

Another Look at Carpal Tunnel

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Carpal tunnel syndrome (CTS) is the most common nerve entrapment syndrome.¹ It is not unusual to fail in the treatment of a chronic carpal tunnel syndrome. There are many spinal, soft tissue, and adjustment theories as to how to alleviate the condition, and depending on our successes, we all seem to adhere to one or two methods that seem to work. Recently, three articles have appeared in *Chiropractic Sports Medicine*, by Leahy and Mock,^{2,3,4} which offer an exciting new approach to not only carpal tunnel but other entrapment neuropathies.

They use a method called myofascial release technique (MRT) which removes the "fibrous adhesion" wherever it might be along the nerve pathway. These adhesions may be caused by almost any recent or past trauma to the area and may result in a traction neuropathy and fixation of the nerve. The eventual loss of normal gliding of the nerve could result in localized nerve tension. They also mention damage to myofascial structures resulting in fibrous adhesions.⁴ In the use of MRT, which I will briefly describe, it is important to examine for these "adhesions" along as many parts of the nerve as possible where the nerve could be fixated. A reason for failure in the treatment of CTS is that therapy is primarily given at the area of the carpal tunnel instead of other areas where the median nerve could be equally involved.

The basis of MRT is to palpate the adhesion which is usually nodular and tender and place a broad thumb contact just distal to the tender adhesion so as to block the muscle. The contact is made with the muscle in a relaxed position: For example, in the biceps area the elbow would be flexed. Then while holding the contact, the patient will slowly extend the elbow, drawing the muscle under the doctor's contact. They state that this will create a "stripping of the muscle parallel to the muscle fibers"² and reduce the adhesion. The active motion by the patient is done as slowly as possible to allow the firmest possible contact for the doctor, with the least amount of pain for the patient.² For more explicit information regarding this technique you should read the references.

In the use of MRT in a carpal tunnel involvement, it is necessary to trace the median nerve at any area where it can be found to be entrapped. The most common areas are at the thoracic outlet at the costoclavicular interval; in front of the subscapularis in the axilla; under the ligament of Struthers, proximal and medial to the elbow; between the heads of the pronator teres; under the anterior interosseous membrane in the forearm; and the carpal tunnel area.⁴

The technique is completely opposite the method of friction massage which always attempts to friction across the tissues in order to separate the fibers from each other. As stated in past soft tissue articles in *Dynamic Chiropractic* on "Tendinosis," fibrosis only occurs when there is an actual tear to tissue resulting in vascular damage and inflammation. In most overuse syndromes, such as tennis elbow or rotator cuff lesions, there has been no evidence of inflammation, and the tendinosis instead of a tendinitis represents more of a degenerative type pathology than an inflammatory pathology. So the actual presence of a fibrous adhesion always being present and treated by either friction or MRT has to be questioned. Whatever, the mobility of the tissue is altered and tension is reduced helping to normalize circulation and reduce tissue tension.

References

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2. Leahy PM, Mock LE: Altered biomechanics of the shoulder and the subscapularis. *Chirop Sports Med.*, 5:62-70, 1991.
3. Leahy PM, Mock LE: Synoviochondrometaplasia of the shoulder: a case report. *Chirop Sports Med.*, 6:5-15, 1992.
4. Leahy PM, Mock LE: Myofascial release technique and mechanical compromise of peripheral nerves of the upper extremity. *Chirop Sports Med.*, 6:139-150, 1991.,
5. Leahy PM: Colorado Springs, CO. (personal communication).

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Editor's Note:

Dr. Hammer will conduct his next soft tissue seminar on March 13-14, 1993, in Raleigh, North Carolina. You may call 1-800-359-2289 to register.

Dr. Hammer's book, *Functional Soft Tissue Examination and Treatment by Manual Methods: The Extremities*, is now available. Please see the Preferred Reading and Viewing List on page xx, Part #T-126 to order your copy.

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