# Effect of orthoses in hand osteoarthritis

[ ] Prospectively registered Submission date Recruitment status 03/11/2008 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 11/12/2008 Completed [X] Results [ ] Individual participant data Last Edited Condition category 27/08/2014 Musculoskeletal Diseases

### Plain English summary of protocol

Not provided at time of registration

# Contact information

### Type(s)

Scientific

### Contact name

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# Additional identifiers

### Protocol serial number

N/A

# Study information

### Scientific Title

Effect of prefabricated orthoses for persons with osteoarthritis of the carpometacarpal joint: a randomised controlled trial

### Acronym

HandOAorthoses

### **Study objectives**

Primary question:

Is the use of prefabricated orthoses combined with hand exercises more effective to relieve pain and improve hand function in persons with osteoarthritis in the carpometacarpal (CMC1) joint, than hand exercises alone?

### Secondary question:

Is the use of prefabricated orthoses combined with hand exercises more effective to increase hand strength in persons with osteoarthritis in the CMC1 joint, than hand exercises alone?

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Ethical Committee for Medical Research, 24/09/2008, ref: 413-08-00056, and the Norwegian Data Inspectorate

### Study design

Randomised controlled trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Osteoarthritis of the carpometacarpal joint

### **Interventions**

Provision of orthoses:

Participants in group 1 are provided with a prefabricated orthosis, aimed at giving support to the CMC1 joint. Participants with an adduction contracture are offered a custom-made orthosis to wear routinely at night.

### Hand exercises:

All participants (group 1 and group 2) are instructed in four basic hand exercises, aimed at improving or maintaining joint mobility, joint stability and hand strength. They are given a leaflet with descriptions and pictures of the exercises, and instructed to perform the exercises twice a day.

Patients in group 2 will be offered orthoses at two months follow-up.

### Intervention Type

Other

#### Phase

**Not Specified** 

### Primary outcome(s)

Assessed at baseline and after two months:

- 1. Hand pain measured on visual analogue scales
- 2. Function in performance of daily activities, measured by the MAP-hand

### Key secondary outcome(s))

Assessed at baseline and after two months:

- 1. Hand strength, measured with the Grippit
- 2. Hand function, measured with the pain, stiffness and function subscales of the Australian /Canadian hand osteoarthritis measure (AUSCAN)
- 3. Abduction of the thumb, measured with Gripsizer
- 4. Patient-acceptable symptoms, measured with the Patient Acceptable Symptom State (PASS)
- 5. General function, measured with the Modified Health Questionnaire (MHAQ)
- 6. Quality of life, European Quality of Life questionnaire (EuroQoL EQ-5D)
- 7. Self-efficacy in relation to pain, measured with the Arthritis Self Efficacy Pain Subscale

Assessed after two months only:

- 8. Costs
- 9. Participants' experiences with prefabricated orthoses and hand exercises (structured interview with participants in group 1)

### Completion date

31/12/2010

# **Eligibility**

### Key inclusion criteria

- 1. Aged from 18 to 75 years, either sex
- 2. Hand osteoarthritis
- 3. Pain in the carpometacarpal joint
- 4. Ability to communicate in Norwegian

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 years

#### Sex

Αll

### Key exclusion criteria

- 1. Cognitive impairment or mental disease
- 2. Past surgery of the thumb
- 3. Impaired hand function due to other diseases
- 4. Steroid injections within the last month

### Date of first enrolment

15/11/2008

### Date of final enrolment

31/12/2010

# Locations

### Countries of recruitment

Norway

# Study participating centre Diakonhjemmet Hospital

Oslo Norway 0319

# Sponsor information

# Organisation

Diakonhjemmet Hospital (Norway)

### **ROR**

https://ror.org/02jvh3a15

# Funder(s)

### Funder type

Research organisation

### Funder Name

National Resource Centre for Rehabilitation in Rheumatology (Norway)

### **Funder Name**

Norwegian Association of Occupational Therapists (Norsk Ergoterapeutforbund [NETF]) (Norway)

# **Results and Publications**

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## **Study outputs**

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2014	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes