

Diese Arbeit wurde veröffentlicht:

Bohls C, McIntyre A. The effect of ice stimulation on sensory loss in chronic stroke patients – a feasibility study. *Physiotherapy* 2005; 91: 237-241

Abstract

Objectives: Ice stimulation has often been used in sensory bombardment programs after stroke. This feasibility study explored the effects of ice as a single stimulus on disturbed wrist position sense, sensation of light touch and temperature discrimination of the affected hand.

Design: A multiple baseline single case study design across subjects

Setting: Physiotherapy department at the Royal Star and Garter Home

Participants: Four patients following cerebrovascular accident with left hemiparesis

Methods: Eight baseline measurements were collected over a minimum of 8 days.

The intervention phase was started for the first, second, third and fourth subject staggered on the 8th, 11th, 13th and 15th day of the study, respectively.

Intervention: The intervention phase involved daily short, repeated ice water immersions of each subjects' affected hand.

Main outcome measure: Repeated measurements of wrist position sense, sensation of light touch and temperature discrimination.

Results

Visual and statistical analysis indicated that changes of wrist position error were neither significant nor consistent across subjects. Results for sensation of light touch were inconclusive: one subject improved, two subjects showed deterioration.

Temperature discrimination of warm stimuli improved in one subject.

Conclusion

These observations suggest that ice-water immersions of the affected hand did not improve wrist position sense in three chronic stroke patients. Further exploration of the effects of ice stimulation on disturbed sensation of light touch and temperature after stroke is justified.