

MIRROR THERAPY IS EFFECTIVE FOR TREATING UPPER EXTREMITY PHANTOM PAIN

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OBJECTIVE

Phantom limb pain is prevalent in patients post-amputation and is difficult to treat. We assessed the efficacy of mirror therapy in relieving phantom limb pain in unilateral, upper extremity (UE) amputees.

METHODS

Fifteen participants from Walter Reed and Brooke Army Medical Centers were randomly assigned to one of two groups: mirror therapy (n=9) or control (n=6, covered mirror or mental visualization therapy). Participants were asked to perform 15 minutes of their assigned therapy daily for four weeks. The primary outcome was pain as measured using a 100-mm Visual Analogue Scale (VAS).

RESULTS

Subjects in the mirror therapy group had a significant decrease in pain scores, from a mean of 44.1 (SD=17.0) to 27.5 (SD=17.2) mm (p=0.002). In addition, there was a significant decrease in daily time experiencing pain, from a mean of 1022 (SD=673) to 448 (SD=565) minutes (p=0.003). In contrast, the control group had neither diminished pain (p=0.65) nor decreased overall time experiencing pain (p=0.49). A response seen by the tenth treatment session was predictive of final efficacy.

CONCLUSIONS

These results confirm that mirror therapy is an effective therapy for phantom limb pain in unilateral, upper extremity amputees, reducing both severity and duration of daily episodes.