

Active or passive neural mobilization for the management of radiculopathy: Which one of the two is more effective?

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Neck and back are the most common sites of musculoskeletal symptoms even in young healthy adults (1), and the buildup of these symptoms can lead to spinal syndromes including postural, dysfunctional and derangement syndromes. (2-4) Two of the most common types of derangement syndromes are cervical and lumbar radiculopathy (5-7), and research has shown neural mobilization to be an effective technique for the treatment of cervical and lumbar radiculopathy.(8) Moreover, neural mobilization can be administered (passively) by a physical therapist, and can also be performed actively by the patient him or herself.(9) Even though research has shown neural mobilization to be effective in the management of cervical and lumbar radiculopathy (8), there is a dearth of literature regarding if active neural mobilization performed by the patient him or herself is as effective as passive neural mobilization performed by the therapist, or if there is a significant difference between active and passive neural mobilization. Based on the review of literature, there is only one study till date that has compared the effects of active and passive neural mobilization, which was carried in patients of cervical radiculopathy.(9) The findings of the study showed no significant differences between the two treatments in terms of neck pain, cervical range of motion and neck related disability.(9) However, it is imperative to point out that the aforementioned study consisted of female patients only.(9) Moreover, passive neural mobilization was only administered during treatment sessions with the physical therapist whereas active neural mobilization could be performed by the patient even after the treatment session with the therapist as a home exercise program, and no efforts were made to record the number

of times a participant performed active neural mobilization outside the treatment session.(9) This suggests an unequal dosage of the two techniques and can perhaps be the reason that no significant differences were observed between the two treatment groups. Furthermore, no study has been identified regarding the effects and comparison of active and passive upper extremity neural mobilization in lumbar radiculopathy. Thus, in view of the findings from the literature, it is suggested that studies should be conducted on the effects of active as compared to passive neural mobilization in persons with cervical and lumbar radiculopathy, regardless of gender, and efforts should be made regarding equal dosage for both treatments in future studies.

Keywords: Back Pain, Neck Pain, Neural Mobilization, Radiculopathy.

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