Cervical Radiculopathy or Myofascial Dysfunction?

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Introduction:
Myofascial dysfunction is a common disorder that mimics signs and symptoms of many other pathological problems. It can cause pain which is mostly a constant ache, but also can be sharp and throbbing. It can also cause numbness, tingling and muscle weakness with or without pain. The hallmark of myofascial dysfunction is active trigger points (ATP) (1).

Case Report
38-year-old male with history of type II diabetes mellitus, hypertension, and depression who smokes one pack of cigarettes per day came to our pain clinic because of chronic left sided neck pain and left hand numbness for the past two and a half years following a rollover motor vehicle accident (MVA). He described his neck pain as constant, dull ache with occasional sharp sensation. He also had numbness distal to his left wrist on both the anterior and posterior aspects of his hand. His pain was worse with movement and caused difficulty getting comfortable at night. MRI reports showed moderate narrowing in the left C5-6 neural foramen, which may cause left C5 radiculopathy.

Physical examination reveals pain and tenderness of left side of the neck. He was most tender over the upper one third of the left sternocleidomastoid (SCM) muscle. He also had decreased sensation to the left hand, specifically the palm and medial aspect of the left hand, without motor weakness. After discussing with patient, consent for trigger point injection was obtained. Trigger point injection of the SCM muscle was performed using a 30 gauge needle and 2.5ml of normal saline. Immediately the patient reported the neck pain and numbness of the left hand went away, all except the numbness of the medial aspect of the left hand. Two weeks later, on return visit, the patient reported he continued to do well without neck pain or numbness except for numbness to the medial aspect of the left hand and left little finger. On examination, another ATP was found at the left flexor carpi ulnaris (FCU). After another consent was obtained from the patient, the ATP of left FCU was injected using 30 gauge needle and 1.5ml of normal saline, after which all numbness was resolved. On follow up by phone call 10 months later, the patient reports he is free of pain and numbness in his neck and his left hand.

Discussion:
Our patient presented to the pain clinic with neck pain and numbness of left hand. Also, his MRI was positive for possible C5 radiculopathy. Without paying attention to the details of thorough physical examination and correlation with the MRI finding, it is easy to misdiagnose this condition as cervical radiculopathy. C5 radiculopathy does not cause numbness of the hand (2). Also, numbness
of the little finger and medial hand did not correlate with ulnar neuropathy. Thorough physical exam revealed exquisite tenderness that increased the symptoms upon applying pressure to these ATP. By inactivating these ATP through injecting saline in the exact ATP, the patient had long-lasting pain relief and resolution of the numbness. With proper and thorough history and physical exam we were able to avoid a misdiagnosis and performing unnecessary procedures such as cervical epidural steroid injection.

Conclusion:

We presented this case to emphasize the importance of thorough history and physical exam and correlation with other studies. Also, to emphasize myofascial dysfunction, which is more common than we may think and can mimic many other symptoms.

References: