# \*Influence of weightbearing on angular measurement in patients with a hallux valgus deformity and validation of two patient-based questionnaires regarding first ray deformity\*

Published: 21-12-2011 Last updated: 28-04-2024

Part one: To quantify the influence of weightbearing on the IMA, HVA and DMAA, measured according the actual gold standard of measurement.Part two: Validation of the Dutch version of the Foot Ankle Outcome Score (FAOS) and the Dutch version of the...

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Joint disorders

**Study type** Observational invasive

## **Summary**

#### ID

NL-OMON39119

#### Source

**ToetsingOnline** 

#### **Brief title**

Hallux research

#### **Condition**

Joint disorders

#### **Synonym**

deformity, hallux valgus, skewed toe

#### Research involving

Human

#### **Sponsors and support**

**Primary sponsor:** Medisch Centrum Haaglanden

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

#### Intervention

**Keyword:** Hallux valgus, non-weightbearing, validation, weightbearing

#### **Outcome measures**

#### **Primary outcome**

For part one: Influence of weightbearing on IMA, HVA and DMAA in patients with

hallux valgus deformity.

For part two: Validation of the Dutch version of the FAOS and MOXFQ for first

ray deformity.

#### **Secondary outcome**

Intra- en interobserver variation for angular measurements of first ray deformity.

# **Study description**

#### **Background summary**

Angular measurement is an important tool for the choice of treatment of hallux valgus deformity. Literature has suggested treatment flow charts for treatment depending of the intermetatarsal (IMA), hallux valgus (HVA) and distal metatarsal articular angles (DMAA). In orthopedic surgery both weightbearing and non-weightbearing foot radiographs are used for measurement of these angles. Little is known about the influence of weightbearing on these specific angles.

Patient outcome and satisfaction questionnaires are increasingly popular in modern medical and surgical follow up. Unfortunately, for forefoot problems no Dutch validated questionnaires is available.

#### Study objective

Part one: To quantify the influence of weightbearing on the IMA, HVA and DMAA, measured according the actual gold standard of measurement.

Part two: Validation of the Dutch version of the Foot Ankle Outcome Score (FAOS) and the Dutch version of the Manchester-Oxford Foot Questionnaire (MOXFQ) for patients with first ray deformity.

#### Study design

The study will comprise two parts. Patients will be included according to the GCP principle. For part one, patients will undergo a physical examination and 4 radiographs will be made of each foot. (Antero-Posterior (AP) weightbearing and non-weightbearing & Lateral (LAT) weightbearing and non-weightbearing). Angular measurements will be performed according to the gold standard. For part two, only the patients with first ray deformity will be asked to complete a set of questionnaires, including the Dutch version of the FAOS, MOXFQ, SF-36 and VAS pain and limitation. Two weeks later patients will receive a new set of questionnaires to complete at home and to return to the orthopedic department.

#### Study burden and risks

Each extremity radiograph (e.g. foot) exposes the patient to <0.01mSv. This means that included patients will receive <0.02mSv extra per foot. This amount is negligible compared to the yearly background radiation at sea level (2-3 mSv). According to the guidelines of the ICRP occasional diagnostic radiography of the extremity is highly unlikely to cause malignancy.

## **Contacts**

#### **Public**

Medisch Centrum Haaglanden

Lijnbaan 32 Den Haag 2512 VA NL **Scientific** 

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

- Patient with uni- or bilateral hallux valgus deformity
- Patient with forefoot disability, other than hallux valgus deformity
- Male or non-pregnant female aged 18-90
- Patients who signed the Ethics Committee approved specific Informed Consent Form

#### **Exclusion criteria**

- Earlier foot surgery
- Earlier fracture of any bone of the foot, with exception for phalanx of digitus II-V fracture
- Cerebral palsy
- Rheumatoid arthritis
- Not motivated for inclusion
- Dutch language not mastered
- Pregnant patients

## Study design

### **Design**

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

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Control: Active

Primary purpose: Diagnostic

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 28-02-2012

Enrollment: 100

Type: Actual

## **Ethics review**

Approved WMO

Date: 21-12-2011

Application type: First submission

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

Approved WMO

Date: 09-07-2012

Application type: Amendment

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

Approved WMO

Date: 08-11-2013

Application type: Amendment

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

# **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 NL37757.098.11

# **Study results**

Date completed: 01-07-2014

Actual enrolment: 72