



Comparison between active and passive neural mobilization for the management of lumbar radiculopathy: Which one is more effective?

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The most common site of musculoskeletal issues in young adults, aged between 15 to 35 years, is the back or lumbar region [1]. These issues can lead to various spinal syndromes, including postural problems, dysfunction, and derangement syndromes. Among these, lumbar radiculopathy is the most prevalent, often attributed to muscular and disc-related changes [2-4]. Research has indicated that neural mobilization is an effective technique for treating lumbar radiculopathy [5]. This approach can be administered passively by a physiotherapist or actively performed by the patient themselves [7]. Furthermore, studies have shown the effectiveness of neural mobilization in managing lumbar radiculopathy [8].

In the literature, there is ongoing debate about whether active neural mobilization performed by the patient is as effective as passive neural mobilization performed by a physiotherapist, and if there are significant differences between the two approaches. To date, only one study has directly compared the effects of active and passive neural mobilization in patients with lumbar radiculopathy [9]. The findings of this study revealed no significant difference in the treatment's impact on lumbar disability and radiculopathy [9]

Furthermore, in the study, passive neural mobilization was solely administered during treatment sessions with the physiotherapist. In contrast, active neural mobilization could be performed by the patient as part of a home exercise program, and no effort was made to track how often participants engaged in active neural mobilization outside of these sessions [9]. This unequal dosage of the two techniques may account for the lack of significant differences observed between the two treatment groups.

Moreover, it's worth noting that no study has been identified that specifically examines the effects and comparisons between active and passive neural mobilization in cases of lumbar radiculopathy. Therefore, based on the literature review findings, it is suggested that further research should be conducted to investigate the effects of active versus passive neural mobilization in individuals with lumbar radiculopathy, regardless of gender. Additionally, future studies should consider implementing equal dosage for both treatments to enhance the validity of their findings.

Keywords: neural mobilization, radiculopathy, back pain,

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