# THE PREVALENCE OF FABRY DISEASE IN MALES WITH RENAL SYMPTOMS OF UNKOWN CAUSE, VISITING THE OUTPATIENT CLINIC OF A LARGE TEACHING HOSPITAL

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To determine the prevalence of  $\alpha$ -Galactosidase A deficiency in male patients presenting with renal failure, proteinuria or micro-albuminuria of unknown cause, at the outpatient clinic of the department of internal medicine of a large teaching...

**Ethical review** Approved WMO

**Status** Pending

**Health condition type** Metabolic and nutritional disorders congenital

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON29934

#### Source

ToetsingOnline

#### **Brief title**

Prevalence of renal disease in rmale patients with renal disease

#### Condition

Metabolic and nutritional disorders congenital

#### **Synonym**

alpha-Galactosidase deficiency, storage diseases

### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Onze Lieve Vrouwe Gasthuis

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

#### Intervention

**Keyword:** Fabry, Prevalence, proteinuria, renal insufficiency

#### **Outcome measures**

#### **Primary outcome**

The prevalence of  $\alpha$ Gal A deficiency will be recorded.

## **Secondary outcome**

none

# **Study description**

## **Background summary**

Fabry disease is an X-linked disorder caused by the deficiency of the lysosomal enzyme alpha Galactosidase A (\*-Gal a), resulting in accumulation of specific glycosphingolipids in (vascular) endothelial cells. In childhood males suffer from severe pains in hands and feet (acroparesthesias), hypo- or anhydrosis and develop angiokeratoma at trunk and genitals. Later in life, they develop vascular complications due to the ongoing endothelial glycolipid accumulation, of which renal insufficiency often progressing to end stage renal failure requiring dialysis is a main feature 1. The clinical picture of the disorder is highly variable. In female carriers the clinical picture is even more heterogeneous, albeit with a more protracted course. It is possible that due to its variability in clinical expression, the above mentioned symptoms are not always recognised as Fabry disease, resulting in underdiagnosis and consequently underestimation of its prevalence. The prevalence of Fabry disease in large dialysis registry programs, was shown to be 0,019% and 0,017%, in Europe and the US, respectively 2 3. Reports on the prevalence of Fabry disease in such registries depend on a correct diagnosis. In contrast, Utsumi et al. diagnosed Fabry disease in 2 of 440 males (0,45%) with renal failure in Japan 4. In the Netherlands, screening of 508 male dialysis patients revealed only one Fabry disease patient, who was already known with Fabry disease 5.

To date, screening of patients with moderate renal function disorders,

2 - THE PREVALENCE OF FABRY DISEASE IN MALES WITH RENAL SYMPTOMS OF UNKOWN CAUSE, VI ...

micro-albuminuria or proteinuria has not been performed.

## **Study objective**

To determine the prevalence of  $\alpha$ -Galactosidase A deficiency in male patients presenting with renal failure, proteinuria or micro-albuminuria of unknown cause, at the outpatient clinic of the department of internal medicine of a large teaching hospital.

## Study design

Observational, prospective.

## Study burden and risks

none

## **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

- Male origine, AND
- A serum kreatinin > 100µmol/l, OR
- A calculated kreatinin-clearance <80 ml/min OR
- Proteinuria (>0,3 g/l), OR
- Microalbuminuria (>0,03 g/l).

## **Exclusion criteria**

- Female .
- Known cause of renal disease, as documented by renal biopsy, laboratory evaluation or by clinical judgment by the physician.

# Study design

## **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-08-2006

Enrollment: 1000

Type: Anticipated

## **Ethics review**

Approved WMO

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

# **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 NL13587.067.06