Connectivity and networks in epilepsy patients with cranial tumors

Gepubliceerd: 04-09-2008 Laatst bijgewerkt: 18-08-2022

- 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

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON23852

Bron
NTR

Verkorte titel
CONNECT

Aandoening

epilepsy, brain tumor
epilepsie, hersentumor

Ondersteuning

Primaire sponsor: VU University Medical Center
Overige ondersteuning: Nationaal Epilepsie Fonds, The Netherlands

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- Magnetoencephalography

- Epilepsy diary

Toelichting onderzoek

Achtergrond van het onderzoek

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.

Doel van het onderzoek

- 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

Onderzoeksopzet

Baseline, before and after each treatment

Onderzoeksproduct en/of interventie

N/A

Contactpersonen

Publiek

VU Medisch Centrum
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Wetenschappelijk

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Afdeling Neurologie, ZH 1F.03/05

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

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.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

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.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders

Controle: N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-10-2008
Aantal proefpersonen:	80
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	04-09-2008
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	NL1370
NTR-old	NTR1430
Ander register	METC VU Medisch Centrum : 08/052
ISRCTN	ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten
N/A