Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of the effectiveness of tele rehabilitation program with routine rehabilitation program on improving upper limb function in patients with multiple sclerosis: a pilot study

Protocol summary

Study aim

Determining the effect of telerehabilitation program on upper limb function in people with Multiple Sclerosis (MS)

Design

The present study is a pilot study in the form of a clinical trial. Sampling is available from the patients of the center. Before starting, the random allocation study is done through the software and they are divided into three groups. The number of 5 people in each group (15 people in total) is selected.

Settings and conduct

The study site is the adult occupational therapy ward of Rofideh Hospital in Tehran. The study population of patients with MS who are visited by a neurologist in the hospital and have the conditions to enter the study. No blinding was performed in this study.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Satisfaction of people to participate in the study; Diagnosis of MS by a specialist; Extensive Disability Status Scale (EDSS) score below 8; The person has access to the Internet; The person has the ability to work with a computer; The person has a score higher than 24 based on the MoCA scale. Non-inclusion criteria: The person has vision problems related to the disease; Recurrence of the disease

Intervention groups

Control group : receives routine occupational therapy interventions in the hospital; Intervention group 1: receives routine occupational therapy interventions with the use of Pressure MOLEB in the hospital; Intervention group 2: receives routine occupational therapy interventions with the use of Pressure MOLEB at home.

Main outcome variables

Upper limb tone; Upper limb function speed; Fatigue; Independence level

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210627051725N1**
Registration date: **2021-09-07, 1400/06/16**
Registration timing: **prospective**

Last update: **2021-09-07, 1400/06/16**
Update count: **0**

Registration date

2021-09-07, 1400/06/16

Registrant information

Name

Tahmineh Marandi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 2247 6448

Email address

tahmineh.m9@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-10-23, 1400/08/01

Expected recruitment end date

2022-02-19, 1400/11/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
Comparison of the effectiveness of tele rehabilitation program with routine rehabilitation program on improving upper limb function in patients with multiple sclerosis: a pilot study

Public title
Evaluation of the effectiveness of tele rehabilitation program on upper limb function in people with MS : Pilot study
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Satisfaction of people to participate in the study Diagnosis of MS by a specialist Extensive Disability Status Scale (EDSS) score below 8 The person has access to the Internet The person has the ability to work with a computer The person has a score higher than 24 based on the MoCA scale
Exclusion criteria:
The person has vision problems related to the disease Recurrence of the disease
Age
No age limit
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **15**
Randomization (investigator's opinion)
Randomized
Randomization description
Sampling is available from the patients of the center based on the demographic questionnaire and inclusion and exclusion criteria. Before starting the study, a list of random assignments of individuals to groups is prepared using R software and they are divided into three groups.
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
Ethics Committee of the University of Rehabilitation Sciences and Social Health
Street address
Koodakyar deadend alley, Daneshju Blvd., Evin
City
Tehran
Province
Tehran
Postal code
1985713871
Approval date
2021-07-17, 1400/04/26
Ethics committee reference number
IR.USWR.REC.1400.100

Health conditions studied

1

Description of health condition studied
multiple sclerosis
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Upper limb tone
Timepoint
Before the meetings, after the meetings, one month later
Method of measurement
MAshworth test

2

Description
Upper limb function speed
Timepoint
Before the meetings, after the meetings, one month later
Method of measurement
9-Hole peg test

3

Description
Fatigue
Timepoint
Before the meetings, after the meetings, one month later
Method of measurement
FIS test

4

Description
Independence level
Timepoint
Before the meetings, after the meetings, one month later
Method of measurement
FIM test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group 1: Routine occupational therapy interventions with the use of motor biofeedback system (Pressure MOLEB) in the hospital
Category
Rehabilitation

2

Description
Control group: Routine occupational therapy interventions in the hospital
Category
Rehabilitation

3

Description
Intervention group 2: Routine occupational therapy interventions with the use of motor biofeedback system (Pressure MOLEB) for remote rehabilitation at home
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Rofideh Rehabilitation Hospital
Full name of responsible person
Tahmineh Marandi
Street address
Ne'emati Alley, South Salimi Avenue, Andarzgoo Blvd, Qeytarie
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1955675863
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rofeideh.hospital@uswr.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
University of social welfare and rehabilitation sciences
Full name of responsible person
Hamidreza Khoram Khorshid
Street address
Koodakyar Alley, Daneshju Blvd., Evin
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1985713871
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+98 21 2218 0083
Email
pr@uswr.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
University of social welfare and rehabilitation sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
University of social welfare and rehabilitation sciences
Full name of responsible person
Tahmineh Marandi
Position
occupational therapist
Latest degree
Bachelor
Other areas of specialty/work
Occupational Therapy
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Person responsible for scientific inquiries

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Position
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Latest degree
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available