SOMATOSENSORY REHABILITATION FOR ALLODYnia IN CRPS OF THE UPPER LIMB: A COHORT STUDY

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INTRODUCTION / AIM

Somatosensory rehabilitation (SSR) is a standardized method of evaluation and treatment of painful disorders of vibrotactile sensation, including allosthenia. This retrospective cohort study examined the effectiveness of somatosensory rehabilitation for reducing allosthenia in persons with complex regional pain syndrome (CRPS) of one upper limb.

METHODS

Independent chart review of all client records (May 2004-August 2015) in the Somatosensory Rehabilitation Centre of the Human Body (Fribourg, Switzerland) identified 48 files for persons meeting the Budapest criteria for CRPS of one arm. Outcomes of interest were the French McGill Pain Questionnaire (QDSA), total area of allosthenia as recorded by mapping the area of skin where a 15g monofilament was perceived as painful, and the allosthenia severity (minimum pressure eliciting pain within the allosthenic territory).

RESULTS

This cohort was primarily women (70%), mean age 45yrs (range 18-74). Mean duration burning pain was 31 months, and baseline QDSA score was 48. The average primary area of allosthenia was 66 cm² (range 2.6-320), and the most common allosthenia threshold was 4.0 g. The average duration of treatment was 81 days. At cessation of treatment, the average QDSA score was 20 (Cohen’s d ES=1.64). Allosthenia completely resolved in 27/48 persons (56% of the total sample where only 60% completed treatment).

DISCUSSION / CONCLUSIONS

Somatosensory rehabilitation may be an effective treatment for reducing the allosthenia and painful sensations associated with CRPS of the upper limb. Work is in progress to provide estimates of reliability and validity for the measurement tools for allosthenia employed by this method.

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