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

No registrations found.

Ethical review	Not applicable
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON28661

Source
Nationaal Trial Register

Brief title
N/A

Health condition

cognition
cerebral blood flow regulation
preeclampsia
pulse wave velocity

cognitie
cerebrale bloedstroom regulatie
preeclampsie
polsgolfsnelheid

Sponsors and support

Primary sponsor: University Hospital Maastricht
Source(s) of monetary or material Support: University Hospital Maastricht
Eindhoven University of Technology

Intervention

Outcome measures

Primary outcome

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

Secondary outcome

Correlation between presence of cognitive complaints and cognitive function (NPO-scores).
Correlation between presence of cognitive complaints and cerebrovascular control parameters.

Study description

Background summary

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.

Study objective

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.

Study design

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

Intervention

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.

Contacts

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Eligibility criteria

Inclusion criteria

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.

Exclusion criteria

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.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	15-01-2009
Enrollment:	30
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 33668
Bron: ToetsingOnline
Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

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

Study results

Summary results
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