



Dynamic Chiropractic – October 8, 2001, Vol. 19, Issue 21

Gone Fishin' for Whoppers

By Anthony Rosner, PhD

Like Rip Van Winkle, I must have awoken from a deep sleep and still am not getting things. They tell me this is the Information Age, yet in several forums that are supposedly at a high, evidence-based level, I am finding more misinformation than ever. At the height of the fishing season, some would say I have been blessed with good luck with the proliferation of whoppers I have seen - only these ones are in print.

Let me start at the beginning. Two coauthors and I have just finished a lengthy and detailed rebuttal of a boatload of distortions that have been printed in several scientific journals by Edzard Ernst, who directs a program of Alternative Medicine at the University of Exeter, in the United Kingdom. The misrepresentations were numerous and clearly detrimental to the practice of chiropractic as we know it,¹ raising the bizarre, but oft-quoted specter of the fox guarding the chickens. Rather than rehash the article, I want to share with you several choice tidbits that Ernst offered in rebuttal to justify his transgressions. In reality, they will impress you as being outrageously self-incriminating, if not downright ludicrous. With each falsehood building upon its predecessor, you will find an intriguing resemblance to the growth of Pinocchio's nose:

"Take any review paper...[mine, Morley's, or one chosen at random], tear it to pieces, and you will probably find some minor inaccuracies.

"The authors repeatedly accuse me of shortening quotes. It is the nature of a quote that it does not include the full text.

"The authors claim that the advertisement cited in my paper is not representative of typical chiropractic practice. I did not state that it was, nor do I know of any advertising that can be representative of anything - it is simply not the nature of advertisements to be representative.

"Morley, et al., accuse me of omitting from my sentence the citation 'fortunately this practice is in decline.'

"Had I quoted this, Morley, et al., might have accused me of citing unsubstantiated claims, because no hard evidence was supplied in support of this statement.

"Morley and colleagues are surprised that the error regarding the dose of x-rays has 'escaped the detection during peer review.' If my memory serves me correctly, it was actually included through peer-review.

"One review asked me to insert it; my first submission did not contain any dose calculation at all.

"To put it bluntly: I have nothing whatsoever against chiropractic or any other profession, but it is my task to establish the safety of complementary therapies.

"When reading all this, I had an uncomfortable feeling that Morley, et al., uses ad hominum arguments...to distract from the real."²

Imagine my great surprise, then, when just a few weeks later, Ernst shared his following assessment of my concerns with the public in no less a visible vehicle than the *Sunday Telegraph*. This was regarding the detailed paper I had crafted with two coauthors:

"Judging from the language used by these authors, I get the impression that their motives might not be entirely rational."³

Is this reverse psychology or what? Elsewhere, I found the following gem:

"Neither of these studies reports a single case of serious, more permanent injury. This might suggest that such events are rare. Applying the 'rule of three' to the collective figures of the investigations cited above [~7400 treatments without a single serious adverse event] one can estimate that we can be 95-percent confident that the worst incidence of serious adverse effects is three per 7400, or one in 2500."⁴

As I asked previously: **Am I missing something?** Somehow, with the dexterity of Mandrake the Magician, it seems as if Ernst has "jacked up" the incidence rate of adverse events following chiropractic treatment from 0/7400 to 1/2500. Shucks; and here I thought that people flunked sixth-grade arithmetic for stuff like

this.

Elsewhere, Ernst suggests that adverse events are really in fact **underreported**:

"One could, however, also postulate that, even if serious adverse events had occurred in this series of investigations, they might have been missed. Only patients who returned for treatment were asked about adverse reactions after the previous intervention. Patients who did not return were not recorded, yet they might have been those suffering from serious complications."⁴

Geez; and here I thought that people who ran into trouble like this would only be too anxious to share it with its presumed perpetrator. Kids, can you spell "attorney?"

Hold on, it gets better. Here's another whopper:

"Three of these cases [1.3% of all AEs (adverse events) reported] led to bone fractures, and two to neurological damage, such as spinal cord transaction."⁵

Wait, if I get this right - does this mean that Marie Antoinette and countless others met their maker in the French Revolution in a chiropractor's office rather than at the guillotine? Does this mean that Henry VIII dispatched each of his wives to a chiropractor, rather than the Tower of London? "The World According to Ernst" must indeed be a strange and wonderous place.

Unfortunately, to paraphrase what is said in so many science fiction movies - Ernst is "not alone." The legendary Canoe website, full of attacks on chiropractic health care, which I find practically unreadable, contains such nuggets as these:

"The results of the *Stroke* journal study are close to the conclusions of a 1996 Danish study of stroke after spinal manipulation. That study, which examined Danish data from 1978 to 1988, found that one in every 120,000 neck manipulations resulted in stroke."⁶

Make that "adverse event" please, rather than "stroke." [The occurrence of stroke has been estimated from many sources to be three per **10 million** manipulations.]⁷

And finally:

"A 1999 RAND Corporation study of cervical manipulation concluded that only 11 percent of all cervical manipulations were appropriate and found little evidence of benefit."⁸

I am still waiting to hear a confirmation of anything resembling this statement. So what is going on? The betting had always been that this recent proliferation of comments about chiropractic, which one could conjecture as libelous, had been orchestrated to coincide with an inquest in Canada regarding a chiropractor that had a patient experiencing a fatal vertebral basilar artery accident. But an even darker possibility raises itself. Thanks to the ever-widening network of evidence exemplified by the recent Duke Headache Report,⁹ which lends support to the effectiveness of the chiropractic management of headaches, there just might be backlashes being generated from some circles against the wisdom of performing cervical spinal manipulations *per se*.

With this proliferation of whoppers, you can see how this particular column has essentially written itself. As your loyal scribe, I have obviously set my receiver for chiropractic research - and yet a lot of what I hear is static - or is that "jamming," in response to the gratifyingly increasing volume of high-quality research pertaining to chiropractic health care? Put in other terms, I am going through a period of severe cognitive dissonance when it comes to objective reporting of scientific information in certain journals.

References

1. Morley J, Rosner AL, Redwood D. A case study of misrepresentation of the scientific literature: Recent reviews of chiropractic. *The Journal of Alternative and Complementary Medicine* 2001; 7(1):65-78.
2. Ernst E. Reply to paper by Morley, et al. *The Journal of Alternative and Complementary Medicine* 2001;7(1):79-82.
3. Matthews R. Expert on alternative medicine hits raw nerve. *Sunday Telegraph*, March 25, 2001.
4. Ernst E. Prospective investigations into the safety of spinal manipulation. *Journal of Pain and Symptom Management* 2001; 21(3):238-242.
5. Abbott NC, White AR, Ernst E. Complementary medicine [correspondence]. *Nature* 1996;381: 361.
6. Klougart N, Lebouef-Yde C, Rasmussen LR. Safety in chiropractic practice, part II: Treatment to the upper neck and the rate of cerebrovascular incidents. *Journal of Manipulative and Physiological Therapeutics* 1996;19(9): 563-569.
7. MacPhail W. Posted to Canoe website, May 11, 2001.
8. Hurwitz EL, Aker PD, Adams AH, Meeker WC, Shekelle PG. Manipulation and mobilization of the

cervical spine: A systematic review of the literature. *Spine* 21(15):1746-1760.

9. McCrory DC, Penzien DB, Hasselblad V, Gray RN. *Evidence Report: Behavioral and Physical Treatments for Tension-Type and Cervicogenic Headache*. Des Moines, IA: Foundation for Chiropractic Education and Research, 2001.

Anthony Rosner, PhD

Brookline, Massachusetts

rosnerfcer@aol.com

Dr. Anthony L. Rosner is the director of research initiatives at Parker College of Chiropractic. A 1972 graduate of Harvard University (PhD in biological chemistry/medical sciences), he is the former director of research and education for the Foundation for Chiropractic Education and Research (FCER).



Page printed from:

http://www.chiroweb.com/mpacms/dc/article.php?id=18259&no_paginate=true&p_friendly=true&no_b=true