

Bibliographic identification

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Annotation

Objectives: Introduction of "mirror therapy" (MT) principles in patients with Type 1 complex regional pain syndrome (CRPS). Verification of the effectiveness of the MT in terms of sensory, functional and morphological changes.

Participants: Sixteen patients (14 women and 2 men, age 55.3 ± 10.5 years) and 10 controls (7 women and 3 men, age 54.9 ± 7.6 years) were included in this study. All of them were diagnosed as patients with Type I CRPS.

Methods and measure: The intervention group underwent 6 weeks of MT. Both groups recorded numerical scale pain for 6 weeks. At the beginning and end of the period, all probands underwent examination including: range of motion of wrist flexion and extension, thenar temperature side-to-side difference, volume of the hand and forearm, dynamometry, PegBoard, ability to close the fist, Wind-Up, referred sensations and EQ-5D-3L questionnaire.

Results: A statistically significant reduction in pain at rest and during movement was found in the intervention group, not in the control group. In the intervention group an analgesic effect occurred in patients with different CRPS duration. In this group a significant improvement in parameters of dynamometry, PegBoard, volume of hand and forearm, ROM in wrist and closing of the fist was also demonstrated.

Conclusions: MT has significant positive effects in the CRPS treatment in terms of pain reduction, swelling reduction and hand strength and function improvement. Pain reduction is detectable even in later stages CRPS.

Keywords

Complex regional pain syndrome, mirror therapy, central origin of pain, neuroplasticity, recovery of function.