Modulating connectivity with noninvasive brain stimulation during spatial neglect rehabilitation

No registrations found.

Ethical review Not applicable

Status Pending

Health condition type - Study type Interventional

Summary

ID

NL-OMON21904

Source

NTR

Brief title

ModNeglect

Health condition

Stroke patients with unilateral spatial neglect

Sponsors and support

Primary sponsor: Maastricht University

Source(s) of monetary or material Support: NWO VICI

Intervention

Outcome measures

Primary outcome

Performance on a digitalised Star Cancellation Test

Secondary outcome

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- Performance on a Computerised Visual Detection Task
- Performance on Line Bisection Task
- Performance on Baking Tray Task

Study description

Background summary

Hemispatial neglect is a common symptom in stroke patients and is marked by the inability to attend to the contralesional side of space. The standard cognitive training for neglect in the subacute phase of stroke is visual scanning training (VST). However, VST requires many sessions to have a long-lasting effect. Here, we aim to increase the effectiveness of VST by applying non-invasive brain stimulation, namely transcranial Alternating Current Stimulation (tACS), to the frontoparietal attention network in patients with neglect following subacute stroke.

Study objective

The application of dual site tACS during cognitive training ameliorates spatial neglect symptoms to a larger extent than the application of sham stimulation during cognitive training.

Study design

Unkwown

Intervention

We will combine an evidence based Visual Scanning Training with 40 minutes of (active or sham) dual site tACS at the theta (6 Hz) and gamma (80 Hz) frequencies. The intervention is administered 5 times a week for a duration of 2 weeks.

Contacts

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Eligibility criteria

Inclusion criteria

- 30-80 years of age
- Subacute stroke (stroke occurred more than 2 weeks and less than 6 months ago; first or recurrent, ischemic or intracerebral haemorrhagic lesion)
- Diagnosed visuospatial neglect and/or spatial neglect symptoms (either left or right sided) on the basis of clinical judgement (i.e. by the cooperating clinical (neuro)psychologist).
- Sufficient comprehension and communication skills to benefit from training (based on clinical judgement)

Exclusion criteria

- Physically or mentally unable to participate (e.g. to perform the neglect training)
- Severe communicative disability, including aphasia
- Local scalp injuries
- Eczema on scalp or psoriasis
- (Neuro)psychiatric or neurodegenerative diseases including dementia, serious depression, multiple sclerosis, Parkinson's disease, Huntington's disease on the basis of clinical judgement (i.e. cooperating (neuro)psychologist)
- Current alcohol and/or drug abuse or a history of abuse within the last 6 months
- Pregnancy

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Non controlled trial

Masking: Single blinded (masking used)

Control: Placebo

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-03-2020

Enrollment: 40

Type: Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Not applicable

Application type: Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

In other registers

Register ID

NTR-new NL8145

Other METC: METC 19-081

Study results