VAI pilot studie in glioblastomen

Gepubliceerd: 21-02-2018 Laatst bijgewerkt: 13-12-2022

Can vessel

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON21865

Bron
NTR

Verkorte titel
VAI pilot study in glioblastoma

Aandoening

Glioblastoma, Glioblastoom
Brain tumour, hersentumor

Ondersteuning

Primaire sponsor: University Medical Center Groningen (departments of radiology and ngmb)
Overige ondersteuning: Van der Meer-Boerema stichting grant: B.R.J. van Dijken University of Groningen (MD/PhD grant: B.R.J. van Dijken, Mandema grant: A. van der Hoorn)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The primary outcome is to establish the practicability abd diagnostic accuracy of VAI-MRI for the treatment evaluation of glioblastoma.

Toelichting onderzoek

Achtergrond van het onderzoek

Glioblastomas (GBM) are the most malignant brain tumours with low survival rates. Treatment failure causes this tumour to inevitably recur, making close monitoring of GBM patients essential. The gold standard for follow-up is anatomical MR imaging based on contrast enhancement. However, this imaging method is hindered by pseudo-progression which can resemble true tumour progression, but is in fact due to treatment effects.

Functional imaging methods have been employed to overcome the limitations of anatomical MRI by measuring biological aspects of the tumour. Tumour neovascularisation, a hallmark of glioblastoma progression, can be visualised by perfusion MRI. Current perfusion MRI techniques rely on leakage from vessels and do not accurately demonstrate microvasculature.

Vessel Architectural Imaging (VAI) is a novel perfusion MRI technique which can acquire a plethora of additional perfusion parameters, such as oxygenation and vessel diameter. The practicability and accuracy of VAI for differentiating treatment effects from tumor progression in glioblastoma treatment evaluation has not been studied before.

This study aims to establish the practicability and diagnostic accuracy of VAI-MRI in treatment evaluation of glioblastoma.

Doel van het onderzoek

Can vessel

Onderzoeksopzet

Ten treated glioblastoma patients with a new enhancing lesion on conventional follow-up MRI will undergo VAI-MRI. The definite diagnosis will be made radiologically according to the appropriate guidelines (RANO criteria).

Onderzoeksproduct en/of interventie

n/a

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Histological confirmed glioblastoma after standard treatment

- New contrast enhancing lesion on follow-up MRI

- Written informed consent

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Minors (<18 years)

- Residual enhancement on post-operative MRI

- History of previous new enhancing lesion on follow-up MRI

- Treatment different than standard treatment

- Contraindication for MRI (ferromagnetic material in body, pregnancy, claustrophobia)

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Cross-over
Toewijzing:	N.v.t. / één studie arm
Blindering:	Enkelblind
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-07-2018
Aantal proefpersonen:	10
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

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	NL6859
NTR-old	NTR7037
Ander register	Universitair Medisch Centrum Groningen : ABR65208

Resultaten