Transcranial magnetic stimulation to the right parietal cortex in the treatment of depression.

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Ten consecutive sessions of 2 Hz TMS (inter-pulse interval: 1 sec) at 90% MT to the right parietal cortex (2400 pulses p/session) will have antidepressant effects.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21176

Bron
NTR

Verkorte titel
TMS

Aandoening

Depression; Depressie

Ondersteuning

Primaire sponsor: Department of Psychiatry
St Lucas Hospital
P.O. Box 9243
1006 AE Amsterdam
the Netherlands
Overige ondersteuning: Netherlands Organization for Scientific Research (NWO)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The percentage change from baseline on the HAM-D scores

Toelichting onderzoek

Achtergrond van het onderzoek

Background:

The aim of the current treatment study was to evaluate the therapeutic effects of transcranial magnetic stimulation (TMS) over the right parietal cortex in depression.

Methods:

In a double-blind sham-controlled design ten consecutive sessions of 2 Hz TMS (inter-pulse interval: 1 sec) at 90% MT to the right parietal cortex (2400 pulses p/session) were applied to thirty-four patients with the primary diagnosis of DSM-IV depression and a > 15 score on the 17-item Hamilton Rating Scale for Depression (HAM-D). The primary outcome measures were the percentage change from baseline on the 17-item HAM-D scores after ten sessions, and the percentage clinical (> 50% reduction in HAM-D score) and partial clinical responders (> 30% reduction in HAM-D score).

Results:

The reduction of HAM-D scores in the real TMS treatment (meanreal ± SD, -19.9 ± 32.5%) was not statistically different from the sham TMS treatment (meansham ± SD, -5.6 ± 28.4%), and the number of clinical responders did not differ between treatments. However, a significant greater number of partial clinical responders was observed in the real (43.8%) as compared to the sham TMS treatment (6.3%).

Conclusions:

The current study provides the first evidence showing that 2 Hz TMS over the right parietal cortex may have antidepressant properties and warrants further research.

Doel van het onderzoek

Ten consecutive sessions of 2 Hz TMS (inter-pulse interval: 1 sec) at 90% MT to the right

parietal cortex (2400 pulses p/session) will have antidepressant effects.

Onderzoeksopzet

t=1: week 0 - baseline;

t=2: week 2 - endpoint.

Onderzoeksproduct en/of interventie

Transcranial magnetic stimulation: 2 Hz TMS (inter-pulse interval: 1 sec) at 90% MT to the right parietal cortex (2400 pulses p/session). 10 sessions in total.

Contactpersonen

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Primary diagnosis of depressive disorder according to the DSM-IV (APA 2000);

2. => 15 score on the Hamilton Rating Scale for Depression (HAM-D).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. History of seizures;

2. Neurological conditions;

3. Metal objects in or around the body that cannot be removed (i.e., cochlear implant, surgical clips, piercing, cardiac pacemaker);

4. Heart disease;

5. Pregnancy;

6. Drug and alcohol abuse.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Dubbelblind
Controle:	Placebo

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	01-07-2004

Aantal proefpersonen:	34
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	17-04-2008
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

Register	ID
NTR-new	NL1234
NTR-old	NTR1279
Ander register	: TMSDEP18061975
ISRCTN	ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten
In preparation