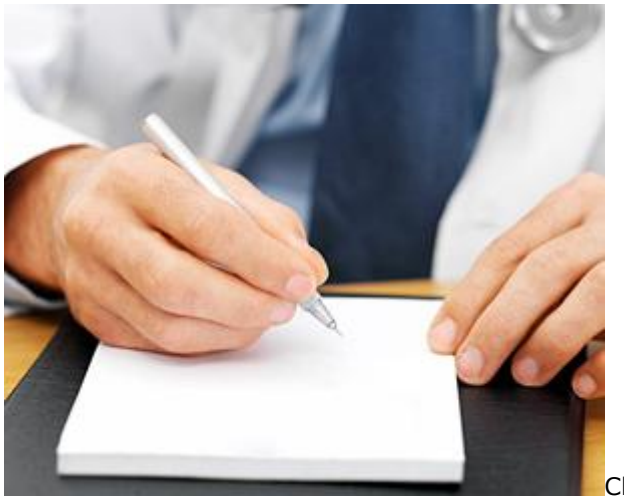
Is Advice Alone Adequate for the Management of Neck Pain? By Dr. Arthur C. Croft

Over the course of the past dozen years or so, we've seen a continuing push toward greater self-reliance on the part of the patient in medical care. That translates into health care dollar savings for consumers and enhanced profits for insurers. Many interventions that traditionally kept patients in the hospital for two to three days have become outpatient procedures. This trend has also resulted in the de-institutionalization of many mental health patients. And more recently, we've witnessed the replacement of assistant surgeons with physician's assistants (PAs).

The trend sometimes has its benefits for patients. On a larger scale, it may result in a **reduction in complications such as nosocomial infections**, or a reduction in the quarter of a million fatal adverse drug reactions (ADRs) that occur each year in the U.S.[1] (Readers may be familiar with a lower number [106,000] concerning fatal ADRs, but this comes from mid-1990s data that was reported in *JAMA* in 1998. Since then, the FDA has been actively monitoring these events. Recent tallies indicate the problem has grown by a factor of more than 2.5. Even then, it is almost certainly underreported.)

It is also a fact that many routine medical examinations and lab studies lead to relatively benign discoveries that nevertheless invite more invasive exploratory procedures. These sometimes evolve into expensive and sometimes life-threatening misadventures in health care. So, sometimes less is good for everybody.



Chiropractic has historically been considered a fringe element of medicine by insurers - certainly not a major cost factor, but not insignificant, either. The profession has often been made the seemingly dispensable scapegoat for the high costs of medical care within the framework of the workers' compensation system, and has been offered as a sacrifice on the altar of cost-containment in several states in recent years. California is one of the more recent examples. As in other states, these system-wide changes in reimbursement and choice of provider are rarely based on sound clinical or epidemiological evidence. They are often simply part of a political platform and are eventually voted into law by other politicians who are not properly advised or informed concerning the likely downstream public health effects or long-term economic consequences.

Self-Care-Only Advice

Aiding those who cry for reform are the regular installments of controversial literature spinning off from boutique research financed by the insurance industry. This literature historically asserts that advice to act normally and self-treat at home with exercise or stretching is just as effective as active treatment for spine pain, or neck and back injuries. Over the years, I have reviewed much of this genre of literature and have written several letters to editors. Science is supposed to be a self-correcting enterprise and it is important always to seek the truth, even if it sometimes hurts. However, when you seek to deceive,

someone needs to speak up. Regrettably, there is a continuous trickle of work being published that is more industrially than scientifically inspired.

For the sake of simplicity, let me just systematize the usual package of theories espoused by this literature as a backdrop for some comments on a newer study that should provide some welcome evidence that chiropractic, as a profession, is not easily replaced with a prescription for exercise and advice to act normally. That is, in fact, the capstone theory in question: Let patients treat themselves. The other theories commonly advanced are that by actively treating patients, practitioners or therapists promote dependency and also foster the insidious concept that the patient has some kind of disease or more serious injury. Theorists allude to terms such as *sickness beliefs*, *pain* or *illness behavior*, and the so-called *biopsychosocial phenomenon* - which is phenomenological only in the fact that it remains popular after so many years despite the lack of an unambiguous definition or any substantial evidence supporting it. Relying on this literature, reformers advocate seeing patients in the ER or private clinic once or twice, managing their care with handout literature for advice and home exercise, and then predict that they will have a good or better outcome as compared to patients treated passively by practitioners or therapists.

Recent Research Findings

I imagine I speak for most experienced practitioners when I lament that obtaining good home exercise compliance from patients, even after repeated prompting, is a bit like herding cats. The probability of securing it after a single encounter is, from a realistic standpoint, close to zero. A **recent meta-analysis** by Haines, et al., offers a Cochrane database-level, best-evidence synthesis - an overview of the state of this literature advocating this kind of self-care-only advice. The following is the abstract from that paper:[2]

BACKGROUND: Neck disorders are common, disabling, and costly. The effectiveness of patient education strategies is unclear.

OBJECTIVES: To assess whether patient education strategies, either alone or in combination with other treatments, are of benefit for pain, function, global perceived effect, quality of life, or patient satisfaction, in adults with neck pain with and without radiculopathy.

SEARCH STRATEGY: Computerized bibliographic databases were searched from their start up to May 31, 2008.

SELECTION CRITERIA: Eligible studies were quasi or randomized trials (RCT) investigating the effectiveness of patient education strategies for neck disorder.

DATA COLLECTION AND ANALYSIS: Paired independent review authors carried out study selection, data abstraction, and methodological quality assessment. Relative risk and standardized mean differences (SMD) were calculated. The appropriateness of combining studies was assessed on clinical and statistical grounds. Because of differences in intervention type or disorder, no studies were considered appropriate to pool.

MAIN RESULTS: Of the 10 selected trials, two (20%) were rated high quality. Advice was assessed as follows: Eight trials of advice focusing on activation compared to no treatment or to various active treatments, including therapeutic exercise, manual therapy and cognitive behavioral therapy, showed either inferiority or no difference for pain, spanning a full range of follow-up periods and disorder types. When compared to rest, two trials that assessed acute whiplash-associated disorders (WAD) showed moderate evidence of no difference for various forms of advice focusing on activation. Two trials studying advice focusing on pain [and] stress coping skills found moderate evidence of no benefit for pain in chronic mechanical neck disorder (MND) at intermediate/long-term follow-up. One trial compared the effects of "traditional neck school" to no treatment, yielding limited evidence of no benefit for pain at intermediate-term follow-up in mixed acute/subacute/chronic neck pain.

AUTHORS' CONCLUSIONS: This review has not shown effectiveness for educational interventions in various disorder types and follow-up periods, including advice to activate, advice on stress coping skills, and "neck school." In future research, further attention to methodological quality is necessary. Studies of multimodal interventions should consider study designs, such as factorial designs, that permit discrimination of the specific educational components.

Defending Your Methods

The plain-English interpretation of this meta-analysis is that advice to act naturally, act as usual or to learn how to better cope with pain or disability simply has no scientific basis to recommend it. In the past several years, we've seen dozens of recommendations for this kind of "intervention," usually from physicians who don't typically provide that kind of therapy anyway. However, this overview clearly shows that such advice is fruitless. It could be worse than fruitless if it prevents patients from obtaining timely access to interventions that do work. Notably, in an **earlier Cochrane Collaboration review** by some of the same authors, it was reported that manipulation in combination with exercise was one of the only interventions to show strong evidence for effectiveness for treating neck disorders and radiculopathies.[3]

When faced with opposition to management strategies you feel are appropriate, necessary and likely to be clinically effective, these are the kinds of papers that will often thaw that resistance and perhaps provide a more meaningful framework for future discussions on the topic of the need for care. If nothing else, it offers a challenge to those advocating contrarian theories to show you the research they rely upon.

References

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