

# Effectiveness of Kinesiotaping on Seventh Cranial Nerve Palsy: A Literature Review

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## ABSTRACT

Bell's palsy, is a neurological disorder causing sudden, temporary facial paralysis due to facial nerve dysfunction. It is the most common peripheral facial nerve palsy, affecting nearly two-thirds of cases. Stroke-induced facial nerve paralysis significantly impaired facial muscle function. Physiotherapy is crucial for managing Bell's palsy, focussing on maintaining muscle tone, stimulating nerve function, and preventing contractures. Kinesiology Taping (KT) has emerged as a non-invasive and promising intervention to address facial muscle weakness and asymmetry associated with Bell's palsy. This review aims to synthesise and summarise the current evidence on the effectiveness of kinesiotaping in managing facial nerve palsy. A comprehensive literature search conducted between 2014 and 2024 using the keywords "kinesiotaping," "Bell's palsy," "facial palsy," or "seventh cranial nerve palsy" in PubMed, Google Scholar, Scopus and Cochrane Library yielded 9,108 articles. Following the removal of duplicates, only four articles were deemed relevant for further analysis. The reviewed literature primarily employed the House-Brackmann Scale, the Facial Disability Index (FDI), and the Synkinesis Assessment Questionnaire to assess patient outcomes

in facial nerve paralysis, with only one study utilising the Arianna Disease Scale. Kinesiotaping, when applied in conjunction with Kabat Rehabilitation, demonstrated statistically significant improvements ( $p < 0.05$ ) compared to Kabat therapy alone. However, the optimal tension applied during kinesiotaping remains a subject of debate due to significant variability across studies. Notably, one study indicated that kinesiotaping alone was less effective than Kabat therapy in managing facial nerve paralysis. While 3 studies suggest that kinesiotaping, when used in conjunction with Kabat rehabilitation, may offer benefits in managing facial nerve paralysis, further high-quality research is needed. Future studies should conduct rigorous trials comparing the independent effects of kinesiotaping and Kabat rehabilitation to establish the unique contribution of kinesiotaping alone. Furthermore, research is needed to determine the optimal tension for kinesiotaping application to maximise its therapeutic efficacy in patients with facial nerve paralysis.

**Keywords:** Bell's Palsy, Facial Asymmetry, Facial Paralysis, Stroke, Taping