# Effect of physical activity level on maximal exercise performance in Chronic Fatigue Syndrome

Published: 09-07-2009 Last updated: 05-05-2024

The aim of this study is to compare the aerobic physical capacity of physically inactive CFS patients to relatively active patients and healthy controls.

**Ethical review** Approved WMO **Status** Recruiting **Health condition type** Other condition

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON33019

#### Source

ToetsingOnline

#### **Brief title**

physical condition in CFS

## **Condition**

Other condition

#### Svnonvm

CFS, chronic fatigue, chronic fatigue syndrome

#### **Health condition**

chronisch vermoeidheidssyndroom

## **Research involving**

Human

# **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Sint Radboud

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

#### Intervention

Keyword: Activity level, Chronic Fatigue Syndrome, Maximal exercise, Physical activity

#### **Outcome measures**

#### **Primary outcome**

Maximal oxygen uptake, as achieved during a maximal exercise test

## **Secondary outcome**

Percentage of patients achieving maximal exertion

# **Study description**

## **Background summary**

Patients with Chronic Fatigue Syndrome (CFS) often report an increase in symptoms after physical exercise (Bazelmans et al. 2005). This may lead to avoidance of physical activity, which will result in an even larger symptom increase after physical exercise (Vercoulen et al. 1999). Several studies reported that physical performance was diminished in CFS patients (Montague et al. 1989, Riley et al. 1990, Sargent et al 1997, Sisto et al. 1996, Wallman 2004). This seems to be mainly due to the higher perceived effort, rather than to reduced physical fitness (Sisto et al. 1996, Bazelmans et al. 2001, Wallman et al. 2004). Unfortunately, the physical activity level of patients participating in these studies was not taken into account. The model of reduced activity, leading to reduced physical fitness, leading to symptom increase might only be valid for physically inactive patients.

## **Study objective**

The aim of this study is to compare the aerobic physical capacity of physically inactive CFS patients to relatively active patients and healthy controls.

#### Study design

Case-control study

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## Study burden and risks

Only the maximal exercise test itself and lactate measurements are performed especially for this study (1.5h).

# **Contacts**

## **Public**

Universitair Medisch Centrum Sint Radboud

Toernooiveld 214 6525 EC Nijmegen Nederland

**Scientific** 

Universitair Medisch Centrum Sint Radboud

Toernooiveld 214 6525 EC Nijmegen Nederland

# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

## Inclusion criteria

- female
- age between 18-50 years
- able to speak, read and write Dutch language ;additional criteria for patients:
- CDC criteria for CFS
- CIS fatigue score of 35 or higher, indicating severe fatigue
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- Sickness Impact Profile score of 700 or higher

# **Exclusion criteria**

- cardiac/pulmonary disease
- knee problems
- severe hypertension
- high fever within the last 6 weeks
- unable to undergo maximal exercise testing

# Study design

# **Design**

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 01-12-2009

Enrollment: 60

Type: Actual

# **Ethics review**

Approved WMO

Date: 09-07-2009

Application type: First submission

Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

# **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 NL26646.091.09