The effect of massage therapy on postural dysfunction to reduce low back pain exacerbated by Parkinson's disease

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Abstract

The causes that lead to low back pain (LBP) vary, and include poor postural alignment, muscle fatigue, and chronic conditions. Deviations from balanced upright posture can result, leading to hypertonicity in compensatory muscles. With increased kyphosis and forward head posture, affected tissues include scapular retractors and anterior cervical muscles. With decreased lumbar lordosis, affected tissues include lumbar, trunk and hip muscles. Conditions such as Parkinson's disease (PD), can exacerbate LBP, since a common sign of it is postural change.

The objective of this case report is to show that massage therapy is effective in reducing LBP by applying relaxation, myofascial release, mobilization, and stretching techniques, and hydrotherapy heat to postural misalignment, worsened from PD.

A 55-year-old male diagnosed with PD in 2012, presented with shooting LBP in the left lumbar region after lifting a heavy gate. Clinical analysis suggested muscle strain exacerbated by postural changes related to PD. The treatment aim was to decrease LBP in the affected muscles. The treatment plan involved 50-minute sessions of massage, once a week, for five weeks.

Results showed that the patient reported an overall decrease in pain intensity, by rating pain descriptors. The patient also reported a general decrease in disability caused by pain impacting life activities. Post-treatment measurements of the lumbar spine using a tape measure and goniometer revealed maintained or increased range of motion.

The results suggest that massage is an effective form of treatment for LBP resulting from postural dysfunction exacerbated by PD. Future research can be performed to determine if a comparative study of massage techniques would have any statistical difference in treating LBP.

The results of this case report will be published in massage therapy journals and presented at the American Massage Therapy Association conference in Milwaukee 2016.