# Wear analysis of cross-linked versus conventional polyethylene acetabulum cups in cemented primary total hip arthroplasty

No registrations found.

Ethical review Positive opinion

**Status** Recruiting **Health condition type** -

Study type Interventional

# **Summary**

## ID

NL-OMON22863

#### Source

Nationaal Trial Register

#### **Brief title**

FAL cup trial

## **Health condition**

Total hip arthroplasty Wear Cross-linked

Polyethylene

# **Sponsors and support**

**Primary sponsor:** Department of Orthopedic surgey, Medical Centre Leeuwarden **Source(s) of monetary or material Support:** Department of Orthopedic surgery, Medical

Centre Leeuwarden.

Link Nederland B.V., Schiedam

## Intervention

### **Outcome measures**

### **Primary outcome**

Mean annual polyethylene wear rate in millimetres at 5 years postoperatively

## **Secondary outcome**

- 1. Mean annual polyethylene wear rate in millimetres at 1, 3 and 10 years postoperatively
- 2. Mean scores on patient reported outcomes measures (NRS pain, HOOS-PS, OHS, EQ-5D and SQUASH) at 1, 3, 5 and 10 years postoperatively
- 3. Number of peri-prosthetic lucencies in the 3 zones according DeLee and Charnley at 5 and 10 years postoperatively
- 4. Number of revisions at 5 and 10 years postoperatively
- 5. Mean total intramural costs at 5 and 10 years postoperatively

# **Study description**

## Study objective

It is hypothesized that at 5 year postoperatively, mean annual wear rate in millimetres of the cross-linked polyethylene FAL cups is significantly less compared to the conventional polyethylene FAL cups.

## Study design

Preoperatively and postoperativey at 6 weeks, 3 months, 1 year, 3 years, 5 years and 10 years

#### Intervention

Patients will receive a crosslinked polyethylene FAL cup® (Link) or a conventional polyethylene FAL cup. The femoral stem will be the SP II® (Link). All surgeons will peform a posterolateral surgical approach. All patients will be treated postoperatively following a standardized protocol.

# **Contacts**

#### **Public**

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# **Eligibility criteria**

# Inclusion criteria

Patients with

- 1. age 65-80 years
- 2. symptomatic coxartrosis and scheduled for a cemented total hip replacement
- 3. physical and mentall ability to come for the postoperative follow-up visits
- 4. written informed consent

## **Exclusion criteria**

Patients with:

- 1. standard contraindications for total hip replacement, such as infection and severe pulmonary, cardiovascular or metabolic comorbidity
- 2. neurlogical disorders that affect walking
  - 3 Wear analysis of cross-linked versus conventional polyethylene acetabulum cups i ... 1-06-2025

- 3. an inability to fill in the questionnaires due to mental or cognitive impairments
- 4. insufficient understanding of the Dutch language
- 5. a Body Mass Index > 40
- 6. an abnormal hip joint anatomy not suitable for the use of the FAL cup and SPII stem
- 7. an amputation of the lower extremity
- 8. malignancy receiving anticancer therapy
- 9. participation in another trial that might interfere with this study
- 10. an alcolhol or drug dependency

# Study design

# **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: N/A, unknown

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 20-04-2015

Enrollment: 106

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 06-06-2017

# **Study registrations**

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

ID: 40132

Bron: ToetsingOnline

Titel:

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

No registrations found.

# In other registers

Register ID

NTR-new NL6597 NTR-old NTR6814

CCMO NL46774.099.13 OMON NL-OMON40132

# **Study results**