Treatment of osteoartritis of the carpometacarpal joint of the thumb: Evaluation of treatments

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The aim of this study is to:- Analysis the mobility of the IP joint, MCP-1 joint and CMC-1 joint after surgical treatment- Analysis the strength of the CMC-I joint after surgical treatment- Analysis the Kapandji opposition of the thumb after...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Joint disorders
Study type	Observational invasive

Summary

ID

NL-OMON38567

Source
ToetsingOnline

Brief title
Treatment of osteoartritis of the carpometacarpal joint of the thumb

Condition

- Joint disorders
- Bone and joint therapeutic procedures

Synonym
degeneration, Osteoarthritis

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Carpometacarpal joint, Osteoartritis, Treatment

Outcome measures

Primary outcome

The primary outcome is the functional limitation of the hand (DASH score /

MHOQ)

Secondary outcome

- Mobility of IP joint, MCP joint and the CMC-1 joint

- Pinch strength thumb and fingers

- Opposition of the thumb according to Kapandji

- Pain (VAS score, during rest and activity)

- Degree of CMC-I joint subluxation

Study description

Background summary

Osteoarthritis of the CMC-1 joint is a noninfectious degeneration of the cartilage of the carpometacarpal joint of the thumb. The symptoms of CMC-1 osteoartrosis may consist of osteoarthritis pain, decreased strength and subluxation of the joint, which all can result in dysfunction of the thumb. There are a number of conservative options such as immobilization splint therapy and intra articulair injections with corticosteroiden. Furthermore surgical treatment is possible, including artrodesis, excision of the trapezium with ligament reconstruction, excision of the trapezium with a prothesis or with interposition arthroplasty. Another possibility is a combination of ligament reconstruction and interposition arthroplasty, LRTI. The present study was conducted to establish the long-term results and to highlight the problems associated with the different surgical and conservative treatments

Study objective

The aim of this study is to:

- Analysis the mobility of the IP joint, MCP-1 joint and CMC-1 joint after surgical treatment

- Analysis the strength of the CMC-I joint after surgical treatment

- Analysis the Kapandji opposition of the thumb after surgical treatment

- Analysis the functional outcome of the CMC-1 joint after surgical treatment

- Analysis subluxation of the joint-I CMC after a surgical treatment

- Analysis of pain after conservative treatment

- Analysis the functional outcome of the CMC-1 joint after conservative treatment

Research Hypotheses:

- After surgical treatment a grip strength of 85% standard for age and sex is expected

- After surgical treatment of CMC-1 osteoarthritis is a good DASH score expected (<50 points)

- Radiographic abnormalities do not always have clinical consequence

- After conservative treatment of CMC-1 osteoarthritis is a good DASH score expected (<50 points)

Study design

Descriptive retrospective cross-sectional cohort study

Study burden and risks

The study contains no additional risks for the included patients except for the total radiation exposure of 0.002 mSv (annual background radiation in the Netherlands 2.0-2.5 mSv per inhabitant). The patient fill out two questionnaires which takes about an hour to complete. In addition, the patients are invited for a clinical visit for a half hour. During this clinic visit some functional tests of the hand will preformed end a X-ray of both hands is taken.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

Treatment for osteoartritis of the basal joint of the thumb
Treatment AMC/OLVG
Signed informed consent
Minimal follow up 12 months
Maximum 1 surgery

Exclusion criteria

Other pathology on the same hand which can affect the functional results

Study design

Design

Study type: Observational invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-08-2015
Enrollment:	370
Type:	Actual

Ethics review

Approved WMO Date:	31-07-2013
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	23-10-2013
Application type:	Amendment
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	NL43052.018.12