# Pilot study into the working mechanism of a brace preventing hip displacement after total hip replacement surgery

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

Health condition type

Study type Interventional

# **Summary**

#### ID

NL-OMON29467

#### **Source**

Nationaal Trial Register

#### **Health condition**

Healthy volunteers Hip replacement surgery Gezonde vrijwilligers Operatie waarbij een nieuwe heup wordt geplaatst

## **Sponsors and support**

**Primary sponsor:** Roessingh Research and Development

Source(s) of monetary or material Support: Non-funded research

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

Peak hip anteflexion, adduction, endoratation and exorotation during several functional activities.

## **Secondary outcome**

Peak joint angles of the knee and ankle of the ipsilateral leg and joint angles of the joints of the contralateral leg.

# **Study description**

## **Background summary**

Preventing hip dislocation is an important part of the postoperative care after total hip replacement. Hip dislocation is associated with implant failure and it may lead to recurrent hip dislocations. One of the possible interventions to prevent hip dislocation is the prescription of a brace, such as the Rebound Hip brace, that restricts the movements that are associated with hip dislocations. While these braces are prescribed in daily care there is little scientific knowledge about the efficacy of these braces in preventing movements that might lead to a hip displacement.

In this trial we exam whether a brace preventing hip displacement restricts the movements that pose a risk for hip displacement in a group of healthy adults.

The subjects will perform a set of measurements consisting of different activities of daily living both with and without the brace. After completion of the measurements, the brace will be removed and subjects will leave the study.

The main study parameters are the peak hip flexion, adduction and rotation angles during the execution of the different tasks. In addition, we will study the peak angles of the other joints to see whether the brace influences the movements of these joints.

## Study objective

The brace is able to restrict the movement that pose a risk for hip displacement after total hip replacement surgery

## Study design

Single measurement

#### Intervention

Prescription of a brace that prevents hip displacement after total hip replacement surgery.

## **Contacts**

#### **Public**

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#### Scientific

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# **Eligibility criteria**

### Inclusion criteria

- Aged 18 and above.
- No musculoskeletal problems influencing walking ability and range of motion of the hip. To objectify the musculoskeletal problems, the primary investigator will go through a questionnaire ('Vragenlijst Orthopedische Problemen') together with the participant. In addition, the primary investigator who has a background in physical therapy will assess the hip range of motion to see whether participants are able to make the movements that pose a risk for hip dislocation (>90 hip flexion, adduction and rotations).
- Be able to be physically (low-intensity) active for a period of 4 hours.

## **Exclusion criteria**

- Had a joint replacement surgery of one of the joints of the lower extremities.
- Not able to understand Dutch or English instructions.
  - 3 Pilot study into the working mechanism of a brace preventing hip displacement af ... 26-06-2025

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: N/A: single arm study

Masking: Open (masking not used)

Control: N/A, unknown

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-11-2017

Enrollment: 10

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 15-10-2017

Application type: First submission

# **Study registrations**

## Followed up by the following (possibly more current) registration

ID: 44352

Bron: ToetsingOnline

Titel:

# Other (possibly less up-to-date) registrations in this register

No registrations found.

# In other registers

Register ID

NTR-new NL6649 NTR-old NTR6883

CCMO NL63397.044.17 OMON NL-OMON44352

# **Study results**

## **Summary results**

None