Resolution Of Thoracic Pain Following A One-Level Cervical Fusion: A Case Study.
Category: Spine – Post Cervical Fusion Thoracic Pain

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HISTORY: 47-year-old, right hand dominant Caucasian male complained of mild cervical and right upper extremity pain, complete loss of sensation in the thumb and radial forearm, and marked and progressive weakness of C6-innervated muscles of four days duration. This was an insidious onset, but rapidly progressive. There were no prior complaints of cervical or upper extremity symptoms. **PHYSICAL EXAMINATION**: Serratus anterior, biceps, brachioradialis, wrist extensors were 4/5 on the right and 5/5 left. Hand dynamometer revealed a 60% decreased grip strength on the right. Markedly diminished sensation to light touch in the C6 dermatome was detected. Right biceps and brachioradialis reflexes were absent. The bilateral triceps, left biceps and left brachioradialis were +1 as were the patellar and Achilles reflexes, clonus was not present. **DIFFERENTIAL DIAGNOSES**: C6 radiculopathy, C5-6 disc protrusion, carpal tunnel syndrome, double crush syndrome. **TESTS**: MRI revealed collapse of the C5-6 disc, right C5-6 intraforaminal disc fragment, cervical cord compression. X-rays revealed C5 flexed on C6 due to collapse, no evidence of instability**. FINAL DIAGNOSIS**: C5-6 disc collapse, right C5-6 foraminal stenosis, C6 radiculopathy, spinal cord compression. **TREATMENT**: The patient underwent an anterior cervical diskectomy with cadaver allograft fusion and RSB plate. 4 weeks post-op, the patient complained of upper thoracic discomfort, which is a common complaint after this procedure. The 4-week post-op plain x-rays indicated fusion was taking place. Patient received soft tissue mobilization (STM) to trapezius, levator scapulae, paraspinal muscles in a seated position. Patient also received gentle manipulation to the mid thoracic spine in a supine position. Patient's head remained on the table and the thoracic spine was accessed by rolling one shoulder up and the doctor reached underneath the patient. **OUTCOME**: The patient had solid fusion at 14 weeks. The soft tissue mobilization reduced post-operative muscle guarding and spasms and increased AROM. The mid-thoracic manipulation markedly reduced the subjective complaint of thoracic discomfort. The patient received manipulation six times and the thoracic discomfort did not return and STM returned patient to full AROM. **CONCLUSION**: The authors have recognized this syndrome and response to treatment anecdotally. This case example warrants further study.

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