

Professionalism and Evidence-Based Health Care

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Editor's note: This is the inaugural contribution from Dr. Lehman, who succeeds longtime columnist Dr. Stephen Perle as author of the "Ethics" column.

Today's chiropractors are facing a conundrum with the Affordable Care Act and its health care reform requirements, including evidence-based practice and health technology assessment. In spite of the American Chiropractic Association's [support](#) of evidence-based medicine,¹ many chiropractors have decided to maintain [cash practices](#),² which implies they will operate their practices outside of the new "coordinated care" organizations - in effect negating the need to purchase health care information technology, integrate the best available scientific knowledge evidence with clinical expertise, or provide patient-centered care. This reactive strategy appears to be one solution, while retirement is another.

You might agree with [the position](#) offered by the Canadian Association of General Surgeons: "The primary rationale for professionalism and collaboration is to promote patient safety. Health care is delivered by teams of professionals who need to communicate well, respecting the principles of honesty, respect for others, confidentiality and responsibility for their actions."³

An Evidence-Based Example

Evidence-Based Practice: "A way of providing health care that is guided by a thoughtful integration of the best available scientific knowledge with clinical expertise. This approach allows the practitioner to critically assess research data, clinical guidelines, and other information resources in order to correctly identify the clinical problem, apply the most high-quality intervention, and re-evaluate the outcome for future improvement."⁴

As a clinical science professor, I question whether it is professional to avoid the use of information technology or elect not to provide evidence-based care. It has been my clinical experience that use of the best available evidence reduces medical errors and improves quality of care, specifically with the treatment of elbow pain. I offer a putative case of lateral elbow pain as an example that demonstrates the value of evidence-based practice.

A female patient presents to you with pain in the left lateral elbow, which resembles lateral epicondylitis. She has been dropping her coffee cup in the morning due to severe pain in the area of the lateral elbow. This patient dislocated the same elbow 10 years earlier. Palpation of the area of the lateral elbow on the extensor aspect of the forearm creates exquisite pain. Resistance to finger extension reproduces the patient's elbow pain.

You make a diagnosis of lateral epicondylitis, and provide soft-tissue treatments to the extensor muscles and tendons of the affected forearm to reduce pain and active trigger points. This seems to reduce the pain. The patient leaves the office with a tennis elbow support, stretching exercises, and recommendations to use ice and heat at home. She is advised to return the next week for a follow-up visit and another soft-tissue treatment.

Unfortunately, the patient relates a very negative response to care. She claims that she woke at 3 a.m. with severe, throbbing pain in her left forearm and was unable to return to sleep. Now she presents with weakness and difficulty extending the fingers of the left hand.

You have never experienced this type of reaction to treatment of lateral epicondylitis. Befuddled, you consult with your young associate doctor. She offers to do a PubMed / MEDLINE search. Since the patient is receiving ultrasound, soft-tissue massage and stretching exercises, you advise the young chiropractor that she has about 15 minutes to do the search.

Within 10 minutes, your associate offers three articles describing "radial tunnel syndrome" as a cause of pain that is frequently diagnosed and treated as lateral epicondylitis. Following the patient's therapy, you advise her to return in three days for a follow-up visit.

That evening, you read the three articles which describe "radial tunnel syndrome."⁵⁻⁷ After realizing your patient may be suffering from a nerve compression syndrome, you contact her the next day and explain that you would like to re-evaluate her elbow condition. She schedules an afternoon appointment.

Once again, the patient presents with a similar story of increased pain in the left forearm following the office visit that woke her during the night. Now, the weakness in the left hand is worse, and the patient has difficulty extending the fingers in the affected upper extremity. You perform a neurological examination and more precise palpation of the left forearm.

It is now obvious that the pain is located three finger-widths inferior to the lateral epicondyle at the location of the radial tunnel, and not at the lateral epicondyle. Testing muscle strength demonstrates motor weakness of the finger extensor muscles.

You realize your misdiagnosis and inform the patient she is actually suffering with compression of a nerve in her forearm (posterior interosseous) and that research indicates patients with this condition respond best to conservative treatment with ice, rest and NSAIDs within a period of 2-3 weeks. Fortunately, the patient responds well to conservative care, avoids surgical intervention, and is pleased with your evidence-based and patient-centered care.

Later in the week, you have lunch with one of your friends, a primary care physician. You relate the story and ask if he has encountered patients with radial tunnel syndrome. He explains that he never heard of the condition before reading his recent issue of the *American Family Physician*, [which discussed](#) evaluation of the elbow in adults.⁸

Your medical doctor friend responds that when he sees patients with lateral elbow pain, he refers them to physical therapy. He then asks if *you* would consider evaluating and managing his patients with elbow pain.

This putative case discussion demonstrates that use of the best available scientific knowledge may reduce medical errors and improve quality of care for a patient suffering with elbow pain. I trust this case illustrates the value of professionalism and the use of evidence-based practice.

References

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