Dynamic Chiropractic

CHRONIC / ACUTE CONDITIONS

Management of De Quervain's Disease

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In 1895, F. De Quervain described a stenosing tenosynovitis of the thumb abductors at the radiostyloid process. This stenotic tendon sheath is a common by-product of occupational activities which demand frequent thumb pinching and wrist movement. Friction between the tendon, the sheath, and the osseous process results in synovitis due to friction of these tissue moving while compressed against one another.

Aching discomfort over the styloid process which radiates into the hand, or up the forearm, is commonly described by the patient. This aching, or pain, is aggravated by wrist and thumb movements. Clinical reproduction of these symptoms may be achieved by flexing the thumb while cupping it under the fingers and flexing the wrist in an ulnar direction. This movement stretches the thumb tendons and commonly results in pain. Resistive abduction of the thumb may also reproduce aching and pain. Pinch and grasp strength are commonly diminished.

Pathologically there is increased vascularization of the outer sheath with edema which increases the thickness of the sheath thereby constricting the existing tendon. Microadhesions may form between the sheath and the tendon resulting in sheath thickness two to four times its normal size.

Since this lesion involves a stenosing pathology, therapeutic heat is commonly contraindicated.

In the early, acute, stage the edema and plethorization may be relieved by cryotherapy with ice packs or silicone gel wrap. Twenty minute periods of application are recommended initially. Following this procedure, cortisone phonophoresis, using pulsed ultrasonic energy is administered for eight to ten minutes directly over the lesion. If the aching and pain of the thumb are not sufficiently relieved following phonophoresis, interferential current may be applied for about 15 minutes using quadrapolar electrodes with a frequency selection of 0-100 Hz for parasympathetic dominant stimulation and the Davis procedure involving a graduated three-fold increase in applied intensity.

If no relief is obtained following four weeks of therapy, the patient should be referred for orthopedic or neurosurgical consultation.

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JULY 1991