Manipulative techniques for carpal tunnel syndrome questioned

To the Editor:

As a practicing orthopedic surgeon with a particular interest in hand surgery, I read with much curiosity the article "Myofascial manipulative release of carpal tunnel syndrome: Documentation with magnetic resonance imaging" (*JAOA* 1993;93:1273-1278).

I have some concerns about the results of this study. First, only four patients were included. I do not think that any meaningful conclusions can be drawn based on results from this small sample size. Second, the myofascial release manipulation techniques used would tend to hyperextend the wrist and median nerve. Incidents have been reported in which symptoms of carpal tunnel syndrome have been aggravated by hyperextension of the wrist.

It would have been interesting to note how the patients would have done after having performed stretching exercises alone without manipulative treatment. Dr Sucher does not indicate whether the electrodiagnosis included the cervical paraspinal muscles as some of the patients had cervical problems as well.

I do think that this area deserves further study and that this mode of treatment must be considered experimental because it has not yet been proven to be efficacious.

Peter B. Ajluni, DO
Clinton Township, Mich

Response

To the Editor:

I appreciate Dr Ajluni's concern regarding the small number of patients studied. These four case reports were not intended to serve as the definitive study of MRI documentation of structural changes following manipulative techniques. Indeed, as I concluded, "The development of more specific criteria for categorizing severity of carpal tunnel syndrome and provision of additional treatment guidelines for clinicians await a larger number of cases."

The MRI demonstrated additional objective change that helped to illustrate one of the potential mechanisms responsible for the improvement, namely, actual mechanical enlargement of the canal. Another proposed mechanism involves release of fibrous adhesions, which develop from hyperextension in particular.

Although small, the sample size of my current study does meticulously document several factors in each patient:

- dramatic and rapid reduction of symptoms;
- improvement in nerve conduction (Proximal extremity and cervical paraspinal needle electromyograms were performed on each patient to rule out other disorders);
- an increase in both the anteroposterior and transverse dimensions of the carpal canal.

The hyperextension maneuvers involved in this treatment are applied very slowly, in a judicious and therapeutic manner and held for brief periods. In contrast, the hyperextension of injury is usually applied haphazardly in a nontherapeutic setting. Patients should easily tolerate the temporary increase in pressure on the median nerve accompanying the treatment. This tolerance is especially likely given that when the pressure is relieved after the maneuver, the canal probably is enlarged. This enlargement reduces pressure on the nerve.

Finally, Dr Ajluni mentions that the treatment used on these four patients should be considered experimental. With additional documentation of the beneficial effects of manipulative techniques, I expect the approach to move beyond the experimental stage.

I thank Dr Ajluni for his interest and second his contention that this approach deserves further study. Patients should be monitored closely and referred for surgical consideration if clinical or electrophysiologic deterioration develops.

Benjamin M. Sucher, DO
Paradise Valley, Ariz

Dark period in history of osteopathic medicine revisited

To the Editor:

I read with interest the Louisa Burns Memorial Lecture delivered by Charles Steiner, DO , and reprinted in the *JAOA* (*JAOA* 1994;94:85-87). I would like to make one small, but important, correction. Dr Burns worked at the Sunnyslope Laboratory of the A.T. Still Research Institute in association with the College of Osteopathic Physicians and Surgeons (COPS) in Los Angeles. I visited Dr Burns when I was a student at COPS. This college was lost to the profession in 1962 when it was converted to an allopathic medical college.

The College of Osteopathic Med-

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