Automatic analysis and validation of MRI-perfusion of the heart in patients with possible myocardial infarction.

Gepubliceerd: 27-12-2012 Laatst bijgewerkt: 18-08-2022

N/A

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25930

Bron
NTR

Aandoening

myocardial infarction
myocardial fibrosis

Ondersteuning

Primaire sponsor: Atrium Medical Center Parkstad
Overige ondersteuning: Research time investment of the technician will be partly facilitated by Atrium Medical Center Parkstad

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Correlation-coefficient between the currently used visual interpretation to assess myocardial viability on delayed enhancement magnetic resonance imaging and computer-aided assessment of myocardial viability on delayed enhancement magnetic resonance imaging.

Toelichting onderzoek

Achtergrond van het onderzoek

In this prospective cohort study, all consecutive patients who are referred for contrast-enhanced magnetic resonance imaging of the heart in daily clinical practice to evaluate possible myocardial infarction will be included if they indeed successfully underwent a contrast-enhanced magnetic resonance imaging of the heart. Patients are scanned on a 1.5 Tesla MRI-scanner (Avanto Siemens, Erlangen, Germany). All dynamic short-axis-scans will be evaluated by two researchers who will be blinded with respect to patient's demographics, patient's clinical history, each other's findings, and the results of the other method of assessment. All patients will be evaluated by each researcher twice. Once with the currently used visual interpretation to assess myocardial viability on delayed enhancement magnetic resonance imaging and once with computer-aided assessment of myocardial viability on delayed enhancement magnetic resonance imaging using Dynamika-software. The researchers will first indicate whether the image quality is good enough to evaluate the images. Subsequently, the researchers will indicate on a standardized scoring form whether or not an abnormality is present, and in case of an abnormality indicate where the abnormality is located in the myocardium.
Correlation-coefficient will be calculated between the currently used visual interpretation to assess myocardial viability on delayed enhancement magnetic resonance imaging and the computer-aided assessment of myocardial viability on delayed enhancement magnetic resonance imaging. In addition the interobserver-variation between the two researchers for each method of assessment will be calculated. We expect a good correlation between the two methods to assess myocardial viability on delayed enhancement magnetic resonance imaging of the heart.

Doel van het onderzoek

N/A

Onderzoeksopzet

Analyses will be performed after the inclusion of patients is finished.

Onderzoeksproduct en/of interventie

None.

Contactpersonen

Publiek

Postbus 4446
M. Junghans
Heerlen 6401 CX
The Netherlands
+31 (0)45 5766642

Wetenschappelijk

Postbus 4446
M. Junghans
Heerlen 6401 CX
The Netherlands
+31 (0)45 5766642

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

All consecutive patients who are referred for contrast-enhanced magnetic resonance imaging of the heart in daily clinical practice to evaluate possible myocardial infarction.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Patients with a contra-indication for contrast-enhanced magnetic resonance imaging of the heart.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Blindering:	Enkelblind

Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-02-2013
Aantal proefpersonen:	50
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	27-12-2012
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	NL3615
NTR-old	NTR3781
Ander register	METC Atrium-Orbis-Zuyd : 12-N-109
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten
N/A