# Follow-up of a randomized controlled trial comparing closing-wedge and opening-wedge high tibial osteotomy for medial compartment osteoarthritis of the knee.

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To study the radiological and clinical long term results as well as the survival rate in participants of our randomized controlled trial comparing opening- and closing-wedge osteotomy ten and fifteen year post-operatively.

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Joint disorders

**Study type** Observational invasive

## **Summary**

## ID

**NL-OMON37143** 

#### Source

**ToetsingOnline** 

#### **Brief title**

Follow-up of a RCT comparing closing and opening-wedge HTO

#### Condition

Joint disorders

## **Synonym**

multifactorial chronic joint disease, osteoarthritis

## 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:** closing wedge, follow-up, high tibial osteotomy, opening wedge

## **Outcome measures**

## **Primary outcome**

Functional outcomes: change in severity of pain (Visual Analogue Scale; VAS),

the intermittent and constant pain score; ICOAP, Knee injury and Osteoarthritis

Outcome Score (KOOS), Hospital for Special Surgery scale (HSS)

## **Secondary outcome**

- 1. Complications and re-operations
- 2. Medial and lateral collateral ligamentous stability
- 3. Loss of correction measured with hip-knee-ankle- angle (HKA-angle)
- 4. Radiological progression of osteoarthritis
- 5. Patient satisfaction

# **Study description**

## **Background summary**

We conducted a RCT in which we compared closing-wedge vs opening-wedge high tibial osteotomy (HTO). (MEC 196.813/2000/232)

There is a lack of radiological and clinical long term results of well designed prospective studies comparing closing-wedge and opening-wedge HTO. To study the results of these techniques on the long term, we aim to re-examine the participants of this RCT ten and fifteen year postoperatively.

## Study objective

To study the radiological and clinical long term results as well as the survival rate in participants of our randomized controlled trial comparing opening- and closing-wedge osteotomy ten and fifteen year post-operatively.

## Study design

Long-term follow-up of a Randomized Controlled Trial comparing closing-wedge HTO and opening wedge HTO with identical postoperative care. Closing-wedge HTO was fixed with staples and opening-wedge HTO with a Puddu-plate. Patients who underwent total knee arthroplasty (TKA) during follow-up will be asked to give permission to review their last pre-TKA radiographs. Patients who did not undergo TKA will be asked to fill in 3 questionnaires (general questionnaire, Knee Osteoarthritis Outcome Score, Visual Analogue Score-pain and Intemittent and Constant Pain Score), to visit the department of Orthopaedics for physical examination and three radiographs will be made; whole leg radiograph, lateral and posteroanterior view of the knee.

#### Intervention

Index group: opening wedge osteotomy Control group: closing wedge osteotomy

## Study burden and risks

The burden is primarily time (outpatient clinic visit and questionnaires) and radiation (three radiographs; whole leg radiograph, lateral and posteroanterior view of the knee). There is no direct benefit from participation. Travel allowance will be offered to participants.

# **Contacts**

#### **Public**

Erasmus MC, Universitair Medisch Centrum Rotterdam

's Gravendijkwal 230 Rotterdam 3015 CE 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

All patients included in our Randomized Controlled Trial between January 2001 and January 2004.

## **Exclusion criteria**

None

# Study design

## **Design**

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

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Start date (anticipated): 11-03-2013

Enrollment: 92

Type: Actual

# **Ethics review**

Approved WMO

Date: 20-12-2012

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 NL42516.078.12