# Effect of exercises in Hand OsteoArthritis

Submission date [ ] Prospectively registered Recruitment status 07/01/2011 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 10/03/2011 Completed [X] Results [ ] Individual participant data Last Edited Condition category 05/05/2016 Musculoskeletal Diseases

### Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

**Protocol serial number** N/A

# Study information

### Scientific Title

Effect of exercises for persons with Hand OsteoArthritis: a randomised controlled trial

### Acronym

**HOAexercises** 

### **Study objectives**

Primary question:

Are hand exercises delivered by an occupational therapist (OT) more effective in improving activity performance than no exercises (treatment as usual) in people with hand osteoarthritis (OA) secondary care?

Secondary question:

Does regular hand exercising improve grip-force, joint mobility and hand pain in people with hand OA?

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Ethical Committee for Medical Research, 18/11/2010. ref: 2010/2693a

### Study design

Randomised controlled trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Hand osteoarthritis

#### **Interventions**

Group 1 - hand exercises:

Participants receive information about HOA and a leaflet containing five suggestions for alternative working methods to improve hand function and performance of daily activities. Thereafter, participants are instructed in five hand exercises, aimed at improving or maintaining joint mobility and grip force. They are given a leaflet with descriptions and pictures of the exercises, and instructed to perform the exercises with ten repetitions three times a week for the first two weeks, thereafter 12 repetitions for the next two weeks and if this is well tolerated to increase to fifteen repetitions for the rest of the trial period. They will be contacted by phone several times during the follow up.

## Group 2 - treatment as usual (i.e., no exercises):

Participants' receive information about HOA and a leaflet containing five suggestions for alternative working methods to improve hand function and performance of daily activities. After completion of the study, participants are taught the same exercise program as participants in group 1.

### Intervention Type

Behavioural

## Primary outcome(s)

Function in performance of daily activities, measured by the Patient Specific Functional Scale (PSFS), assessed at baseline and after three months

### Key secondary outcome(s))

Current secondary outcome measures as of 11/07/2013:

Assessed at baseline and after three months:

- 1. Function in performance of daily activities, measured by Measure of Activity Performance of the Hand (MAP-Hand) and the Functional Index of the Hand (FIHOA)
- 2. Hand pain, stiffness, fatigue and disease activity measured on numeric rating scales (NRS)
- 3. Hand strength, measured with the Grippit
- 4. Abduction of the thumb, measured with Gripsizer
- 5. Joint mobility, measured as flextion or opposition (in millimeter) of digits I to V
- 6. Self-reported hand function (NRS)
- 7. Number of participants who fulfill the OMERACT-OARSI responder criteria

Participants in the exercise group are also asked to keep a diary where they register their exercising and also self-report hand pain immediately following each exercise bout on a NRS.

Previous secondary outcome measures:

Assessed at baseline and after three months:

- 1. Function in performance of daily activities, measured by Measure of Activity Performance of the Hand (MAP-Hand) and the Functional Index of the Hand (FIHOA)
- 2. Hand pain, stiffness, fatigue and disease activity measured on numeric rating scales (NRS)
- 3. Hand strength, measured with the Grippit
- 4. Abduction of the thumb, measured with Gripsizer
- 5. Joint mobility, measured as flextion or opposition (in millimeter) of digits I to V
- 6. Self-reported hand function (NRS)

Participants in the exercise group are also asked to keep a diary where they register their exercising and also self-report hand pain immediately following each exercise bout on a NRS.

## Completion date

30/06/2014

# **Eligibility**

### Key inclusion criteria

- 1. Women aged from 18 to 80 years
- 2. Hand osteoarthritis according to the American College of Rheumatology (ACR) criteria
- 3 Stable medication last three months
- 4. Minimum three self-reported activity limitations caused by hand OA
- 5. Ability to communicate in Norwegian

## Participant type(s)

Patient

## Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 years

#### Sex

Female

### Key exclusion criteria

- 1. Cognitive impairment or mental disease
- 2. Surgery in the hand for the last 6 months or in the follow-up period
- 3. Impaired hand function due to other diseases
- 4. Steroid injections within the last 2 weeks

### Date of first enrolment

01/02/2011

### Date of final enrolment

30/06/2014

# Locations

### Countries of recruitment

Norway

## Study participating centre Martina Hansens Hospital

Sandvika Norway

1306

# Sponsor information

### Organisation

Martina Hansens Hospital (Norway)

### **ROR**

https://ror.org/00a2gj556

# Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Martina Hansens Hospital (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                       | 01/08/2015   |            | Yes            | No              |
| Participant information sheet | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |