

# tDCS and aphasia

Gepubliceerd: 21-02-2014 Laatst bijgewerkt: 18-08-2022

We expect that tDCS will enhance speed of language recovery, resulting in improved communication, quality of life and participation - associated with decreased rehabilitation consumption and cost reduction.

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON27213

### Bron

Nationaal Trial Register

### Verkorte titel

TEA

### Aandoening

We will study participants with aphasia, an acquired language disorder caused by stroke.

/

De participanten van het onderzoek hebben afasie, een niet-aangeboren taalstoornis die door een beroerte (CVA) is ontstaan.

### Ondersteuning

**Primaire sponsor:** Erasmus University Medical Centre. Department: rehabilitation medicine and physiotherapy

**Overige ondersteuning:** Erasmus University Medical Centre, M-RACE

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

language functioning i.e. word finding (Boston naming test)

## Toelichting onderzoek

### Achtergrond van het onderzoek

In summary, we will study whether tDCS has an additional effect in the rehabilitation of aphasia. To investigate this, two groups will be studied: 1 group receives real current stimulation and 1 group receives no current stimulation (sham-tDCS).

The intervention (real tDCS or sham-tDCS) will be added to language therapy sessions. We hypothesise that real tDCS will lead to a significant improvement in language functioning, and that this group difference will also be there at 6 months follow-up.

### Doel van het onderzoek

We expect that tDCS will enhance speed of language recovery, resulting in improved communication, quality of life and participation - associated with decreased rehabilitation consumption and cost reduction.

### Onderzoeksopzet

5 timepoints for language tests&questionnaires:

- before intervention week 1
- after intervention week 1
- before intervention week 2
- after intervention week 2
- follow-up: 6 months

For the fMRI, there are 2 timepoints:

- before intervention week 1
- after intervention week 2

### Onderzoeksproduct en/of interventie

The intervention is tDCS (Transcraniale Direct Current Stimulation). We will study whether tDCS has an additional effect in the rehabilitation of aphasia. To investigate this, two groups will be studied: 1 group receives real current stimulation and 1 group receives no current stimulation (sham-tDCS).

The intervention (real tDCS or sham-tDCS) will be added to language therapy sessions. Two separate intervention weeks will be planned, in each week the participants will get 5 1-hour sessions of real tDCS or sham-tDCS+language therapy.

# Contactpersonen

## Publiek

Kamer MB.014 (afdeling Research & Development)  
Westersingel 300  
K. Spielmann  
Rotterdam  
The Netherlands  
010 2412412

## Wetenschappelijk

Kamer MB.014 (afdeling Research & Development)  
Westersingel 300  
K. Spielmann  
Rotterdam  
The Netherlands  
010 2412412

## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Aphasia after stroke
- Time post onset < 3 months
- Age 18-75 years
- Right handed
- Physical health sufficient to participate in intensive aphasia therapy

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Subarachnoid Haemorrhage (SAH)
- Prior stroke resulting in aphasia
- Brain surgery in the past
- Epileptic activity in the past 12 months
- Excessive use of alcohol or drugs
- Insufficient level of Dutch premorbidly

- Premorbid (suspected) dementia
- Premorbid psychiatric disease affecting communication
- Severe non-linguistic cognitive disturbances impeding language therapy
- Pace maker
- Global aphasia (spontaneous speech 0 AND shortened Token Test < 9)
- Severe Wernicke's aphasia (spontaneous speech 0-1 AND shortened Token Test <9)
- Residual aphasia (spontaneous speech 4-5 AND shortened Token Test > 28 AND Boston Naming Test > 150)

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Factorieel
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Placebo

### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-11-2013
Aantal proefpersonen:	58
Type:	Verwachte startdatum

## Ethische beoordeling

Positief advies	
Datum:	21-02-2014
Soort:	Eerste indiening

## Registraties

## **Opgevolgd door onderstaande (mogelijk meer actuele) registratie**

Geen registraties gevonden.

## **Andere (mogelijk minder actuele) registraties in dit register**

Geen registraties gevonden.

## **In overige registers**

<b>Register</b>	<b>ID</b>
NTR-new	NL4211
NTR-old	NTR4364
Ander register	METC : MEC-2013-147

## **Resultaten**