

# Combined Effect of Gross Arm Pull Technique and Suboccipital Inhibition on Pain, Range of Motion, and Disability in Patients with Cervical Spondylosis with Radiculopathy: A Case Series

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## ABSTRACT

**Introduction:** Cervical Spondylotic Radiculopathy (CSR) is a common degenerative cervical condition characterised by neck pain, radiating arm pain, restricted cervical mobility, and functional disability. Conventional physiotherapy interventions such as traction, electrotherapy, and exercises may require prolonged treatment and may not adequately address persistent symptoms. Myofascial restrictions are increasingly recognised as contributors to pain and dysfunction in CSR.

**Purpose:** To examine the effectiveness of gross arm pull and suboccipital inhibition in reducing pain, improving cervical mobility, and decreasing disability in individuals with CSR.

**Participants:** Three participants (two females and one male) with radiologically confirmed cervical degeneration and symptoms persisting for more than three months, including neck pain radiating to the upper limb, restricted cervical range of motion, and difficulty with activities.

**Materials and Methods:** Pain intensity was assessed using the Numerical Pain Rating Scale (NPRS), cervical range of motion using

a universal goniometer, and disability using the Neck Disability Index (NDI) and Quick Disabilities of the Arm, Shoulder, and Hand questionnaire (Quick-DASH). Participants received a three-week intervention consisting of three sessions per week, each lasting approximately 25 minutes. The treatment protocol included gross arm pull technique, and postural re-education exercises. Pre- and post-intervention scores were compared.

**Results:** Significant improvements were observed across all outcome measures. NPRS scores decreased from  $7.67 \pm 0.57$  to  $2.67 \pm 0.57$  ( $p < 0.01$ ). NDI scores improved from  $59.16 \pm 2.88$  to  $25.00 \pm 2.50$  ( $p < 0.01$ ), and Quick-DASH scores reduced from  $55.83 \pm 2.88$  to  $13.33 \pm 1.44$  ( $p < 0.01$ ). Cervical range of motion improved in all planes following the intervention.

**Conclusion:** Gross arm pull and cranial base release combined with postural re-education demonstrated meaningful improvements in pain, cervical mobility, and disability in individuals with CSR.

**Keywords:** Cervical mobility, Degenerative, Myofascial release therapy.

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