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

Submission date 23/02/2007	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 23/02/2007	Overall study status Completed	 Statistical analysis plan Results
Last Edited 08/09/2011	Condition category Musculoskeletal Diseases	 Individual participant data Record updated in last year

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

Treatment for CRPS-I in another institution
 Psychiatric problems
 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