Connectivity and networks in epilepsy patients with cranial tumors

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON23852

Source
NTR

Brief title
CONNECT

Health condition

epilepsy, brain tumor
epilepsie, hersentumor

Sponsors and support

Primary sponsor: VU University Medical Center
Source(s) of monetary or material Support: Nationaal Epilepsie Fonds, The Netherlands

Intervention

Outcome measures

Primary outcome

- Magnetoencephalography

- Epilepsy diary

Secondary outcome

- Neuropsychological assessment

Study description

Background summary

Epilepsy is considered a disease in which dynamic processes in the neuronal networks of the brain are dysfunctional. Patients suffering from primary brain tumors often experience epileptic seizures. Up till now, it is unclear which factors are responsible for the large individual variability in the frequency of epileptic seizures in these patients. Magnetoencephalography (MEG) is an imaging technique that is used for detection of seizure activity and epileptic source localization as well as assessment of functional connectivity and neural network features throughout the brain. Recent research advances concerning functional connectivity and network properties of the brain have indicated that these techniques may be used to investigate factors that determine the frequency of epileptic seizures. Functional connectivity and network structure have also proven to correlate with cognitive functioning in brain tumor patients.
The current study aims to investigate whether neural network characteristics of the brain can predict the frequency and severity of epileptic seizures in brain tumor patients. Our secondary objective is to determine the correlation between seizures, network architecture and cognition in this patient group.

Study objective

- Epilepsy patients with brain tumours show altered functional connectivity and networks in the brain compared to healthy controls

- Connectivity and networks change over time as a function of treatment

Study design

Baseline, before and after each treatment

Intervention

N/A

Contacts

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Eligibility criteria

Inclusion criteria

Inclusion criteria for brain tumor patients:

1. Adult (>18 years)

2. Epilepsy (at least one epileptic seizure)

3. Histopathologically confirmed glioma or meningioma according to the WHO

4. Written informed consent.

Inclusion criteria for healthy controls:

1. Adult (>18 years)

2. Written informed consent.

Exclusion criteria

Exclusion criteria for brain tumor patients:

1. Psychiatric disease or symptoms

2. Insufficient mastery of the Dutch language

3. Inability to communicate adequately.

Exclusion criteria for healthy controls:
1. Use of centrally acting drugs (including analgetics)

2. Psychiatric disease or symptoms

3. Disorders of the central nervous system

4. Insufficient mastery of the Dutch language.

Study design

Design

Study type:	Interventional
Intervention model:	Other

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-10-2008
Enrollment:	80
Type:	Anticipated

Ethics review

Positive opinion

Date:	04-09-2008
Application type:	First submission

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	NL1370
NTR-old	NTR1430
Other	METC VU Medisch Centrum : 08/052
ISRCTN	ISRCTN wordt niet meer aangevraagd

Study results

Summary results
N/A