# Surgical Treatment of Olecranon Fractures in Adults, Fractures Patterns, Surgical Technique and Outcome after 10-30 Years.

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We propose a protocol to invite patients with olecranon fractures identified from the AMC database to return for evaluation and radiographs in order to collect long term (>10 years) data regarding the outcomes of these fractures.

Ethical review Approved WMO

**Status** Pending **Health condition type** Fractures

**Study type** Observational invasive

## **Summary**

#### ID

NL-OMON32463

#### **Source**

ToetsingOnline

#### **Brief title**

Surgical Treatment of Olecranon Fractures in Adults

## **Condition**

- Fractures
- Bone and joint therapeutic procedures

## **Synonym**

broken arm, olecranon fractures

## **Research involving**

Human

## **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

### Intervention

**Keyword:** Fractures, Olecranon, Outcome, Surgical treatment

#### **Outcome measures**

#### **Primary outcome**

Constraints in range of motion

Constraints in daily activities

Pain score

Structural deformities of the lower arm

## **Secondary outcome**

not applicable

# **Study description**

#### **Background summary**

The olecranon is the most proximal articulating part of the ulna. Together with the coronoid process it forms the trochlear notch of the ulna, which articulates with the distal humerus. Due to its subcuatenous position, the olecranon is vulnerable to direct trauma. Most olecranon fractures are displaced and unstable. Treatment goals for olecranon fractures should consist of the following; articular restoration, preservation of motor power of extension, stability, avoidance of stiffness, and limitation of possible associated complications. Several treatment options have been advocated in the past; tension band wire technique, intramedullary screw (with or without tension band wire) and plate fixation, but the treatment option depends on the nature of the fracture. A few studies document good or excellent elbow function within a couple of years of operative fixation of a fracture of the olecranon, however the long-term results in those patients are not well investigated. It would be useful to know if patients lose motion, have more pain, develop arthrosis, or require additional operations ten years or more after a fracture

of the olecranon.

## Study objective

We propose a protocol to invite patients with olecranon fractures identified from the AMC database to return for evaluation and radiographs in order to collect long term (>10 years) data regarding the outcomes of these fractures.

## Study design

All patients treated for olecranon fractures in the Academic Medical Centre in Amsterdam from the first available year of registry in the AO AMC trauma database from 1973 until 1998, will be invited to return to our out-patient clinic for a long term follow up (IRB approved).

Outcome instruments, such as the Mayo Elbow Performance Index and ASES (American Shoulder and Elbow Society) Elbow Score, will be used to assess subjective and objective functional outcome. The DASH-questionnaire will be used to evaluate functional outcome from the patient\*s point of view. Radiographs will be taken to evaluate postoperative alignment.

## Study burden and risks

Burden: One time visit to the AMC Amsterdam.

Risk: Very low risk classified as trivial risk for X-photography of the elbow.

## **Contacts**

#### **Public**

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

All patients (>18 years old) treated for an olecranon fracture in the Academic Medical Centre in Amsterdam from the first available year of registry in the AO AMC trauma database from 1974 until 1998, will be invited to return to our out-patient clinic for a long term follow up.

## **Exclusion criteria**

Patients younger than 18 years old and Distal radius fractures

# Study design

## **Design**

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-09-2008

Enrollment: 100

Type: Anticipated

## **Ethics review**

Approved WMO

Application type: First submission

Review commission: METC Amsterdam UMC

# **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

CCMO NL24362.018.08