Somatosensory electrical stimulation to augment skill acquisition and motor memory consolidation: An electroencephalography study

No registrations found.

Ethical review Not applicable

Status Pending

Health condition type -

Study type Interventional

Summary

ID

NL-OMON22077

Source

Nationaal Trial Register

Health condition

Cerebral bleeding, disability, wrist fracture

Sponsors and support

Primary sponsor: University Medical Center Groningen

Source(s) of monetary or material Support: University Medical Center Groningen

Intervention

Outcome measures

Primary outcome

Primary outcome measure is the tracing error in the visuomotor task

Secondary outcome

Secondary outcome measures are mechanistic measures as assessed with electroencephalography. Specifically, we examine changes in the N30-component, event-related desynchronization, and resting-state coherence.

Study description

Study objective

Increases in motor performance after motor practice and somatosensory electrical stimulation are mediated by changes in brain activity as assessed by electroencephalography

Study design

pre-test, post-test, follow-up intervention design

Intervention

Weak somatosensory electrical stimulation applied to the right hand, in some conditions combined with non-invasive visuomotor practice with the right wrist flexors and extensors during a 20-minute session

Contacts

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Eligibility criteria

Inclusion criteria

Age 18-30 or 65+, Right handed based on the Edinburgh inventory

Exclusion criteria

Fracture in the upper extermity over the past year, neurological disorders, health and psychological disorders, medication affecting central nervous system functioning, MMSE score <26

Study design

Design

Study type: Interventional

Intervention model: Factorial

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-03-2016

Enrollment: 125

Type: Anticipated

Ethics review

Not applicable

Application type: Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 43412

Bron: ToetsingOnline

Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID
NTR-new NL5484

NTR-old NTR5619

CCMO NL55748.042.15 OMON NL-OMON43412

Study results