Geheugenfunctie en doorbloeding van de hersenen na recente pre-eclampsie.

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Persistent cognitive complaints of part of the women who experienced severe preeclampsia 0.5-1.5 year ago can be objectified by neuropsychological as well as cerebral hemodynamic tests.

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

Samenvatting

ID

NL-OMON28661

Bron
Nationaal Trial Register

Verkorte titel
N/A

Aandoening

cognition
cerebral blood flow regulation
preeclampsia
pulse wave velocity

cognitie
cerebrale bloedstroom regulatie
preeclampsie
polsgolfsnelheid

Ondersteuning

Primaire sponsor: University Hospital Maastricht
Overige ondersteuning: University Hospital Maastricht
Eindhoven University of Technology

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Correlation between degree of disturbance of the cerebrovascular control system and cognitive function in former preeclamptic patients.

Toelichting onderzoek

Achtergrond van het onderzoek

Although the regulation of cerebral blood flow is known to be altered during preeclampsia, little is known about the state of the control mechanisms after the experience of preeclampsia. Nevertheless, several studies report evidence for formerly preeclamptics having a higher risk to die from stroke and a shorter life expectancy. Furthermore, our previous study shows that neurovascular coupling is abnormal in a subgroup of formerly preeclamptics. The question raised now is whether abnormalities in local blood flow regulation of formerly preeclamptics are related to cognitive function and to the persistent cognitive complaints which are regularly reported.

A few studies show that cognitive function is disturbed after severe preeclampsia, but discuss that it is not known whether this effect is permanent or temporal and whether it is caused by organic damage. Our working hypothesis is that test-objectified cognitive function of formerly preeclamptics with or without subjective cognitive complaints is correlated with dynamic cerebrovascular control parameters measured by non-invasive techniques for recording cerebral autoregulation and neurovascular coupling. The major objective is to investigate whether cognitive complaints of formerly preeclamptics are caused by organic damage (measured by brain function) which may be used to predict an increased risk for future cerebrovascular complications such as stroke.

Doel van het onderzoek

Persistent cognitive complaints of part of the women who experienced severe preeclampsia 0.5-1.5 year ago can be objectified by neuropsychological as well as cerebral hemodynamic tests.

Onderzoeksopzet

Single measurements within time span of 0.5-1.5 years after experience of preeeclampsia.

Onderzoeksproduct en/of interventie

No interventions tested, but correlation between parameters (cerebral blood flow regulation and cognition) in a single patient group (former preeclamptics).

Cerebral blood flow is measured non-invasively using transcranial Doppler ultasonography.

Cognition is objectified by neuropsychological test scores.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Women who have been diagnosed with severe (clinical admission indispensable) early (< 34 weeks) preeclampsia 0.5-1.5 years ago in their first pregnancy;

2. Age > 18 years;

3. Informed consent of the patient before participation into the study.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Neurological or cerebrovascular disorders in case history;

2. Kidney function disorder;

3. Use of statines;

4. Psychiatric case history or state (As I and II issues);

5. Use of anti-depression medicine;

6. Abuse of alcohol and/or drugs;

7. Smoking or refrained from smoking less than 2 years;

8. Diabetes.

Onderzoeksopzet

Opzet

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

Controle: N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	15-01-2009
Aantal proefpersonen:	30
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing
Soort: Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 33668
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL1525
NTR-old	NTR1596
CCMO	NL25268.068.08
ISRCTN	ISRCTN wordt niet meer aangevraagd
OMON	NL-OMON33668

Resultaten

Samenvatting resultaten
Martens EGHJ, Peeters LLH, Gommer ED, Mess WH, Lima Passos V, van de Vosse FN, Reulen JPH. The visually-evoked cerebral blood flow response in women with a recent history of preeclampsia and/or Eclampsia. Ultrasound in Med an Biol. 2009, 35(1): 1-7