# Mirror therapy in patients with complex regional pain syndrome type one of the upper extremity: a randomised clinical trial

Recruitment status	Prospectively registered
No longer recruiting	☐ Protocol
Overall study status	Statistical analysis plan
Completed	Results
Condition category	Individual participant data
	Record updated in last year
	No longer recruiting  Overall study status

# Plain English summary of protocol

Not provided at time of registration

# Contact information

## Type(s)

Scientific

#### Contact name

Dr Ton A R Schreuders

#### Contact details

Erasmus Medical Centre
Department of Rehabilitation Medicine, Room H014
P.O. Box 2040
Rotterdam
Netherlands
3000 CA
+31 (0)10 463 2867
a.schreuders@erasmusmc.nl

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

#### Scientific Title

#### Study objectives

Mirror therapy was introduced by Ramachandran in patient with phantom limb pain and is based on new knowledge about the plasticity of the brain. Recently, studies in patients with Complex Regional Pain Syndrome (CRPS) have suggested that exercising with the painful hand behind a mirror and watching a reflection of the normal hand will give the brain the illusion that the hand is now able to move normally.

In these controlled but undersized studies, positive effects were reported on pain, oedema and hand function. In the present single-blind randomised clinical trial, mirror therapy will be presented in three phases:

- 1. One week Recognition of Hand Laterality using pictures of left and right hands
- 2. One week of Imagined Hand Movements, and
- 3. Four weeks of mirror therapy

#### **Hypothesis:**

Mirror therapy in patients with Complex Regional Pain Syndrome type one (CRPS I) has a positive effect on pain, oedema, sensibility, hand function, Activities of Daily Living (ADL) and quality of life compared to standard treatment.

#### Ethics approval required

Old ethics approval format

# Ethics approval(s)

Ethics approval received from the local medical ethics committee

# Study design

Randomised, active controlled, parallel group, single blinded trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

Other

# Study type(s)

Treatment

#### Participant information sheet

Health condition(s) or problem(s) studied

#### Complex regional pain syndrome type 1 (CRPS I)

#### **Interventions**

Mirror therapy versus standard treatment:

- 1. One week recognition of hand laterality using pictures of left and right hands
- 2. One week of imagined hand movements, and
- 3. Four weeks of mirror therapy

The control group will receive treatment following standard treatment guidelines.

#### **Intervention Type**

Other

#### Phase

**Not Specified** 

#### Primary outcome measure

Pain

#### Secondary outcome measures

- 1. Hand function
- 2. ADL
- 3. Oedema
- 4. Sensibility
- 5. Quality of life

## Overall study start date

01/12/2005

# Completion date

01/12/2007

# **Eligibility**

#### Key inclusion criteria

Modified research diagnostic criteria for CRPS-1 based on Bruehl 1999.

# Participant type(s)

**Patient** 

# Age group

**Not Specified** 

#### Sex

**Not Specified** 

# Target number of participants

52

#### Key exclusion criteria

- 1. Treatment for CRPS-I in another institution
- 2. Psychiatric problems
- 3. Lack of motivation

#### Date of first enrolment

01/12/2005

#### Date of final enrolment

01/12/2007

# Locations

# Countries of recruitment

Netherlands

# Study participating centre Erasmus Medical Centre

Rotterdam Netherlands 3000 CA

# Sponsor information

#### Organisation

Erasmus Medical Centre (The Netherlands)

#### Sponsor details

P.O. Box 2040 Rotterdam Netherlands 3000 CA

#### Sponsor type

Hospital/treatment centre

#### Website

http://www.erasmusmc.nl/

#### ROR

https://ror.org/018906e22

# Funder(s)

## Funder type

Hospital/treatment centre

#### Funder Name

Erasmus Medical Centre (The Netherlands)

#### Funder Name

Medical Research Advisory Committee Erasmus (MRACE) (The Netherlands)

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration