

# Control of attention by the motor system

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON21965

### Source

NTR

### Brief title

CAMS

### Health condition

neglect  
eye movements  
oogbewegingen  
attention  
aandacht  
intervention  
interventie

## Sponsors and support

**Primary sponsor:** Utrecht University

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

## Intervention

## Outcome measures

### Primary outcome

Shape cancellation task (T0, T1)

Line bisection task (T0, T1)

Visual discrimination task (T0, T1)

Catherine Bergego Scale (T0, T1)

## **Secondary outcome**

Visual exploration task (T0, T1)

Virtual supermarket (T0, T1)

Eye movement behavior

## **Study description**

### **Background summary**

About 30% of all stroke patients admitted in a rehabilitation centre show unilateral visuospatial neglect. This disorder is characterized by the inability to respond to sensory stimuli in the affected (left) hemispace, due to damage to the right hemisphere. Visual scanning therapy, a training aimed at provoking eye movements to the affected hemifield, is often applied to attenuate neglect. Recent views on the attentional and motor system suggest new approaches to treat neglect. Congruence between different effectors of the motor system may produce a powerful bias in the motor system, which can counteract pathological biases in the attentional system. Therefore, an intervention with congruent eye and hand movements may result in greater attenuation of neglect symptoms compared to an intervention with single eye movements (as applied in visual scanning therapy).

### **Study objective**

Congruence between different effectors of the motor system may produce a powerful bias in the motor system, which can counteract pathological biases in the attentional system. Therefore, an intervention with congruent eye and hand movements may result in greater attenuation of neglect compared to an intervention with single eye movements (as applied in visual scanning therapy).

### **Study design**

T0 = baseline measurement

T1 = measurement after all training sessions

## Intervention

15 neglect patients will receive visual scanning therapy

15 neglect patients will receive a visual scanning training combined with congruent hand movements

Outcome measures for each training group will be compared to 15 stroke patients without neglected and 15 age matched healthy controls

## Contacts

### Public

J.A. Elshout  
Utrecht  
The Netherlands

### Scientific

J.A. Elshout  
Utrecht  
The Netherlands

## Eligibility criteria

### Inclusion criteria

- Clinical diagnosed symptomatic stroke (ischemic or intracerebral haemorrhagic lesion), first or recurrent, if possible verified by Magnetic Resonance Imaging (MRI) and/or Computed Tomography (CT) data
- Signs of neglect:
  - o asymmetry between the left and right side of the stimulus field in number of missed items of at least 2 on a shape cancelation task, and/or
  - o a bias towards the left or right side of space on a line bisection task, and/or

o Catherine Bergego Scale score higher than 6.

- 18-85 years of age
- Sufficient ability to comprehend and to communicate, as observed during neuropsychological assessment and/or neglect screening
- Sufficient motivation to participate in a daily rehabilitation treatment programme for two weeks.
- Written informed consent

## Exclusion criteria

Patients who recovered from neglect between inclusion and start of the training (i.e. no signs of neglect anymore on all baseline measurements) will be excluded

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-04-2018
Enrollment:	60
Type:	Anticipated

## Ethics review

Positive opinion

Date: 23-01-2018  
Application type: First submission

## Study registrations

### Followed up by the following (possibly more current) registration

ID: 48849  
Bron: ToetsingOnline  
Titel:

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

No registrations found.

### In other registers

Register	ID
NTR-new	NL6818
NTR-old	NTR7005
CCMO	NL64626.041.18
OMON	NL-OMON48849

## Study results