



Dynamic Chiropractic – April 8, 1994, Vol. 12, Issue 08

Misconceptions Indeed!

By Arthur Croft, DC, MS, MPH, FACO

In his article, "Whiplash injury: misconceptions and remedies,"¹ Michael Livingston, MD, a general practitioner from Canada, reassured the medical community that whiplash injuries are really much to do about nothing more than sprained ankles. Well, sort of. He builds a case for a phenomenon he calls "social copying," suggesting that the symptoms and complaints arising out of whiplash injuries are merely mimicked from one geographic area to another, largely owing to papers published in the medical literature which, as he points out, are frequently misquoted or misinterpreted. I was flattered to see that he even made reference to my textbook. In a twist of irony though, he misquoted from my writing and used it as an example of how commonly this occurs in the whiplash literature!

Dr. Livingston draws on his experience with whiplash trauma (over 100 patients in 16 years) and his own research to bolster his theories about whiplash. In his retrospective analysis of the 100 consecutive patients seen by him between 1972 and 1988,² he reported that a female preponderance was not observed as it has been by other authors; in fact, by almost other authors. Forty percent of his patients recovered within four weeks, 73 percent within three months and 85 percent within six months. All recovered within two years. His therapy included "gentle manipulation," rest, medication, ice, and heat. He does not refer patients to chiropractors, however, pointing out that their "habits may cause dependence or injury." Instead, his advice to other family practitioners is to learn gentle manipulative techniques rather than refer to others. There seems to be a slight flaw in the logic, however. If chiropractors, with vastly more training and experience in spinal manipulation than GPs, can cause injury (he cites literature relating to a case report of quadriplegia), and manipulation of the cervical spine does carry a potential risk, does it really make sense to recommend to GPs that they "go out and learn it"? Does Dr. Livingston really believe that amateur spinal manipulation is safe, so long as it's delivered by MDs?

Dr. Livingston failed to tell us what his definition of "significant symptoms" or "objective findings" were, leaving us to wonder whether his report is comparable to others. This is a common problem in such studies.

Moreover, interviewing your own patients introduces a serious bias since patients are generally uncomfortable telling their doctors that they still hurt and that, in essence, the doctor has failed. In rigid research communities, this error would very likely have kept this paper out of print. Another potential source of trouble is selection bias. Since most others have reported a clear female predominance in the whiplash arena, his group of patients should suggest that they might not have been a representative group. One wonders, too, if most people, injured in this way, would choose a general practitioner over a specialist with more expertise. That would seem to be the case since Dr. Livingston saw only an average of six of these patients a year -- a number that many chiropractors see in a week. One conclusion would be that Dr. Livingston saw patients with relatively trivial injuries who did not feel their injuries were serious enough to warrant a visit to a specialist. Moreover, Dr. Livingston's review of the existing literature was rather unbalanced and limited. He didn't make mention of most of the 15 or so other prognostic studies which have reported on the long term outcome of whiplash trauma.³⁻¹⁸ Of these, all but two^{6,12} found that more than 26 percent of these patients were symptomatic after at least one year. And, although there are limitations to the interpretation of these studies, and many of them also suffer from varying degrees of selection bias, several have shown that less than 50 percent of these patients recover fully, even after more than two years.^{7,13-17}

It's difficult to draw specific conclusions about the results of these papers, but they certainly raise questions about Dr. Livingston's rather remarkable results of 100 percent resolution. And, while critical of other authors' use of the literature, Dr. Livingston often supports his own contentions with citations to articles whose authors' opinions were based on pontification rather than science. This practice has become necessary to bolster arguments supporting the notion that litigation has a significant effect on outcome in such cases since there is a singular lack of valid research confirming this connection.¹⁸

Although critical review of such papers generally reveals their flaws and/or limitations, the defense industry (insurance companies and their lawyers) come to rely on the fact that most practitioners will lack the insight or specific knowledge to do so. This misuse of what can only charitably be regarded as science is rampant today. Defense lawyers and "experts" are quick to cite papers which "prove" that the majority of whiplash victims will recover in 6-10 weeks. By virtue of the fact that they appear in print, they are often construed as authoritative. However, and let's put this in bold print, there has never been a valid study that supports this rather naive belief. Even in Dr. Livingston's group, the majority took up to three months to recover.

It is alarming to see that many of those in the file review business have not only subscribed to this myth but have relied on it to deny ongoing care, often in the face of clear indications for treatment. Some will rather automatically recommend cuts in care which extends beyond 10 weeks or so. Yet even if it were true that, say, 70 percent of whiplash victims would recover within 10 weeks, the statistic should not be used to deny the other 30 percent care beyond 10 weeks if clinically indicated.

Dr. Livingston left his readers with some advice, so I'll leave mine with some. Whiplash is an epidemic in this country. If you look beneath the surface and carefully examine the vast pool of literature on the subject, you'll gain the insight and confidence needed to contend with those who see it as nothing more than, as Dr. Livingston assures his patients, "a sprained ankle," and with those who use such works to support or advance their own theories. Read all that you can on the subject because knowledge truly is power.

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