Barral Institute Case Report

Neural Manipulation - Pronator Teres Syndrome

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**Abstract**

Overuse injuries can be difficult to treat. They are complicated by many adaptive responses to the tissues and altered movement patterns. This case study shows the effectiveness of neural manipulation to treat such injuries within a short time frame, to help change the movement patterns to restore a more efficient pattern with less strain on the tissues.

**Key Words**

Pronator Teres Syndrome, Median Nerve, Neural Manipulation

**Introduction**

30 year old woman presents with bilateral forearm pain especially with typing and gripping, right more severe than left. It has been persistent but oscillating in intensity for the last 3 years. At the time of onset she was an office worker and subsequently had to change professions due to the levels of pain she was experiencing. At the time of her first visit she was unable to type more than 3-4 minutes before pain was severe enough to cause her to stop. She describes the pain as an 8/10 at that moment. There is ongoing pain about 3-4/10 at rest. She recently had been working limited hours with few administrative duties in child care but had to take a disability leave due to pain in her hands and forearms. She had been diagnosed with bilateral carpel tunnel syndrome and right sided pronator teres syndrome. On initial observation her ROM was limited to -15 degrees extension bilateral, R sided supination at -10 degrees, L supination at 0 degrees.

**Method**

Treatment One: General Listening Right arm. Local Listening down the Right brachial plexus to the elbow and the point the median nerve crosses the pronator teres. Treatment was performed here, first on the fascial ring, secondly on the median nerve itself. This was done including elbow extension and forearm supination. A second listening was done, which was cranial to the right. A local listening on the cranium was right sided tentorium confirmed by a listening at the rectus capitus minor. Treatment was performed on the tentorium cerebelli.

Treatment Two: General Listening right side upper extremity, local listening to brachial plexus at the clavicle. Treatment was performed on the brachial plexus as it passes posterior to the clavicle. Another local listening then went left to the brachial plexus at the scalenes. Mobilization of the supraclavicular portion of the brachial plexus was completed with induction and elongation. Given breathing exercises to decrease the use of scalenes for breathing.

Treatment Three: General Listening posterior right cranial. LL at vertex was posterior, right (tentorium cerebelli). LL at rectus capitus post minor went right superior. Mobility testing tentorium confirmed tight on the right. Tentorium release done on the right which resolved the vertex listening. Patient was given ROM exercise for maintaining fascial and dural mobility through bilateral upper extremities, neck and thorax.

**Results**

Following three treatments the patient was able to start a graduated return to work program with no flair ups. Her pain diminished considerably and returned to previous activities of daily living with a time constraint of 30 minutes typing at a time.

**Discussion**

With the advent of technology brings increased repetitive movement such as typing. Body and arm position are a great contributor to areas of strain in the body. For administrators the forearms are areas of great stress. This is where nerve entrapment is common.

Manual neural manipulation can be an effective tool to help this population of tech-addicted people.

**References**

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