Genetic immunological causes of recurrent miscarriages; 'HLA sharing as a cause of recurrent miscarriages'.

No registrations found.

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

Summary

ID

NL-OMON19918

Source
NTR

Health condition

Recurrent miscarriages

Sponsors and support

Primary sponsor: LUMC (Leiden University Medical Centre)
Department IHB and Department of Obstetrics
Source(s) of monetary or material Support: Department IHB and Department of Obstetrics at the LUMC

Intervention

Outcome measures

Primary outcome

Difference genetic profile patients and controls (HLA (mis)matches, frequency HLA-C2, frequency KIRAA, polymorphism hPR, mutations of complement regulatory proteins).

Secondary outcome

Pregnancy outcome.

Study description

Background summary

Recurrent miscarriages is commonly defined as three or more consecutive miscarriages prior to the 20th week. It is a common problem affecting 1 to 2% of all fertile couples and is a highly heterogeneous condition. An underlying cause may be identified in about 25-50% of cases. Therefore 50-75% of the couples are left with the burden of continuous uncertainty and clinicians without means to treat these women. In the last decade several therapies were investigated, however none of these therapies have been proven effective. In this project we aim to determine different genetic immunological causes of recurrent miscarriage of unknown etiology. These results will help to identify these patients and to eventually develop effective therapies.

Study objective

Recurrent miscarriages is defined as three or more consecutive miscarriages prior to the 20th week of gestation. Whenever the diagnosis ‘recurrent miscarriages’ is established, an underlying cause may be identified in about 25-50% of cases. A successful implantation of the embryo needs an adequate maternal immune response; an inadequate maternal allo-immune response to paternal antigens has been proposed to be responsible for a proportion of these unexplained miscarriages. In the case of shared human leukocyte antigens (HLA) in couples a depressed response of maternal PBMCs may occur and as a consequence of this a failure of placentation can take place.

Therefore, the influence of HLA-sharing in couples with unexplained recurrent miscarriages has been studied extensively. However it is still unclear whether the HLA antigens themselves are the susceptibility factors or whether they are linked to other genes that are the main causative agents for the onset of recurrent miscarriages. Also influences of different KIR (NK inhibitory receptors) haplotypes, polymorphism in hPR (Human Progesteron Receptor) receptor and mutations in complement regulatory proteins remains unclear. We hypothezised that genetically factors such as HLA sharing could be responsible for recurrent miscarriages of unknown etiology.

Study design

Patients, partners and their children will be invited to visit the clinic once for filling in questionnaire and donating bloodsamples.

We will invite all couples at the same day. After this we will analyze questionnaires and perform genotyping this will cost us approximately 3-6 months.

Intervention

Peripheral bloodsamples from patient and partner will be obtained only once, also after informed consent buccal swabs from their children will be taken.

Contacts

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Eligibility criteria

Inclusion criteria

Recurrent miscarriages (>2 and < 20 weeks) and age < 36 years.

Exclusion criteria

Parental chromosomal abnormalities and uterus anomalies.

Study design

Design

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

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-06-2012
Enrollment:	432
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

In other registers

Register	ID
NTR-new	NL3250
NTR-old	NTR3402
Other	:
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A