

Frogmarching to a Different Drummer in Eminence-Based Medicine

Anthony Rosner, PhD, LLD [Hon.], LLC

Your loyal scribe was fortunate enough to have been invited to be a presenter at a special commemorative conference in manual medicine at the *Orthopaedisches Spital Speising* in Vienna in January, where several discussants took umbrage at how medical practice often becomes accepted and established because of the reputation of its source, rather than its intrinsic worth. They used the term "eminence-based medicine" to describe this sorry state of affairs. Indeed, this coinage very much summarizes the daunting task facing chiropractic and other healthcare interventions that challenge the *status quo* in establishing an equitable scope of practice and reimbursement schedule, based upon credible evidence rather than hubris.

At the same time, the chiropractic profession is beset with a multiplicity of named techniques (over 100¹), many with their own diagnostic systems. Should integrative medicine be a goal, the challenge is to translate these myriad protocols into a language that is interpretable by other health care professionals - especially if comparisons to other health care interventions are to be made. It's easy to imagine where General Charles De Gaulle was coming from when he lamented: "How are you going to govern a country which has 246 varieties of cheese?"

In attempting to identify and communicate the key areas of consensus, we need at the same time to avoid being inordinately restrictive to those who may offer innovations for the future, so long as the patient's well being remains a priority. That is, we need to be tolerant to those who may appear to be marching to a different drummer (Comments regarding those who seem to be farther afield and marching with their own percussion sections are beyond the scope of this discussion.)

What needs to be examined is when parties whose interests are not in concert with chiropractic physicians, researchers, or patients impose their standards upon a treatment, research plan, or set of data to interpret, transmogrifying them into grotesque mutants of their former selves and departing from their original purposes. This phenomenon brings us to the subject of the actual title of this epistle: "frogmarching" to a different drummer in eminence-based medicine.

The most chilling example of transformation with coercion of research design by leading authorities of medical research in the United States has been described previously in this space, together with a few examples of faulty research plans which could be interpreted detrimental to chiropractic while appearing in the most prominent and influential of medical journals.² We need to continue with a few representative cases of published research which are disturbing at best; abusive at worst.

First in the "hit parade" would be the Cherkin study which, from a simple reading of the title, would suggest that chiropractic spinal manipulation is no more effective in managing low back pain than physical therapy or even the provision of an educational booklet.³ Appearing in the prestigious *New England Journal of Medicine*, this study triggered an avalanche of negative chiropractic press, and has been cited extensively as a reason to doubt chiropractic as a viable alternative for

managing back pain - the condition most closely associated with chiropractic management.^{4,5}

What appears to be the most flagrant example of pulling rank since Harry Truman fired Douglas MacArthur (or the recent issuing of presidential pardons) is this paper's concluding remarks, far exceeding both the scientific and ethical boundaries of interpreting the data reported in an academic, peer-reviewed journal. The offending quote reads: "Given the limited benefits and high costs, it seems unwise to refer patients with low back pain for chiropractic or McKenzie therapy." Even if the data were to be accepted, there is nothing in the paper that comes anywhere near supporting this conjecture. With the prestigious *NEJM* as plugged into the media as it is, it takes neither a rocket scientist or New Age aromatherapist to figure out that no good (and a lot of bad) PR could ever come from this publication.

What makes this incident especially galling is that this particular study has been criticized for years,⁶⁻⁹ and has led an interdisciplinary committee based in the United Kingdom to conclude that the Cherkin study neither adds nor detracts from the evidence base regarding appropriate interventions for low back pain.¹⁰ In other words, what we have witnessed here is that a communiqué handed down by high authorities, but essentially declared to be a piece of fluff stripped of a sound scientific base, has assumed the force of gospel. It is the perfect example of the smear ethic described by Mike Murphy, campaign manager to Senator John McCain: "Make the charge, and let the other guy spend a million dollars to explain it."¹¹

It does not help that authors Deyo and Weinstein, in their recent review of low back pain (again in the *New England Journal of Medicine*), conclude that the effects of spinal manipulation in the treatment for symptomatic relief of acute or subacute low back pain are "limited," and that referral for manipulation should be delayed for three weeks,⁵ using the Cherkin study³ to buttress their arguments. I am still scratching my head trying to figure out how Deyo could make such a statement after being one of the authors of the 1994 AHCPR's guidelines *Acute Low Back Problems in Adults* back pain guidelines, which clearly stated: "Manipulation can be helpful for patients with acute low back problems without radiculopathy *when used within the first month of symptoms* (italics mine)."¹² According to Deyo, that would leave the patient with back pain the princely allotment of exactly one week (between weeks three and four) to seek treatment using spinal manipulation. The marketplace unfortunately, abounds with attempts to compress chiropractic into an absurdly narrow scope of practice, but here is an example of the squeeze applied in a novel vector to limit the available time window!

The second example of statements which appear arbitrary and capricious and based more upon the reputation of the source rather than good science, is the Bogduk guidelines on low back pain developed in Australia.⁴ Witness the bombastic abuse in the following opening statement: "Transparently and unashamedly, the present guidelines have been developed with the medical practitioner in mind, particularly primary care practitioners, on the grounds that it is *medical practitioners* (italics mine) who have comprehensive responsibility in the management of their patients."

Later, Bogduk suggests that both the AHCPR¹² and British Guidelines¹³ are inferior because they "accepted consensus views in their recommendations, whereas the present guidelines are explicitly evidence-based." How amusing, therefore, for the reader to later find in these same guidelines that behavioral therapy is recommended for low-back pain, "despite the lack of compelling, positive evidence." Instead, the reader is asked to accept the recommendations (i.e., opinions) of authorities. Elsewhere, the chiropractic profession is referred to as a mere "craft group." If this

were so, I'd have difficulty understanding why chiropractors have been awarded primary care and gatekeeper status in such multidisciplinary frameworks as HMO Illinois.

A third example of what appears to have been an abuse of power evolves around the publication of a meta-analysis of the use of amoxicillin in the treatment of otitis media. In the simplest of terms, Bluestone and his colleagues concluded that the antibiotic was effective.¹⁴ Not so, said co-author Erdem Cantekin. For this breach, Cantekin was ultimately dismissed from the Otitis Media Research Center at the University of Pittsburgh (where he had been research director), and the matter was referred to the NIH Office of Scientific Integrity, since charges had been levied that, among other things, Cantekin had acted in an "uncollegial manner." Four years after this controversy first erupted, Cantekin's dissenting views finally saw the light of day in a publication,¹⁵ and the details of the dispute itself have been amply revealed in the *New England Journal of Medicine's* chief competitor - *JAMA*.¹⁶ A detailed response to what still appears to be the overuse of antibiotics in treating otitis media is forthcoming.¹⁷ To make matters more intriguing, one of the original authors of the pro-amoxicillin meta-analysis juggernaut¹⁴ appears to have recanted, as he has since authored a treatise suggesting that "antimicrobial treatment of otitis media in children should be restricted generally to the extent possible without compromising the individual child's well-being."¹⁸

In summary, enough examples abound to demonstrate that no scientific results are etched in stone. The robustness or duration of what is reported as fact has no business being inexorably linked to the reputation of a particular author, place of research, or journal. Rather, it is up to the conscientious researcher, practitioner, and patient to strive to interpret and comprehend the best evidence at hand and to proceed on their own two feet. Leave the "frogmarching" up to Moe, Larry and Curley.

References

1. Bergmann TF. Various forms of chiropractic technique. *Chiropractic Technique* 1993; 5(2): 53-55.
2. "Karaoke Research: Singing Along with the Juggernaut." *Dynamic Chiropractic*, January 25, 2001, 19(2).
3. Cherkin DC, Deyo RA, Battie M, Street J, Barlow W. Comparison of physical therapy, chiropractic manipulation, and provision of an educational booklet for the treatment of patients with low back pain. *New England Journal of Medicine* 1998; 339(14): 1021-1029.
4. Bogduk N. *Evidence-Based Clinical Guidelines for the Management of Acute Low Back Pain*, prepared for the Australian Medical Health and Research Council, November 1999.
5. Deyo RA, Weinstein, JN. Primary care: Low back pain. *New England Journal of Medicine* 2001; 344(5): 363-370.
6. Rosner AL. Response to the Cherkin article in *The New England Journal of Medicine*. *Dynamic Chiropractic* November 2, 1998; 16(23).
7. Chapman-Smith D. Back pain, science, politics and money. *The Chiropractic Report* November 1998;12(6).
8. Freeman MD. A critical evaluation of the methodology of a low-back pain clinical trial. *Journal of Manipulative and Physiological Therapeutics* 2000; 23(5): 363-364.
9. Rosner AL. Evidence-based clinical guidelines for the management of low back pain: Response to the guidelines prepared for the Australian Medical Health and Research Council. *Journal of Manipulative and Physiological Therapeutics* 2001; 24(3): In press (March/April).
10. Royal College of General Practitioners, unpublished update of CSAG Guidelines (reference 2), 1999.

11. The Boston Globe, May 21, 2000, p. A3.
12. Bigos S, Bowyer O, Braen G, et al. Acute low back pain in adults. Clinical practice guideline No. 14. AHCPR Publication No. 95-0642. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services. December 1994.
13. Rosen M. Back pain. Report of a Clinical Standards Advisory Group Committee on back pain. May 1994, London: HMSO.
14. Mandel EM, Rockette HE, Bluestone CD, Paradise JL, Nozza RJ. Efficacy of amoxicillin with and without decongestant-antihistamine for otitis media with effusion in children: Results of a double-blind randomized trial. *New England Journal of Medicine* 1987; 316: 432-437.
15. Cantekin EI, McGuire TW, Griffith TL. Antimicrobial therapy for otitis media with effusion ("secretory" otitis media). *Journal of the American Medical Association* 1991; 266(23): 3309-3317.
16. Rennie D. The Cantekin affair. *Journal of the American Medical Association* 1991; 266(23): 3333-3337.
17. Rosner A. The case against indiscriminate use of antibiotics for otitis media. *Journal of Manipulative and Physiological Therapeutics*. Submitting for publication, March 2001.
18. Paradise JL. Managing otitis media: A time for change. *Pediatrics* 1995; 96(4): 712-715.

Anthony Rosner, PhD
Brookline, Massachusetts
rosnerfcer@aol.com

APRIL 2001