Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Effects of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients

Protocol summary

Study aim

The aim of this study is investigating the effect of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients.

Design

This study is single group design. A 20 chronic stroke patients, available in university clinics will participate in this study.

Settings and conduct

Timed Up and Go test will carried out before and after of intervention with four different types of foot placements including spontaneous foot position, symmetric foot position, affected foot placed behind the unaffected foot position, unaffected foot placed behind the affected foot position and scores will recorded. Patients will receive cerebellar tDCS for 20 minutes. The active anode electrode is placed over ipsilateral cerebellum and returning electrode is placed over right arm. Also each test procedure will be randomly performed by the patients.

Participants/Inclusion and exclusion criteria

Patients should be in chronic phase, more than six months post-stroke; Any other condition apart from stroke that affects patients gait.

Intervention groups

The study is single group design, and cerebellar transcranial direct current stimulation (tDCS) is intervention.

Main outcome variables

The primary outcome measure is the time of Timed Up and Go test that will be assessed before and after of intervention.

General information

Reason for update

Acronym

tDCS

IRCT registration information

IRCT registration number: **IRCT20160424027562N5**
Registration date: **2018-01-09, 1396/10/19**
Registration timing: **prospective**

Last update: **2018-01-09, 1396/10/19**
Update count: **0**

Registration date

2018-01-09, 1396/10/19

Registrant information

Name

Roghayeh Mohammadi

Name of organization / entity

Semnan University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-01-15, 1396/10/25

Expected recruitment end date

2018-03-21, 1397/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients

Public title
Effects of cerebellar transcranial direct current stimulation in chronic stroke patients
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
All the participants will be in chronic phase, more than six months post-stroke. The age of patients will be within rang of 45-70 years. Plantar flexore muscle spasticity should be less than 3. Lower extremity Fugle-Mayer scale should be more than 22.
Exclusion criteria:
If there is major cognitive problems. Any condition (either fractures or other disease apart from stroke) that affects patients gait. If there is sever aphasia.
Age
From **45 years** old to **70 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **20**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Semnan University of Medical Sciences
Street address
Semnan University of Medical Sciences, Basij Blvd, Semnan
City
Semnan
Province
Semnan
Postal code
3514799442
Approval date
2017-12-12, 1396/09/21
Ethics committee reference number
IR.SEMUMS.REC.1396.167

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
The time of Timed Up and Go test
Timepoint
Immediately before and after of intervention
Method of measurement
By Chronometer

Secondary outcomes

1

Description
Berg Balance Scale
Timepoint
Immediately before and after intervention
Method of measurement
Berg Questionare

Intervention groups

1

Description
Intervention group: Patients will receive cerebellar transcranial direct current stimulation for 20 minutes with intensity of 1.5 milliampere. The active anode electrode is placed over ipsilateral cerebellum (1 cm below inion of occiputalbone and 1 cm medial to mastoid process) and returning electrode is placed over right arm.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Neuromuscular Rehabilitation Research Center
Full name of responsible person
Roghayeh Mohammadi
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Semnan University of Medical 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
Semnan University of Medical Sciences
Full name of responsible person
Roghayeh Mohammadi
Position
Assistant Professor
Latest degree
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Other areas of specialty/work
Physiotherapy
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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
Not applicable
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
Not applicable
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available