Denkprocessen meten met electroden in de hersenen

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON20299

Source Nationaal Trial Register

Brief title iEEGstudy

Health condition

Patients with epilepsy (intracranial registration)

Sponsors and support

Primary sponsor: Maastricht University Medical Center **Source(s) of monetary or material Support:** None

Intervention

Outcome measures

Primary outcome

To study the patterns and topographical distribution of the electrical signal generated in cortical neurons during the processing of sensory stimuli (of which the nature will depend on the primary function of the cortical area under investigation) in epileptic patients under intracranial registration.

Secondary outcome

The secondary objectives are:

1. To study the phase-amplitude relationship between different frequency bands in the neural signal.

2. To characterize the brain activation patterns during sensory stimulation by fMRI in epileptic patients before the implantation of the electrodes and compare it with the fMRI activation patterns obtained from healthy volunteers.

3. To identify the patterns in the ECoG signal that are correlated with the patterns of activation obtained with fMRI in order to understand better how the neural processes are reflected in neuroimaging studies.

4. To collect quantitative information that can be used for future research projects.

Study description

Study objective

To enhance insight on the coding of sensory stimuli by signal analyses

Study design

7T fMRI scan (presurgical) and postoperative test. No other timepoints.

Intervention

No interventions are planned

Contacts

Public

PO Box 5800 R. Rouhl Maastricht 6202AZ The Netherlands +31-43-3872911 **Scientific** PO Box 5800

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R. Rouhl Maastricht 6202AZ The Netherlands +31-43-3872911

Eligibility criteria

Inclusion criteria

• Medically refractory epilepsy

• Diagnostic workup up till that moment has not led to decline the patient for resective epilepsy surgery

- A suspected (neo-)cortical seizure focus at the surface of the brain
- Planned implantation of intracranial electrodes
- Incapacitating epilepsy or seizures
- Minimum age 18 years

Inclusion criteria for healthy control:

• Voluntary controls will be selected based on the gender and age distribution of the patients programmed for grid implantation surgery.

Exclusion criteria

- Patients with (co-existent) psychogenic, non-epileptic attacks, or low IQ (below 70).
- (post-ictal) psychosis during the registration period will lead to exclusion from the study.

Study design

Design

Study type:

Observational non invasive

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Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-09-2014
Enrollment:	0
Туре:	Anticipated

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	NL4483
NTR-old	NTR4616
Other	: iEEGstudy

Study results