Study of B cell functions in multiple sclerosis.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON24833

Source
NTR

Health condition

multiple sclerosis, B cells

Sponsors and support

Primary sponsor: no sponsor, study performed by Hasselt University (Belgium), Agoralaan gebouw D, 3590 Diepenbeek, Belgium
Source(s) of monetary or material Support: no sponsor, researchers are funded by FWO Flanders and Hasselt University, Agoralaan gebouw D, 3590 Diepenbeek, Belgium

Intervention

Outcome measures

Primary outcome

Knowledge on the role of B cells in the disease pathogenesis of multiple sclerosis. This will be through in vitro cultivation and measurement of certain receptors.

Secondary outcome

N/A

Study description

Background summary

Multiple sclerosis (MS) is a chronic disease of the central nervous system in which the myelin that surrounds nerves is damaged. It is an autoimmune disease in which the immune system attacks own tissue (myelin). B cells are immune cells that have a disturbed function in MS and produce autoantibodies. These are antibodies that are directed against autoantigens (own tissue or proteins). Despite intensive research, the targets of these antibodies remain unknown up til now. Besides producing autoantibodies, B cells can activate T cells that can damage myelin and the brain. Not much is known concerning this B cell function in the disease process of MS.

The aim of this study is to study the antibody dependent and independent B cell functions in MS. Study of B cells and antibodies in MS and other neurologic diseases can improve insight into the underlying disease mechanisms and improve the current diagnostics and therapy.

B cells will be obtained from the cerebrospinal fluid by centrifugation and from the peripheral blood by density gradient centrifugation. B cells are then studied by flow cytometry and in vitro assays. Cytokines are measured using ELISA.

Study objective

B cells play a role in multiple sclerosis, not only by production of autoantibodies but also by presentation of (auto)antigens to autoreactive T cells.

Study design

N/A

Intervention

N/A

Contacts

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Eligibility criteria

Inclusion criteria

Blood samples (10-15ml) are collected from healthy individuals, multiple sclerosis (MS) patients and neurologic control patients. Cerebrospinal fluid (5-10ml) is obtained via lumbar puncture from MS patients and neurologic controls. The lumbar puncture and blood puncture is done in order to get a correct diagnosis. In this way, trouble and risk for the patient is minimal. During this routine puncture, an extra volume is taken for this study. When the diagnosis is different from MS, the patient will be included in the control population. We aim to include 10 patients with a clinically isolated syndrome, 130 MS patients, 80 control patients and 80 healthy controls.

Exclusion criteria

N/A

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Single blinded (masking used)

Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-03-2012
Enrollment:	160
Type:	Anticipated

Ethics review

Positive opinion

Date:	24-09-2012
Application type:	First submission

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	NL3491
NTR-old	NTR3637
Other	METC Orbis Sittard : 12.023
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A