

# Fall risk assessment in former polio patients.

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<b>Ethical review</b>	Approved WMO
<b>Status</b>	Pending
<b>Health condition type</b>	Muscle disorders
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON32266

### Source

ToetsingOnline

### Brief title

Fall risk in polio patients

### Condition

- Muscle disorders
- Neuromuscular disorders

### Synonym

falls, poliomyelitis

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Academisch Medisch Centrum

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

## Intervention

**Keyword:** falls, Poliomyelitis, risk factors

## Outcome measures

### Primary outcome

Fall risk assessment tools: the performance oriented mobility assessment (POMA) from Tinetti and the Berg Balance Test

Fear of falling (FOF) will be assessed with the falls efficacy scale from Tinetti and the Activities-specific Balance Confidence (ABC) scale.

### Secondary outcome

Functional tests: static balance (timed tandem stance), functional reach, timed 1-leg stance, timed-up-and-go test and the stop-walking-when-talking test will be performed.

Muscle strength of the knee flexors and extensors and ankle dorsal flexors and plantar flexors will be assessed using the Biodex 3 dynamometer.

Dynamic postural control will be assessed using the Biodex Balance system, which is a system to measure dynamic balance. This system evaluated neuromuscular control by quantifying the ability to maintain dynamic posture.

## Study description

### Background summary

Persons previously affected by poliomyelitis (polio subjects) commonly have long-standing muscle weakness and have an increased risk of falling. A fall can lead to injuries and to fear of falling and activity restriction, which can further lead to muscle weakness, decreased endurance and reduced physical functioning. These changes may inhibit social interaction and leisure activities, and therefore affect health related quality of life. The existing literature about risk factors of falls is mainly focussed on frail and older subjects, however little is known about identifying at-risk individuals with specific disabilities who may neither be \*frail\* nor \*older\*, such as former polio patients. Considering the serious consequences of a fall, it is important to evaluate risk factors of falls in patient specific populations in order to screen more effectively and to be able to optimize treatment options. The purpose of this study is to investigate which of the know risk factors and existing screening tests are appropriate and can be used in former polio patients.

## **Study objective**

The aims of this project is three-fold: 1) to assess the difference in functional ability and postural control between former polio patients with and without a history of recurrent falls; 2) to determine which risk assessment tool is the most appropriate screening tool for risk of falls in former polio patients and 3) to assess fear of falling and balance confidence in former polio patients with and without a history of falls.

## **Study design**

a cross-sectinal observational study

## **Study burden and risks**

Patients will attend the department of rehabilitation of the AMC once. During this visit a short clinical examination will take place, a static and dynamic balance tests, a walking test and muscle strength testing will take place. Patients will also be asked to complete two questionnaires. The workload of the different tests is possible if enough resting breaks are taken between the different tests.

## **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

diagnosis of poliomyelitis, ambulating

### Exclusion criteria

impaired vision; hearing loss

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Prevention

## Recruitment

NL  
Recruitment status: Pending  
Start date (anticipated): 01-03-2008  
Enrollment: 50  
Type: Anticipated

## Ethics review

Approved WMO  
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	NL21750.018.08