# Osteoarthritis following distal radius fractures in young patients.

No registrations found.

| | |
|---|---|
| **Ethical review** | Positive opinion |
| **Status** | Pending |
| **Health condition type** | - |
| **Study type** | Observational non invasive |

## Summary

### ID

NL-OMON22608

**Source**
Nationaal Trial Register

**Health condition**

Radius Fracture Osteoarthritis Subjective

### Sponsors and support

**Primary sponsor:** Prof. dr. C.K. van der Sluis, MD PhD
C.K.van.der.Sluis@umcg.nl
**Source(s) of monetary or material Support:** Fonds de Gavere

### Intervention

### Outcome measures

**Primary outcome**

(Level of) posttraumatic osteoarthritis.

**Secondary outcome**

- Subjective outcome measures with validated questionnaires.
- Objective outcome measured with functional outcome.

# Study description

### Background summary

The development of posttraumatic osteoarthritis (PA) following distal radius fractures (DRFs) has been commonly described. Direct and indirect joint impact loading, soft tissue injuries, joint dislocation and intra-articular fractures, increase the risk of progressive joint degeneration that causes PA. It is thought posttraumatic osteoarthritis develops less in younger patients. However, it might be more invalidating for a young non-osteoporotic patient to develop posttraumatic osteoarthritis and loss of function following a distal radius fracture than for an older patient. The extend of the loss of function can be objectivied using functional measures, such as range of motion and grip strength. Subjective measures to objectivy loss of function as experienced by the patient can be performed using validated questionnaires. In this study, the prevalence of posttraumatic osteoarthritis following a distal radius fracture is in young patients is determined. Also, the question arises what the correlation between the existence of post traumatic osteoarthritis and the objective and subjective outcome measures is following a distal radius fracture in young patients.

### Study objective

To determine the incidence of post traumatic osteoarthritis following distal radius fractures in a cohort of young non-osteoporotic patients and the correlation with objective and subjective outcome measures.

### Study design

N/A

### Intervention

- 4 X-rays, 2 of both wrists;

- Validated questionnaires (DASH, PRWE, MHQ and SF-36);

- Functional ourtcome (i.e. ROM, grip strength);

# Contacts

### Public

[default]
The Netherlands
**Scientific**

[default]
The Netherlands

# Eligibility criteria

## Inclusion criteria

- All patients treated in the period 2005 until 2011 at the Medical Center Leeuwarden;

- All distal radius fractures, AO type A, B and C ;

- Men between the ages of 18 - 50 years and women between the ages of 18 - 40 years at the time of injury (no clinical osteoarthritis according to current available information in the literature [21,22]);

- Mentally competent;

- Living in the Netherlands and sufficient control of the Dutch language;

- Availability of X-rays of the wrist of the date of injury and 6 weeks after the injury.

## Exclusion criteria

- Fracture treated surgically after the 7th day following initial injury;

- Open fractures;

- Preexistent osteoarthritis of the wrist or preexistent declined function of the wrist according to the patient;

- ASA III-V patients or other contra-indications for surgical treatment at the time of injury. These patients are not able to receive the most optimal treatment and thus altered outcome measures can be expected;

- No permanent residency (in the Netherlands);

- Co-morbidity that may influence the outcomes, such as neurological of rheumatic disorders influencing arm function;

- Insufficient control of the Dutch language;

- No informed consent;

- Osteoporosis known from medical history;

- Pregnant women.

# Study design

## Design

| | |
|---|---|
| Study type: | Observational non invasive |
| Intervention model: | Other |

**Control:** N/A , unknown

## Recruitment

NL

| | |
|---|---|
| Recruitment status: | Pending |
| Start date (anticipated): | 01-09-2013 |
| Enrollment: | 80 |
| Type: | Anticipated |

# Ethics review

Positive opinion

| | |
|---|---|
| Date: | 20-05-2013 |
| Application type: | First submission |

# Study registrations

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

ID: 39658
Bron: ToetsingOnline
Titel:

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

No registrations found.

## In other registers

| Register | ID |
|---|---|
| NTR-new | NL3834 |
| NTR-old | NTR4002 |
| CCMO | NL41587.099.13 |
| ISRCTN | ISRCTN wordt niet meer aangevraagd |
| OMON | NL-OMON39658 |

# Study results