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Perspectives and Challenges a Functional Bread With Yeast Extract to Improve Human Diet

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Abstract: Background: Mirror therapy (MT) is used to improve motor function after stroke. During MT, a mirror is placed between the two upper limbs (UL), thus reflecting movements of the non- affected side as if it were the affected side. Objectives: The aim of this review is to analyze the evidence on the effectiveness of MT in the recovery of UL function in population with post chronic stroke. Methods: The literature search was carried out in PubMed, ISI Web of Science, and PEDro database. Inclusion criteria: a) studies that include individuals diagnosed with stroke for at least 6 months; b) intervention with MT in UL or comparing it with other interventions; c) articles published until 2023; d) articles published in English or Portuguese; e) randomized controlled studies. Exclusion criteria: a) animal studies; b) studies that do not provide a detailed description of the intervention; c) Studies using central electrical stimulation. The methodological quality of the included studies was assessed using the Physiotherapy Evidence Database (PEDro) scale. Studies with < 4 on PEDro scale were excluded. Eighteen studies met all the inclusion criteria. Main results and conclusions: The quality of the studies varies between 5 and 8. One article compared muscular strength training (MST) with MT vs without MT and four articles compared the use of MT vs conventional therapy (CT), one study compared extracorporeal shock therapy (EST) with and without MT and another study compared functional electrical stimulation (FES), MT and biofeedback, three studies compared MT with Mesh Glove (MG) or Sham Therapy, five articles compared performing bimanual exercises with and without MT and three studies compared MT with virtual reality (VR) or robot training (RT). The assessment of changes in function and structure (International Classification of Functioning, Disability and Health parameter) was carried out, in each article, mainly using the Fugl Meyer Assessment-Upper Limb scale, activity and participation (International Classification of Functioning, Disability and Health parameter) were evaluated using different scales, in each study. The positive results were seen in these parameters, globally. Results suggest that MT is more effective than other therapies in motor recovery and function of the affected UL, than these techniques alone, although the results have been modest in most of the included studies. There is also a more significant improvement in the distal movements of the affected hand than in the rest of the UL.

Keywords: physical therapy, mirror therapy, chronic stroke, upper limb, hemiplegia **Conference Title:** ICNP 2025: International Conference on Neurological Physiotherapy

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