

# Force measurements during hip arthroscopy

No registrations found.

|                              |                            |
|------------------------------|----------------------------|
| <b>Ethical review</b>        | Not applicable             |
| <b>Status</b>                | Recruitment stopped        |
| <b>Health condition type</b> | -                          |
| <b>Study type</b>            | Observational non invasive |

## Summary

### ID

NL-OMON20526

### Source

NTR

### Health condition

Hip Arthroscopy

## Sponsors and support

**Primary sponsor:** Department of orthopaedics, Reinier de Graaf Gasthuis

**Source(s) of monetary or material Support:** Department of orthopaedics, Reinier de Graaf Groep

## Intervention

## Outcome measures

### Primary outcome

The main study outcome is the relation between the pulling force, needed to dislocate the hip and the displacement of the femoral and acetabular component of the hip.

### Secondary outcome

not applicable

# Study description

## Background summary

### Introduction:

Hip arthroscopy is a relatively new surgical technique with expanding intervention options and growing possibilities. The main indications for arthroscopic intervention are femoroacetabular impingement (FAI). During hip arthroscopy the patient is placed in a hip distractor system. With this system traction is applied to dislocate the hip. The pulling force which is necessary to dislocate the caput femur is unknown, and it is unknown if there is a relation between the pulling and the absolute displacement.

### Objective:

The primary objective of this prospective cohort study is to describe a relation between the pulling force and the absolute displacement of the caput femur.

### Study design:

A prospective cohort study during hip arthroscopies in Reinier de Graaf Gasthuis Hospital in Delft will be conducted. All consecutive patients who will have hip arthroscopy in our hospital will be asked to participate.

### Population description:

Patients, male and female, with specific hip pain, derived from the outpatient clinic in Reinier de Graaf Gasthuis Delft, department of Orthopedic surgery will be asked to participate.

### Patient treatment:

All patients will be operated by one orthopaedic surgeon (RB), with large experience in hip arthroscopy. The operation is performed by standardized operation protocol.

### Study endpoints:

Main endpoint is the relation between the pulling force, needed to dislocate the hip and the displacement of the femoral and acetabular component of the hip. It is unknown how much force is needed to dislocate the hip over a certain distance. Therefore this study will be performed. A dynamometer will be placed in the hip distractor system, to measure the force. Next to the patient a calibrated piece of metal (calibrated to measure dimensions on an x-ray) will be placed next to the hip, at the same height of the caput femur, to measure the joint space afterwards on an x-ray.

Statistical analysis:

Data will be presented quantitative by continuous variables (force). The correlation between force and displacement will be tested with Pearson's correlation (if data is normally distributed) or with Spearman's rho.

### **Study objective**

NA

### **Study design**

peroperative

5-6-2018: date of last surgery.

### **Intervention**

Force measurements during hip arthroscopy

## **Contacts**

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## Eligibility criteria

### Inclusion criteria

Patients who:

- are 15-65 years of age.
- Have a physical examination, which is suspect for femoroacetabular impingement, or an acetabulum labrum tear or lesion, or are suspect to loose bodies in the hip joint, chondral lesions or osteophytes impingement.
- Patients smaller then 1,74 m.

### Exclusion criteria

Patients who:

- are <15 or >65 years of age.
- Have had prior surgery for femoroacetabular impingement.
- Have pathological fractures or other metastatic pathology as a cause of the hip/groin pain.
- Patients taller then 1,74 m.

## Study design

### Design

|                     |                            |
|---------------------|----------------------------|
| Study type:         | Observational non invasive |
| Intervention model: | Other                      |
| Allocation:         | Non controlled trial       |
| Masking:            | Open (masking not used)    |
| Control:            | N/A , unknown              |

## Recruitment

NL  
Recruitment status: Recruitment stopped  
Start date (anticipated): 28-04-2016  
Enrollment: 32  
Type: Actual

## IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Not applicable  
Application type: Not applicable

## 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            |
|----------|---------------|
| NTR-new  | NL6593        |
| NTR-old  | NTR6810       |
| Other    | NA : 2016-015 |

## Study results