# Cost-effectiveness of footwear modification for first metatarsophalangeal joint osteoarthritis

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Ethical review Approved WMO

**Status** Pending

**Health condition type** Joint disorders **Study type** Interventional

## **Summary**

#### ID

NL-OMON57221

#### Source

**ToetsingOnline** 

#### **Brief title**

MTP-1 OA Trial

#### **Condition**

Joint disorders

#### **Synonym**

MTP-1 joint osteoarthritis; big too arthritis

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam **Source(s) of monetary or material Support:** Ministerie van OC&W

#### Intervention

Keyword: Cost-effectiveness, Footwear modification, MTP-1 Osteoarthritis, Primary care, RCT

#### **Outcome measures**

#### **Primary outcome**

Walking pain (11-point NRS) at 6 months follow-up

Quality-Adjusted Life-Years (EQ-5D) at 6 months follow-up

Societal costs over 6 months, using iMCQ and iPCQ questionnaires

#### **Secondary outcome**

Self-reported recovery (GROC), foot function (FHSQ) and PASS at 6 and 12 months

follow-up\*

Barriers and facilitators of patients and health care professionals for the

implementation of the intervention in general practice

# **Study description**

#### **Background summary**

OA is a chronic condition characterized by pain and impaired function. Symptomatic radiographic OA of the foot affects 16.7% of people aged over 50 years and the most affected joint in the foot is the first metatarsophalangeal (MTP-1) joint. Symptomatic MTP-1 OA is highly disabling and has a significant impact on quality of life. Non-surgical and non-pharmacological interventions are in general recommended as first line treatment for OA. Though, specific guidelines for the non-surgical management of foot OA are lacking as only few randomized trials have been conducted. Only one pilot study has so far compared a footwear intervention with usual general practice care. This study was however not powered to investigate the effectives of treatment. Another RCT (N=100) compared shoe stiffening to a sham shoe insert and concluded that the intervention was more effective at reducing foot pain than sham inserts at 12 weeks follow-up with a NNT of 4. There is therefore urgency to study the cost-effectiveness of this frequently applied intervention in near future.

#### Study objective

The general aim of this project is to determine the (cost-)effectiveness of footwear modification in addition to GP-led usual care, compared to GP-led usual care alone for patients with first MTP joint osteoarthritis (OA) at 6 months of follow-up.\*\*

#### Study design

Randomized clinical trial

#### Intervention

Patients randomized to the intervention group will, in addition to usual GP care, be referred to an orthopedic shoemaker. The intervention will consist of at least 3 types of footwear modification (OVAC) of ready-made footwear (confection shoes).

#### Study burden and risks

The burden to participants of the intervention; the time spent to complete the online questionnaires (5x, max. 15 minutes);

meetings (minimal 2) with a local orthopedic shoe professional (incl traveling) as per standard of care;

The burden to participants of part 2 the time spent for the interview (max. 30 minutes)

The benefit is that participants of the intervention will probably receive the treatment (footwear modification) earlier that in the standard of care (wait and see) and might not need surgery in the (next) future.

## **Contacts**

#### **Public**

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#### **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

- aged over 45 years
- confirmed diagnosis of MTP-1 joint OA by a health care professional.
- pain in the foot needs to be present on most days of last month and
- either no morning joint-related stiffness or
- morning stiffness that lasts no longer than 30 minutes

#### **Exclusion criteria**

Patients that have already received footwear modifications in the past for big toe complaints will be excluded.

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Other

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 02-03-2025

Enrollment: 136

Type: Anticipated

### Medical products/devices used

Generic name: footwear modification

Registration: Yes - CE intended use

## **Ethics review**

Approved WMO

Date: 19-12-2024

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam

(Rotterdam)

# 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 NL87646.078.24