# Relation between intestinal MICRObiota translocation and development of Graves Orbitopathy: the MICRO-GO study

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We aim to investigate whether a relation between intestinal microbiota composition, mucosal integrity and translocation of bacteria into adipose tissue of the affected eye is related to the severity of Graves orbitopathy.

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeThyroid gland disordersStudy typeObservational invasive

## **Summary**

#### ID

**NL-OMON41329** 

#### Source

ToetsingOnline

**Brief title** MICRO-GO

#### **Condition**

- · Thyroid gland disorders
- Ocular neuromuscular disorders

#### **Synonym**

eyedisease associated with hyperthyreoidism, Graves orbitopathy

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

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#### Intervention

**Keyword:** Graves hyperthyreoidism, gutmicrobiota, inflammation, orbitopathy

#### **Outcome measures**

#### **Primary outcome**

To determine differences in orbital tissue bacterial content and inflammatory genes expression is associated with clinical disease severity score (CAS) in Graves orbitopathy patients

#### **Secondary outcome**

Differences in gutmicrobiota composition, mucosal integrity, subsequent endotoxemia and plasma levels of inflammation between subjects with low and high CAS scores in patients with Graves orbitopathy

# **Study description**

#### **Background summary**

Graves hyperthyreoidism (prevalencee 400 per 100,000, more females than males, age of onset between 20\*50 years) is an autoimmune disease with undefined pathophysiology in which thyroid autoantibodies are produced against thyroid TSH-receptor thus inducing hyperthyroidism. In 10-15% of these cases Graves Orbitopathy develops due to influx of mononucleair cell (lymfocytic) infiltration in adipose tissue of the affected eye. recent articles have suggested a role for the intestinal microbiota composition in the development of Graves orbitopathy.

#### Study objective

We aim to investigate whether a relation between intestinal microbiota composition, mucosal integrity and translocation of bacteria into adipose tissue of the affected eye is related to the severity of Graves orbitopathy.

#### Study design

observational study

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#### Study burden and risks

Based on the observational nature of this research proposal we postulate that the studyburden is low and risk for participating patients will be nil.

### **Contacts**

#### **Public**

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### **Inclusion criteria**

Caucasian subjects with Graves orbitopathy (males/postmenopauzal females, aged 18 to 69 years-old; and not on concomitant medication besides block/replacement therapy (thyrax en strumazol/PTU))

#### **Exclusion criteria**

Use of prednisone/antibiotic in the last three months including proton pump inhibitors (PPI) is prohibited.

# Study design

## **Design**

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 25-09-2013

Enrollment: 24

Type: Actual

## **Ethics review**

Approved WMO

Date: 07-06-2013

Application type: First submission

Review commission: METC Amsterdam UMC

# **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

CCMO NL44564.018.13