## **Case Presentation for Cervical Radiculopathy**

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## ABSTRACT

CASE HISTORY: The Patient was an 84-year-old male who presented with right arm tremors, right arm spasms, numbness and tingling. The patient stated that the numbness and tingling begun in the right fingers and radiated up to the right side of the neck. The pain is worse while driving and walking, especially over uneven surfaces. The pain did not inhibit his ADLs. He took Tylenol PM for the pain, though infrequently. The patient has benign prostatic hyperplasia (BPH), type 2 diabetes mellitus, foot pain, ankle pain, swelling of lower limb, hypertension, and hyperlipidemia. PHYSICAL EXAM: Patient presented with 5/5 strength in upper limbs bilaterally. He tested negative in Romberg's, Adison's, Babinski, Hoffman, Lhermitte's, Phalen's, Tinel's, Neers, Hawkins, and empty can test. The patient had negative impingement and range of motion of shoulders was intact and symmetrical. He was nontender to palpation over anterior, lateral, medial, and posterior borders of the scapula. Examination included full neuro exam without any acute findings except horizontal nystagmus DIFFERENTIAL DIAGNOSES: peripheral nerve entrapment, rotator cuff impingement, parsonage turner syndrome, thoracic outlet syndrome, Cervical Radiculopathy, and Idiopathic brachial plexopathy. TESTS & RESULTS: Patient's MRI showed cervical spine degeneration and stenosis of C4-C5 and C5-C6. EMG findings presented as normal with no significant evidence for a right upper extremity peripheral neuropathy, brachial plexus lesion, or cervical nerve root lesion. FINAL DIAGNOSIS: Cervical Radiculopathy. DISCUSSION: Cervical Radiculopathy most commonly involves the 6<sup>th</sup> and 7<sup>th</sup> cervical nerve roots and is caused by spondylosis of the C5-C6 and C6-C7 vertebrae. Vertebral body diameter, race, weight, and height are not significant risk factors for cervical radiculopathy. However, age, gender, and occupation were found to be significant risk factors. Prevalence is reportedly 3.5 out 1000 persons and gender preference vary. Individuals are commonly affected in the 5th and 6th decades of life. The intervertebral disc is accounted for 22% of cases, whereas the other 68% are caused by a combination of discogenic and spondylitis. Cervical Radiculopathy can be divided into three categories: acute, subacute, and chronic. Acute typical occurs in younger patients. While subacute radiculopathy occurs in patients with prior spondylosis. Subacute typically does not show many symptoms other than occasional neck pain. Chronic radiculopathy stems from untreated or non-response to treatment of acute and subacute radiculopathy. Common treatments of cervical radiculopathy include physical therapy (PT), specifically the use of cervical traction and manipulation, and medication such as oral analgesic, non-narcotic drugs, NSAID's, and corticosteroid injections. Surgery is also an option for many with this condition. OUTCOME OF THE CASE: Through PT patient had reduction in symptoms. His pain level is 0/10 pain when at rest, 3/10 when doing activities. Radicular pain has improved and is only present in a patchy distribution. Patient was instructed to discontinue meloxicam and use an over-the-counter pain medication such as Tylenol. RETURN TO ACTIVITY AND FURTHER FOLLOW-UP: Patient was instructed to continue PT, ice the shoulder 1 to 3 times per day, as needed. Use Trekking poles for ambulation, cervical traction and was provided a handout for home exercise program, which included lateral pull and upright row exercises, 20 reps 7 days a week. Patient will continue PT and will follow up with physician to determine whether the epidural shot is necessary.