

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of Constraint - Induced Therapy and Progressive Resistive Exercise on strength and dexterity of upper extremity in hemiplegic adults

Protocol summary

Summary

34 hemiplegic patients were randomly assigned in Constraint - Induced Therapy and Progressive Resistive Exercise groups. Both groups were assessed before and after the intervention. Pinch and grip strengths, abductor and extensor muscle isometric strengths were measured by dynamometer. In addition, dexterity was evaluated by Minnesota manual dexterity test. Patients were under treatment for 6 weeks. The unaffected upper limb was restrained in CIT group, for five days a week (5 hours a day). In PRE group, progressive loads were applied along with improvement of strengths in patients.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138811101722N2**

Registration date: **2013-08-18, 1392/05/27**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-08-18, 1392/05/27

Registrant information

Name

Samira Karimpour

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

This study, sponsored by a grant from the postgraduate Studied and Research Program, Tehran University of Medical Sciences

Expected recruitment start date

2009-06-22, 1388/04/01

Expected recruitment end date

2009-11-22, 1388/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Constraint - Induced Therapy and Progressive Resistive Exercise on strength and dexterity of upper extremity in hemiplegic adults

Public title

Comparison of Constraint - Induced Therapy and Progressive Resistive Exercise

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Patients with hemiplegia; Time to lesion at least six months; Age between 70 to 50 years; patients understand simple instructions and have body image; Lack of frozen shoulder joint; Ability to sit independently on the edge of bed for at least 10 minutes; At least 20 degrees in the wrist and 10 degrees Ext MP; according to modified ashworth scale, 1, +1 and 2; Minnesota Manual Dexterity Test minimum score for entrance to study not less than 6. exclusion criteria: non_cooperation during the intervention; Orthopedic diseases and stroke occurrence this.

Age
From **50 years** old to **70 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **34**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Deputy of research, tehran university of medical sciences

Street address
keshavarz Blvd,qods street

City
Tehran

Postal code
14167

Approval date
1388-06-06, 769/01/-651

Ethics committee reference number
1388/06/06

Health conditions studied

1

Description of health condition studied
Spastic hemiplegic cerebral palsy

ICD-10 code
G80.2

ICD-10 code description
hereditary spastic paraplegia

Primary outcomes

1

Description

upper limb strength

Timepoint
6 weeks after intervention

Method of measurement
Kg and number, JAMA Dinamometer, Nikolas Isometric evaluation device

Secondary outcomes

empty

Intervention groups

1

Description
CIT group

Category
Rehabilitation

2

Description
PRE group

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Rehabilitation centers of rehabilitation Faculty

Full name of responsible person
Somaye Abbasi

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Rehabilitation Faculty,Pich e shemiran, Enghlab street

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Deputy of education , Tehran Univercity of Medical Scinces

Full name of responsible person
Dr Hosein Keshavarz

Street address
Qods street, Keshavarz Blvd

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Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Deputy of education , Tehran Univercity 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

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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