but possibly asymptomatic bone positions. (Hmmm ... that sounds familiar ... where have I heard this before?) The chiropractor sitting next to me, having presumed me to be a kindred soul by virtue of the DC on my name tag, muttered under his breath, "Why bother inventing a new word when chiropractors have already murdered the word 'subluxation' to get across approximately the same idea?"

It turns out that various ligamentous injuries result in characteristic pain distributions, which nonetheless show considerable variation from one patient to the next, and even in a given patient from one injury to another. We saw maps for the iliolumbar, sacrotuberous, and sacroiliac ligaments. Apart from the referred pain, there is generally local pain at the site of the ligamentous injury. Interestingly enough, digital pressure at this site would not reproduce the pain distribution, a finding which allows the differential diagnosis from trigger point syndromes and peripheral nerve

injuries.

Dr. Dorman demonstrated prolotherapy (formerly called sclerotherapy), the injection of fibrosis-promoting agents into unstable joints and ligaments, on the sacroiliac joints of a patient. What dexterity! Any chiropractor who feels that his profession has a monopoly on psychomotor skills should see Dr. Dorman conduct prolotherapy! Big needle, flying fingers.

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Dr. Derby, in a related talk, reported his preliminary results in an experimental method of intradiscal proliferant therapy. He injects a sodium compound into a degenerative disk in an attempt to stimulate reparative fibrosis, in six monthly treatments. Although the patients' symptoms did in fact show significant amelioration, postradiographs did not show any structural changes. This suggests that the injections, although they did not achieve the expected fibrotic effect, somehow brought about a desirable chemical or functional change that lowered the patients' pain level. (We chiropractors, of course, are rather used to patients improving in the absence of radiographic structural changes.)

On Thursday afternoon, after spending about half an hour in existential despair trying to select two out of 16 available workshops to attend, I chose one whose presenter happened not to appear. Apart from confirming the third law of thermodynamics, which says that even ABS meetings which normally run like a watch occasionally pop a spring, this gave me an unexpected chance to infiltrate, in the company of a lawyer friend of mine, a surgical consultation clinic. What wonderful shop talk! "The careless surgeon who ... The butcher on the other side of town ... The patient whom nobody ..." and so on and so on. The most eminent physicians, when they get together, share not so much their successes as their own and others' failures. I wish chiropractors would discuss their occasional failings with a similar candor, would address their mistakes with the same level of interest that bedecks their chiropractic miracles. Where, in the chiropractic literature, do we report the cases where things did not go well? By comparison, medical case reports usually take good clinical outcomes for granted, focusing instead on the more imperative professional responsibility to illustrate easily avoidable mistakes.

"... he said (Dr. Roger Minkow) that medical doctors would continue to have trouble in their referrals to chiropractors so long as the latter had not better standardized their protocols."

Roger Minkow, who has been an innovator in both medical office computerization and in the implementation of stabilization (or spine-neutral) exercises, discussed how he has tried to run back care centers in a cost-effective manner. In decrying unnecessary MRIs, he denounced a somewhat perverse application of the golden rule, "Forty percent of the people who drove patients to the MRI scan had positive scans themselves." Dr. Minkow recommended intensive, aggressive short-term care to avoid reinjury and reduce the likelihood of expensive long-run chronicity. As if to balance the importance afforded to the precise diagnosis in recent ABS symposia, he distinguished the exact diagnosis that is needed for surgical intervention from the working diagnosis, or clinical impression, that suffices for the nonsurgical situation. One of the difficulties in pooling data from different practitioners, and practicing in an interdisciplinary setting, is the nonstandardization of terms and practices. Focusing on the chiropractic profession in particular, he said that medical doctors would continue to have trouble in their referrals to chiropractors so long as the latter had not better standardized their protocols.

Minkow's several clinics are pooling data which categorize and quantify risk factors for patient failure to improve. This ultimately allows channeling specific patients, with certain scores, into specific types of therapeutic situations where the prognosis would be the most favorable. With just a few key-strokes, the data can be viewed according to different sorting schemes. For example, it is easy to determine how the type of case (WC, PI, private health) bears on the overall outcome, or how the presence of personal factors (obesity, smoking, litigation) bear on the outcome. One interesting observation: common stereotypes about litigation and "accident neurosis" notwithstanding, smoking turns out to more strongly predict a negative outcome than the presence of litigation. Dr. Minkow's parting admonition: "Avoid therapy which is ineffective."

Dr. Farfan, who focused attention on torsional injuries to the intervertebral disk with cadaveric studies in the 1970s, provided an overview of his work. Compressional injuries to the disk (20 percent of patients) result in IVD thinning and lead toward a relatively uncomplicated bilateral facet syndrome, with possible sciatic neuropathy. By contrast, torsional injuries (80 percent) lead toward unilateral gross facet arthropathy, instability, and spinal curvatures. After all, the facets are designed to resist excessive spinal rotation, and would be expected to bear the brunt of such stresses. Interestingly, some chiropractors commonly invoke Dr. Farfan's work to inveigh against rotational adjustments of the lumbar spine, whereas in fact his laboratory studies indicate that the facets would have to fracture, at about 3^{o} of rotation, long before the disk is in danger of rupturing at about 15^{o} of rotation. (See Cassidy's discussion in JMPT, February 1993).

Returning to a theme he often discusses at ABS meetings, Mr. Duane Saunders, PT, cautioned us to stop confusing back "pain" with the back problem. Having discussed his point in previous articles, I thought it might be useful to summarize his position with my rendition of a slide he usually shows (see figure below).

NATURAL HISTORY OF BACK PAIN

SYMPTOMS

AGE

TREATMENT
NO TREATMENT

PAIN
NO PAIN

constant treatment
first treatment
chronic back pain
first episode of back pain
asymptomatic back problem begins
(after Saunders)

The next meeting of the American Back Society, "Cost-Effective Back Care (Une Approche Rentable dans les Soins du Dos)" will be June 2-5 in Montreal, Quebec, Canada, in association with the

McGill University and the University of Montreal Faculties of Medicine. This will be an excellent opportunity to hear Pran Manga, PhD, discuss the study on chiropractic that bears his name. Other distinguished speakers include Drs. Farfan and Gracovetsky, as well as many Canadians and ABS regulars. You may contact the American Back Society at 2647 E. 14th St., Suite 401, Oakland CA 94601, Tel (510) 536-9929, Fax (510) 536-1812.

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