Posttraumatic osteoarthritis following perilunate dislocations and perilunate fracture dislocations in young patients and the correlation with subjective and objective outcome measures. A descriptive cohort study.

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To determine the prevalence of posttraumatic osteoarthritis following a PLD-PLFDs in a cohort of young non-osteoporotic patients and correlation with objective and subjective outcome measures.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Fractures
Study type	Observational non invasive

Summary

ID

NL-OMON44129

Source
ToetsingOnline

Brief title
Posttraumatic osteoarthritis following perilunate (fracture) dislocations

Condition

- Fractures
- Bone and joint therapeutic procedures

Synonym
carpal dislocation, perilunate fracture dislocations

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Groningen
Source(s) of monetary or material Support: Ministerie van OC&W,Fonds de Gavere

Intervention

Keyword: fracture, outcome, perilunate dislocation, posttraumatic osteoarthritis

Outcome measures

Primary outcome

The prevalence of posttraumatic osteoarthritis.

Secondary outcome

Patient reported functional outcomes objectified with the PRWE, DASH, SF-36 and

MHQ. Objective outcomes: range of motion, grip strength.

Study description

Background summary

The development of posttraumatic osteoarthritis (PA) following perilunate dislocations and perilunate fracture dislocations (PLD-PLFDs) has been described. Direct and indirect joint impact loading, soft tissue injuries, joint dislocation and intra-articular fractures, increase the risk of progressive joint degeneration that cause PA. It is though 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 PLD-PLFD than for an older patient. The extent of the loss of function can be objectified using functional measures, such as range of motion and grip strength. Subjective measures to objectify loss of function as experienced by the patient can be performed using validated questionnaires. In this study, the prevalence of posttraumatic osteoarthritis following a PLD-PLFD in young patients is determined. Also, the question arises what the correlation between objective and subjective outcome measures is following a PLD-PLFD in young patients and compare these with a

healthy control group.

Study objective

To determine the prevalence of posttraumatic osteoarthritis following a PLD-PLFDs in a cohort of young non-osteoporotic patients and correlation with objective and subjective outcome measures.

Study design

Descriptive cohort study

Study burden and risks

none

Contacts

Public
Universitair Medisch Centrum Groningen

Hanzeplein 1
Groningen 9713GZ
NL
Scientific
Universitair Medisch Centrum Groningen

Hanzeplein 1
Groningen 9713GZ
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

All patients treated in the period 1996 until 2014 in the University Medical Center Groningen for a PLD-PLFD - 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) - Written informed consent - Mentally competent

Exclusion criteria

Preexistent osteoarthritis of the hand or preexistent declined function of the hand or 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
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Diagnostic

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	08-03-2016
Enrollment:	33
Type:	Actual

Ethics review

Approved WMO Date:	17-09-2015
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Not approved Date:	10-05-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	23-08-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

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

ID: 21645
Source: Nationaal Trial Register
Title:

In other registers

Register	ID
Other	22788 (voorlopig nr.)
CCMO	NL52111.042.15
OMON	NL-OMON21645