# Wrist fractures treated with plaster cast or operation: what leads to the best outcome in patients older than 50 years?

No registrations found.

**Ethical review** Not applicable

**Status** Pending

Health condition type -

**Study type** Interventional

## **Summary**

#### ID

NL-OMON29311

#### **Source**

Nationaal Trial Register

#### **Brief title**

RADIUS STUDY: Randomized Assessment of Distal radius fracture Interventions in Unstable Subtypes

#### **Health condition**

distal radius fracture plate fixation plaster cast immobilization

## **Sponsors and support**

Primary sponsor: None

Source(s) of monetary or material Support: None

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

Main study parameter/endpoint

Functional outcome parameters:

Disability of Arm, Shoulder and Hand (DASH) score, Musculoskeletal Function Assessment (MFA)

#### **Secondary outcome**

Secondary study parameters/endpoints

Functional outcome parameters:

Short Form 36 (SF-36) health survey questionnaire, Patient Related Wrist Evaluation (PRWE), Range of motion, Pain level (VAS), Cost-effectiveness analysis
Radiographic analysis: Lidstrom score

Complications:

complex regional pain syndrome type-I, infection, re-operation, arthrodesis, general surgical complications (pneumonia, myocardial infarction, etc).

# **Study description**

#### **Background summary**

Complication rate for treatment of displaced intra-articular distal radius fractures is low, although functional disability remains a significant problem with up to 30% of patients suffering long-term functional restrictions after conservative treatment. Whether operative correction improves this functional outcome compared to conservative treatment remains unclear.

#### Study objective

Open reduction and internal fixation (ORIF) using locking-plate distal radius osteosynthesis leads to an improved functional outcome (DASH score) in elderly (>50 years) (independent in activities of daily living) patients with a displaced distal radius fracture (AO type A2, A3, B1, C1, and C2).

#### Study design

Follow-up 1 month, and 3, 6, 12 and 24 months

#### Intervention

Open reduction and internal fixation using locking-plate and angular stable screw fixation versus plaster cast immobilization

### **Contacts**

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# **Eligibility criteria**

#### Inclusion criteria

- 1. Age > 50 years
- 2. Primary displaced unilateral fracture of distal radius (open fractures are included)
- a. AO (Arbeitsgemeinschaft fur Osteosynthesefragen) type A2
- b. AO type A3
- c. AO type B1
- d. AO type C1
- e. AO type C2
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- 3. Independent for activities of daily living (yes/no question)
- 4. Inadequate reduction of distal radius fracture at emergency department (For specific criteria see below) and/or
- 5. Inadequate reduction of distal radius at 1 week follow-up at the outpatient department: Therapeutic failure is defined as fracture displacement when the dorsal or volar angulations are more than  $10^{\circ}$ , intra-articular step-off > 1mm, or the ulnar variance is more than 3mm. This failure accounts for both redisplacement after initial adequate alignment during conservative treatment (including manipulative reduction) on the emergency department) and for secondary failure after surgical reduction.

#### **Exclusion criteria**

- 1. Fracture of contralateral arm
- 2. Other fractures at the ipsilateral arm (excluded carpal fractures)
- 3. Pre-existent abnormalities fractured distal radius
- 4. Primary unilateral fracture distal radius AO type A1, B2, B3 and C3
- 5. Pathological fractures (due to metastasis, secondary osteoporosis)

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-06-2008

Enrollment: 200

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Α	nticipated
	Aı

## **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 NL1235 NTR-old NTR1280

Other MEC azM: 08-2-009

ISRCTN wordt niet meer aangevraagd

# **Study results**

#### **Summary results**

N/A