# Gait analysis in healthy children to obtain normative data for gaitanalysis in children with clubfeet

Published: 09-10-2015 Last updated: 19-04-2024

Obtain normative data within similar age-range as our clubfoot patients.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Other condition

**Study type** Observational non invasive

# **Summary**

## ID

NL-OMON47326

#### Source

**ToetsingOnline** 

#### **Brief title**

Gait analysis in children

## Condition

Other condition

## **Synonym**

controls, healthy children

#### **Health condition**

gezonde kinderen

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Catharina-ziekenhuis

**Source(s) of monetary or material Support:** SIA RAAK Publiek, Cooperatie Orthopedie Groot Eindhoven (Catharina ziekenhuis/Maxima Medisch Centrum) / Fontys Paramedische Hogeschool

## Intervention

Keyword: Gait analysis, Normative data

## **Outcome measures**

## **Primary outcome**

Maximum dorsal and plantaiflexion of the ankle during gait-cycle.

## **Secondary outcome**

Addition results gaitanalysis: range of motion knee and hip / ankle power /

foot progression angle - intoeing / footpressure.

Stiffness of the foot / diameter of hamstrigs

# **Study description**

## **Background summary**

The treatment of children with clubfeet who visit our outpatient clinic is prospectively followed. Gait analysis, a measurement of the stiffness of the feet and ultragraphy of the calf-muscles are part of the cohort. Since the unaffected side in children with unilateral clubfoot is not comparable with a healthy normal feet we would like to test healthy children to obtain normative data.

## **Study objective**

Obtain normative data within similar age-range as our clubfoot patients.

#### Study design

Observational study, including 1 or 2 measument of approximately 60-75 minutes.

If only the stiffness is measured, the duration is estimated at +-15 minutes

## Study burden and risks

Measurements will be performed by skilled researchers. Participants and parents are asked to come to lab for a measurement of approximately 60-75 minutes. If only the stiffness measure takes place, measurement could take place at hospital. Considering to unfamiliar location and the unknown measurements it might be that participants will be slightly tired after testing. No additional burder and/or risks are expected.

## **Contacts**

#### **Public**

Catharina-ziekenhuis

Michelangelolaan 2 Eindhoven 5623 EJ NI

## **Scientific**

Catharina-ziekenhuis

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Children (2-11 years)

## Inclusion criteria

- Healthy children, i.e. no congentical / neurological disorders
- Age-matched with clubfootpatients (3-8 years)

## **Exclusion criteria**

- Children who are not able to understand and follow-up instructions
- Children who are not able to perform tasks (e.g. concentration problems)
- Obese children (BMI > 30)

# Study design

## **Design**

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 18-03-2016

**Enrollment:** 50

Actual Type:

# **Ethics review**

Approved WMO

09-10-2015 Date:

Application type: First submission

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

(Nieuwegein)

Approved WMO

Application type:

Date: 09-08-2016 **Amendment**  Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

Approved WMO

Date: 31-01-2018

Application type: Amendment

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

(Nieuwegein)

Approved WMO

Date: 02-01-2019

Application type: Amendment

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 NL53229.100.15