

# Clinical comparison of the straight lateral approach and the anterior approach to the hip.

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<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-OMON44721

### Source

ToetsingOnline

### Brief title

Lateral vs. anterior approach

### Condition

- Joint disorders
- Bone and joint therapeutic procedures

### Synonym

degenerative joint, osteoarthritis

### Research involving

Human

### Sponsors and support

**Primary sponsor:** HagaZiekenhuis

**Source(s) of monetary or material Support:** Johnson & Johnson

## Intervention

**Keyword:** anterior approach, cup positioning, hip, total hip replacement

## Outcome measures

### Primary outcome

The main study parameter of the study is the difference in recovery after a total hip arthroplasty with the anterior approach and a straight lateral approach. In the 3D CT reconstructions, the main study parameter is the difference in positioning the cup of a total hip arthroplasty after an anterior approach and a straight lateral approach.

### Secondary outcome

not applicable

## Study description

### Background summary

The anterior approach to hip replacement surgery allows the surgeon to reach the hip joint from the front of the hip as opposed to the lateral (side) or the posterior (dorsal) approach. In this way, the hip can be replaced without detachment of any muscle from the pelvis or femur. In the present study, comparison is made between the anterior approach and the straight lateral approach. The focus will lie on the cup positioning, the user friendliness and the clinical results. In addition, we plan to develop a surgical strategy that alleviates one of the major complications of the straight lateral; abductor insufficiency.

### Study objective

The objective of this project is to

1. increase accuracy and reproducibility of the most critical step in hip arthroplasty i.e. cup positioning;
2. to alleviate one of the major complications of the straight lateral approach, i.e. abductor insufficiency.
3. To assess the clinical results of the anterior approach compared to straight

lateral approach.

## **Study design**

expertise-based randomized controlled intervention study

## **Intervention**

One group receives a hip replacement through a straight lateral approach and one group through an anterior approach.

## **Study burden and risks**

The patients included in the clinical trials will follow the normal rehabilitation protocol, with the exception that they will have to take some MRI scans and have to fill in several questionnaires. This will be done before or after a normal control appointment and will cost no more than 10 minutes each time. The risks involved with the intervention are no different from the normal risks involved. This study does not impose more, pre- and postoperative, risk to the patient than is seen in clinical performed hip replacement surgery.

For the 3D CT reconstruction, patients will be measured before and after intervention (quantification of cup inclination with fluoroscopy and anteversion with goniometer). This will involve 2 extra visits to the hospital and a mild exposure to radiation (1.7 mSV).

The study will not provide personal benefits or increased, pre- and postoperative, risk to the participating patients but future patients might benefit from the results of the study performed.

Ultimately this will result in more insight in the anterior approach of the hip.

## **Contacts**

### **Public**

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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

- Willing and able to participate in the study protocol
- Age > 18 years
- Diagnosed with hip problems which results in a hip replacement surgery.

### Exclusion criteria

- Mental disabilities
- Language barrier
- Previous surgery to the hip or additional injury as in fractures
- Diabetes mellitus
- Preference towards surgeon or surgical method

## Study design

### Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	23-06-2011
Enrollment:	340
Type:	Actual

## Ethics review

Approved WMO	
Date:	29-10-2010
Application type:	First submission
Review commission:	METC Leiden-Den Haag-Delft (Leiden)
Approved WMO	
Date:	06-11-2013
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden)
Approved WMO	
Date:	20-03-2017
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden)
Approved WMO	
Date:	27-09-2017
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden)

## 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	NL32278.098.10