DOI: 10.7860/JCDR/2025/80478.21683

A Study Protocol of Effects of Neuromuscular Taping on Facial Impairments among Patients with Bell's Palsy

Sarita Pandey, Postgraduate Student, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Kanika, Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Kanika,

Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

E-mail: kanika.k160@gmail.com

Introduction: Bell's Palsy (BP), a type of peripheral facial palsy affects the superior and inferior hemiface. BP is the most common cause of facial nerve palsy accounting for 49-51% of all cases, with an estimated annual prevalence of 20-32.2 per 100,000 people. Its incidence is higher in the ages of 15-45 years and there is a recurrence rate of 8-12%. Neuromuscular Taping (NMT) is a technique of applying elastic adhesive tape to the skin without any tension over the target area.NMT is supposed to induce pain relief, facilitation of lymphatic flow and increased vascularity by employing decompressive stimulation and dilation of underlying body tissue.

Aim: To determine the effectiveness of NMT on Facial Disability in Patients with Bell's Palsy.

Materials and Methods: Twelve participants with BP will be recruited based on the selection criteria. Participants will be randomly allocated into two groups. Experimental Group (EG) will receive treatment with NMT and conventional exercises and Control Group (CG) will receive sham NMT and conventional exercises. Treatment will be given for consecutive 6 days for one week. Outcome measures, such as House- Brackmann grade, Facial clinimetric scale and Facial index scale will be used. NMT will be done on the following muscles: Frontalis muscle, Orbicularis oculi, Risorius, Zygomaticum, Buccinator, Masseter, Levator Labii Superior, Levator anguli oris, and Temporalis muscle from origin to insertion without any stretch in it. Sham NMT will be applied to the same muscles, but it will be performed incorrectly.

Results: The data found to normal distributed will be represented as mean and standard deviation and the data which was found to be not normal distributed will be represented as median and interquartile range (IQR).

Conclusion: This study aims to explore the potential benefits of NMT combined with conventional exercises in patients with BP. By comparing the outcomes of the experimental and control groups the findings will provide valuable insights into the efficacy of NMT as a therapeutic approach. If proven effective, NMT could emerge as a complementary intervention for enhancing recovery in individuals with BP, paving the way for its broader clinical application.

Keywords: Elastic adhesive tape, Facial disability, Physiotherapy.