Arthroplasty in three and four part proximal humeral fracture: hemi or reverse? Prospective randomised clinical trial

Published: 22-12-2009 Last updated: 06-05-2024

Compare hemi-arthroplasty with reverse arthroplasty in the treatment for displaced three- or four-part proximal humerus fractures

Ethical review Approved WMO **Status** Recruitment stopped

Health condition type Fractures **Study type** Interventional

Summary

ID

NL-OMON39124

Source

ToetsingOnline

Brief title

Arthroplasty in proximal humeral fracture: hemi or reverse?

Condition

Fractures

Synonym

proximal humerus fracture, shoulder fracture

Research involving

Human

Sponsors and support

Primary sponsor: Medisch Centrum Alkmaar

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

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Intervention

Keyword: fracture, hemi-arthroplasty, humeral, reverse

Outcome measures

Primary outcome

Constant and DASH shoulder scores, ROM and VAS-pain.

Secondary outcome

Secondary parameters are complications and revision rate

Study description

Background summary

The ideal sequel in the treatment of displaced three and four part proximal humerus fractures is still undefined. Hemi-arthroplasty is a reliable treatment for pain reduction, however generally with a poor range of motion. Without the necessity of an adequate cuff and vascularised tubercula reverse shoulder arthroplasty can possibly provide a better functional outcome with the same pain reduction.

Study objective

Compare hemi-arthroplasty with reverse arthroplasty in the treatment for displaced three- or four-part proximal humerus fractures

Study design

Prospective randomized clinical trial

Intervention

Operative treatment by either Aequalis fracture prosthesis or Aequalis reverse fracture prosthesis.

Study burden and risks

The general operative risks are equal in both groups. The complication risk, as infection, instability en neuralpraxia, is comparable. Potential benefits in

the reverse group is a greater range of motion with equal pain reduction. The number of visits is equal compared with standard procedure, however X-rays and questionnaires will be taken more regularly.

Contacts

Public

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

Patients of 65 years and above with a three or four part proximal humerus fracture, ASA 1-3 and within one month after the trauma.

Exclusion criteria

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-06-2010

Enrollment: 68

Type: Actual

Ethics review

Approved WMO

Date: 22-12-2009

Application type: First submission

Review commission: METC Noord-Holland (Alkmaar)

Approved WMO

Date: 20-08-2010

Application type: Amendment

Review commission: METC Noord-Holland (Alkmaar)

Approved WMO

Date: 15-07-2011

Application type: Amendment

Review commission: METC Noord-Holland (Alkmaar)

Approved WMO

Date: 24-03-2014
Application type: Amendment

Review commission: METC Noord-Holland (Alkmaar)

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 NL26142.094.09