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EFFECTIVENESS OF SENSORIMOTOR TRAINING ON SENSORY DEFICIT, BALANCE AND FUNCTIONAL MOBILITY IN A STATIN INDUCED POLYNEUROPATHY PATIENT- A CASE REPORT.

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Background: Statins are widely prescribed lipid-lowering agents used in the prevention of cardiovascular diseases. Although statins are generally considered safe, prolonged use has been associated with neuromuscular adverse effects, including peripheral polyneuropathy. Statin-induced polyneuropathy is characterized by sensory impairment, altered proprioception, balance dysfunction, and reduced functional mobility, leading to an increased risk of falls and functional dependence. Rehabilitation strategies targeting sensory integration and postural control are essential to address these impairments and improve overall functional independence and quality of life.

Purpose: To evaluate the effectiveness of sensorimotor training on sensory deficit, balance, and functional mobility in a patient with statin-induced polyneuropathy.

Methods & Materials: This was a single-case interventional study conducted in the physiotherapy rehabilitation department at Sri Balaji Vidyapeeth, Puducherry. A 54-year-old male diagnosed with statin-induced polyneuropathy underwent a structured sensorimotor training program performed four days per week for 6 weeks under supervised conditions. Outcome measures included the Semmes-Weinstein 10 g monofilament test, Berg Balance Scale (BBS), and Timed Up and Go (TUG) test. Pre- and post-intervention comparisons of outcome measures were analysed.

Results: Post-intervention results showed improved sensation (4/10 to 8/10 sites), improved balance (BBS score 36 to 47), and improved functional mobility (TUG 17 seconds to 10 seconds), indicating clinically meaningful improvements in all assessed domains.

Conclusion: Sensorimotor training demonstrated clinically significant improvement in sensation, balance, and functional mobility in statin-induced polyneuropathy. This rehabilitation technique may reduce the risk of falls, enhance functional independence, and serve as an effective non-pharmacological intervention in the management of such patients.

Key-words: Statin-induced polyneuropathy, Sensorimotor training, Balance, Rehabilitation, Functional mobility.