# Clinical outcomes investigation in ulna coronoid fractures with elbow instability

Submission date	Recruitment status	Prospectively registered
01/03/2018	No longer recruiting	□ Protocol
Registration date	Overall study status	Statistical analysis plan
05/04/2018	Completed	Results
Last Edited	Condition category	Individual participant data
04/04/2018	Injury, Occupational Diseases, Poisoning	Record updated in last year

#### Plain English summary of protocol

Background and study aims

The coronoid process is a projection from the front of one of the bones in the arm that forms part of the elbow. Fracturing this can lead to instability of the elbow, which was traditionally thought to be classified by the size of the fracture. However recent studies have shown that the location of the fracture is also needed to help analyse the injury. The anteromedial facet is a central part of the coronoid process and fractures here typically vary, so the surgical approach to treat them is critical.

This study aims to report the surgical outcomes of participants with this type of fracture, by analysing their previous hospital records and results to suggest the best surgical approach.

Who can participate?

Adults with a fractured ulnar coronoid

What does the study involve?

All participants undergo surgery to fix their broken bone. The broken bone is reduced or put back in place, then an internal device is placed on the bone to hold it together. This may be screws, plates or pins depending on the injury. Participants attend follow up appointments 2 weeks, 3 months, 6 months, 1 year and 2 years after the operation where they undergo disability evaluation and X-ray imaging.

What are the possible benefits and risks of participating? There are not any direct benefits or risks for those taking part in the study.

Where is the study run from?

Chang Gung Memorial Hospital-Linkou (Taiwan)

When is the study starting and how long is it expected to run for? January 2007 – December 2017

Who is funding the study? Chang Gung Memorial Hospital – Linkou (Taiwan) Who is the main contact?
Dr Alvin Chao-Yu Chen (Scientific)
alvinchen@cgmh.org.tw

# Contact information

#### Type(s)

Scientific

#### Contact name

Dr Alvin Chao-Yu Chen

#### **ORCID ID**

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

none

# Study information

#### Scientific Title

Anteromedial fractures of the ulnar coronoid process: correlation between surgical outcomes and radiographic findings

## **Study objectives**

This study aims to report the surgical outcomes of a consecutive case series and suggest an optimal surgical approach through a retrospective analysis of the surgical and radiographic findings of AMF fracture dislocation.

# Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Chang Gung Institutional Review Board, 11/09/2017, ref: IRB 201701326B0

#### Study design

Restrospective reviews on surgical outcomes of ulnar anteromedial facet fractures

#### Primary study design

Interventional

#### Secondary study design

Non randomised study

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

### Health condition(s) or problem(s) studied

Fracture of forearm

#### **Interventions**

Open reduction and internal fixation of ulnar coronoid fractures is performed for all patients by the same surgeon. Fixation methods and implants are dependent on the fracture patterns including plate, screw, pin and wire and suture anchors. All participants attend regular outpatient clinic follow up appointments at 2 weeks, 3 months, 6 months, 1 year and 2 years.

#### Intervention Type

Procedure/Surgery

#### Primary outcome measure

Clinical functional outcomes are measured using the Mayo Elbow Performance Score (MEPs) and Shortened Disability of the Arm and Shoulder and Hand (quickDASH) scores two years after the operation.

#### Secondary outcome measures

Radiographic correlation with surgical approach and clinical results are assessed by an orthopaedic trauma surgeon and an elbow surgeon using retrospective review of elbow radiographs two years after the operation.

# Overall study start date

01/01/2007

#### Completion date

31/12/2017

# **Eligibility**

#### Key inclusion criteria

1. Displaced anteromedial facet fracture of ulnar coronoid with instability

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Sex

Both

#### Target number of participants

20

#### Key exclusion criteria

1. Prior injury or surgery of the ipsilateral arm

#### Date of first enrolment

01/02/2007

#### Date of final enrolment

28/02/2014

# Locations

#### Countries of recruitment

Taiwan

## Study participating centre Chang Gung Memorial Hospital-Linkou

5th, Fu-Shin St. Kweishan District Taiwan 333

# Sponsor information

#### Organisation

Chang Gung Memorial Hospital-Linkou

#### Sponsor details

5th, Fu-Shin St. Kweishan District Taoyuan Taiwan 333 +886 3 3281200 alvinchen@cgmh.org.tw

#### Sponsor type

Hospital/treatment centre

#### **ROR**

https://ror.org/02dnn6q67

# Funder(s)

#### Funder type

Hospital/treatment centre

#### Funder Name

Chang Gung Memorial Hospital-Linkou

# **Results and Publications**

## Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal.

# Intention to publish date

31/08/2018

## Individual participant data (IPD) sharing plan

The datasets generated and analysed during the current study can be provided upon request from Alvin CY Chen (alvinchen@cgmh.org.tw) in Microsoft Word text files. It is available for 10 years after surgery for each participant. Consents from participants was obtained.

# IPD sharing plan summary

Available on request