

Repetitive Transcranial Magnetic Stimulation (rTMS) treatment for chronic tinnitus.

Gepubliceerd: 23-04-2008 Laatste bijgewerkt: 13-12-2022

rTMS suppresses neural circuits using a pulsed magnetic field which temporarily excites or inhibits a certain brain area. It is thought that tinnitus is generated in the brain as a result of functional reorganization of auditory neural pathways and...

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

Samenvatting

ID

NL-OMON20766

Bron

NTR

Verkorte titel

N/A

Aandoening

chronic tinnitus

NL: chronische tinnitus, oorsuizen

Ondersteuning

Primaire sponsor: Department of Otorhinolaryngology
University Medical Centre Utrecht

Overige ondersteuning: University Medical Centre Utrecht

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Tinnitus severity measured with the tinnitus questionnaire

Toelichting onderzoek

Achtergrond van het onderzoek

Tinnitus is a phantom auditory perception of meaningless sound, meaning that there is registration of sound in the absence of an external or internal acoustic stimulus. It is a common problem (prevalence 7-19%) which may interfere with the ability to lead a normal life. Unfortunately, it is a very difficult symptom to treat because there are hardly any therapeutic options for the cause of tinnitus. Most therapies focus on alleviating the condition rather than treating the cause. Tinnitus is thought to be generated in the brain, as a result of functional reorganization of auditory neural pathways and tonotopic maps in the central auditory system, following damage to the peripheral auditory system. Repetitive Transcranial magnetic stimulation (rTMS) is a therapy, based on this concept of reorganization in the auditory cortex. It uses a pulsed magnetic field to disrupt the neural circuit and to thereby (temporarily) excite or inhibit certain brain areas, leading to the suppression of tinnitus. With this study we intend to answer the question whether rTMS can be an effective treatment for tinnitus.

Doel van het onderzoek

rTMS suppresses neural circuits using a pulsed magnetic field which temporarily excites or inhibits a certain brain area. It is thought that tinnitus is generated in the brain as a result of functional reorganization of auditory neural pathways and tonotopic pathways, leading to a hyperactivity in the central auditory system, following damage to the peripheral auditory system. It is hypothesized that rTMS can suppress this hyperactivity and thereby suppress tinnitus.

Onderzoeksopzet

last rTMS treatment, 1 week after treatment, 1, 3 and 6 months

(VAS's daily for the first three months and monthly for the second three months)

Onderzoeksproduct en/of interventie

rTMS: bilateral 1Hz, 110% MT, 2000 stimuli on five subsequent days.

Contactpersonen

Publiek

University Medical Centre Utrecht Department of Otorhinolaryngology

C.E.L. Hoekstra
Post address: G05.127
Heidelberglaan 100

Utrecht 3584CX
The Netherlands

Wetenschappelijk

University Medical Centre Utrecht Department of Otorhinolaryngology

C.E.L. Hoekstra
Post address: G05.127
Heidelberglaan 100

Utrecht 3584CX
The Netherlands

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Chronic, non fluctuating, tinnitus, demonstrated by means of the Diagnostic Protocol Tinnitus UMCU, of at least two months duration.
2. Age >18 years

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Treatable cause of the tinnitus
2. Use of anticonvulsant medication or other psychotherapeutic drugs

3. History of epilepsy or family members with epilepsy
4. Presence of active migraine
5. Presence of psychiatric, severe internal or heart diseases or other neurologic diseases besides epilepsy
6. Metal objects in and around body that can not be removed
7. Pregnancy (will be tested on the first day of rTMS using a urine pregnancy test)
8. Alcohol or drug abuse
9. Prior treatment with TMS

Onderzoeksopzet

Opzet

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

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	23-04-2008
Aantal proefpersonen:	52
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies	
Datum:	23-04-2008
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	NL1247
NTR-old	NTR1293
Ander register	METC nummer UMC Utrecht : 07-286/O
ISRCTN	ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten

N/A