

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The investigation of Mirror Therapy on hand function in adults with hemiparesis in Semnan

Protocol summary

Summary

Rehabilitation of the affected paretic arm after stroke is one of the main concerns of occupational therapists, especially in the chronic phase. The aims of this study is to investigate the effect of MIRROR THERAPY on hand function in adults with hemiparesis. In this randomized double blinded study a total of 30 chronic stroke patients (mean time post onset, 6 months) will be assigned to the mirror group (n = 15) or the control group (n = 15). Inclusion criteria is spend at least 6 months after stroke and the Ability to understand therapeutic instructions and exclusion criteria includes any structural problems that hinder the implementation of treatment program and cognitive, perceptual or visual deficits that interfere with treatment program. Treatment program will consist of 15 sessions which every session for the mirror group includes bi-manual training with mirror and conventional therapies, and for the control group includes bi-manual training without mirror and conventional therapies. Hand function will be assessed before and after treatments through FMA, Box & Block test and Jamar dynamometer.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201201128713N1**

Registration date: **2012-01-25, 1390/11/05**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-01-25, 1390/11/05

Registrant information

Name

Hossein Alibakhshi

Name of organization / entity

Semnan University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Neuromuscular Research Center, Semnan University of medical sciences

Expected recruitment start date

2012-01-21, 1390/11/01

Expected recruitment end date

2012-04-20, 1391/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The investigation of Mirror Therapy on hand function in adults with hemiparesis in Semnan

Public title

Effect of Mirror therapy in the treatment of adult patients with hemiplegia

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Spend at least 6 months after stroke, the Ability to understand therapeutic instructions
exclusion criteria: any structural problems that hinder the implementation of treatment program, cognitive or perceptual deficits that interfere with treatment program, visual difficulties

Age
From **25 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Semnan University of medical sciences

Street address
Semnan- Semnan University of medical sciences

City
Semnan

Postal code

Approval date
2012-01-10, 1390/10/20

Ethics committee reference number
90/134961

Health conditions studied

1

Description of health condition studied
stroke

ICD-10 code
I67.9

ICD-10 code description
Cerebrovascular disease, unspecified

Primary outcomes

1

Description
dexterity

Timepoint

before/after treatment

Method of measurement
Box & Block Test

2

Description
hand function

Timepoint
befor / after treatment

Method of measurement
Fugl Meyer Assessment r

3

Description
strengthening grip

Timepoint
before/after treatment

Method of measurement
Jammr Dynamometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention: mirror therapy + conventional occupational therapy

Category
Rehabilitation

2

Description
Control : bimanual training + conventional occupational therapy

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Neuro-muscular Research Center

Full name of responsible person
Street address

City
Semnan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

research and technology deputy of Semnan university
of medical sciences

Full name of responsible person

Dr. Raheb Ghorbani

Street address

Semnan university of medical sciences

City

Semnan

Grant name

Grant code / Reference number

**Is the source of funding the same sponsor
organization/entity?**

Yes

Title of funding source

research and technology deputy of Semnan university of
medical sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Semnan University of medical sciences

Full name of responsible person

Hossein Alibakhshi

Position

Msc. Occupational therapy/ lecturer

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty