

# Minimal invasive knee surgery; is it less traumatic? A pilot study

Published: 06-07-2006

Last updated: 14-05-2024

To investigate of the minimal invasive approach is less traumatic in terms of inflammation and tissue damage?

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Joint disorders
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON30180

### Source

ToetsingOnline

### Brief title

Minimal invasive knee surgery; is it less traumatic?

## Condition

- Joint disorders

### Synonym

artrosis, total knee arthroplasty

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Maaslandziekenhuis

**Source(s) of monetary or material Support:** St Nuts-Ohra (lab bepalingen)

## Intervention

**Keyword:** inflammation, MIS, tissue damage, TKA

## Outcome measures

### Primary outcome

Hemoglobin will be determined in terms of blood loss. Blood loss is also measured during the operation and post-operatively in terms of drain production.

H-FABP tissue damage and IL-6 inflammation reactions

Furthermore the patient will be standard evaluated in terms of range of motion, prosthesis alignment and pain

### Secondary outcome

None

## Study description

### Background summary

Replacement of the knee or hip is done in patients with reduced function because of the pain. The replacement leads to improvement of function and a better comeback in the community.

The last couple of years a lot of research has been done to reduce the hospitalisation and a less demanding surgery for the patient.

Recently is the minimal invasive approach (MIS) developed in which a prosthesis is placed with an incision <10cm.

When research is done to investigate if this procedure is less traumatic than this can lead to shorter hospitalisation, faster recovery and a better cosmetic appearance for the patient.

### Study objective

To investigate if the minimal invasive approach is less traumatic in terms of inflammation and tissue damage?

### Study design

The patients included in the study will be selected at random to one of the two study groups. One group is operated using the conventional approach and the

other with the minimal invasive approach.

## **Intervention**

During the trial blood will be collected from the patients pre and postoperative (2, 4 and 6 hours and day 2 and 4 after surgery)

## **Study burden and risks**

The patients have the same risks and benefits than patients not included in the study. The only difference is the blood collection of the patients included in the study.

## **Contacts**

### **Public**

Maaslandziekenhuis

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Nederland

### **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

- patients receiving a primary total knee arthroplasty
- patients with osteoarthritis or avascular necrosis

## Exclusion criteria

- pregnancy
- clinical relevant disorders, like rheumatoid arthritis, previous knee surgery, standard use of anticoagulantia
- unwilling and unable to cooperate in the study

## Study design

### Design

**Study type:** Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 30-10-2006

Enrollment: 40

Type: Actual

## Ethics review

Approved WMO

Date: 06-07-2006

Application type: First submission

Review commission: METC Z: Zuyderland-Zuyd (Heerlen)

## 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	NL11693.096.06