

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

Investigating the effects of repetitive Transcranial Magnetic Stimulation (rTMS) on Stuttering Severity in Adults Who Stutter

Protocol summary

Study aim

Investigating the effects of repetitive Transcranial Magnetic Stimulation (rTMS) on Stuttering Severity in Adults Who Stutter

Design

Clinical trial, non-randomized, single center, no blinding, sample size 4 people.

Settings and conduct

Neuromuscular Rehabilitation Research Center Semnan University of Medical Sciences. Magnetic brain stimulation, using a non-invasive transcranial magnetic stimulation device with a frequency of 1 Hz for 20 minutes (1200 pulses) with an intensity of 90% of the motor threshold and during 10 treatment sessions will be used.

Participants/Inclusion and exclusion criteria

Inclusion criteria: People with developmental stuttering based on the results of the SSI-4 test; People over 18 years old; Only Persian speaking; No neurological problems; Do not have accompanying psychiatric disorders such as autism; Not receiving any treatment for stuttering in the last 3 months. Exclusion Criteria: Suffering from any type of disease that prevents cooperation in the continuation of the intervention.

Intervention groups

Intervention group: 4 people over 18 years of age according to the therapeutic protocol of magnetic brain stimulation, using a non-invasive transcranial magnetic stimulation device with a frequency of 1 Hz for 20 minutes (1200 pulses) with an intensity of 90% of the motor threshold and during 10 treatment sessions will be used. (Mag Survey 100HZ MSV-100 device model)

Main outcome variables

Stuttering severity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20151228025732N80**

Registration date: **2023-12-31, 1402/10/10**

Registration timing: **prospective**

Last update: **2023-12-31, 1402/10/10**

Update count: **0**

Registration date

2023-12-31, 1402/10/10

Registrant information

Name

Alireza Emadi

Name of organization / entity

Semnan University of Medical Sciences, Semnan, Iran

Country

Iran (Islamic Republic of)

Phone

+98 23 3345 1336

Email address

are20935@semums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-01-10, 1402/10/20

Expected recruitment end date

2024-05-09, 1403/02/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the effects of repetitive Transcranial Magnetic Stimulation (rTMS) on Stuttering Severity in Adults Who Stutter

Public title

Investigating the effects of repetitive Transcranial Magnetic Stimulation (rTMS) on Stuttering Severity in Adults Who Stutter

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

People with developmental stuttering based on the results of the SSI-4 test. People over 18 years old Only Persian speaking. No neurological problems Do not have accompanying psychiatric disorders such as autism. Not receiving any treatment for stuttering in the last 3 months

Exclusion criteria:

Suffering from any type of disease that prevents cooperation in the continuation of the intervention.

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **4**

Randomization (investigator's opinion)

Not randomized

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

2023-10-02, 1402/07/10

Ethics committee reference number

IR.SEMUMS.REC.1402.146

Health conditions studied**1****Description of health condition studied**

Movement disorder

ICD-10 code

F82

ICD-10 code description

Specific developmental disorder of motor function

Primary outcomes**1****Description**

Stuttering severity

Timepoint

The beginning and end of each session will be done.

Method of measurement

Stuttering Severity Instrument - Fourth Edition - Pro-Ed (SSI-4)

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: 4 people over 18 years of age according to the therapeutic protocol of magnetic brain stimulation, using a non-invasive transcranial magnetic stimulation device with a frequency of 1 Hz for 20 minutes (1200 pulses) with an intensity of 90% of the motor threshold and during 10 treatment sessions will be used. (Mag Survey 100HZ MSV-100 device model)

Category

Behavior

Recruitment centers**1****Recruitment center****Name of recruitment center**

Neuromuscular Rehabilitation Research Center

Full name of responsible person

Seyed Abolfazl Tohidast

Street address

Neuromuscular Rehabilitation Research Center, Qods Blvd, Mashahir Aven.

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are20935@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Semnan University of Medical Sciences
Full name of responsible person
Majid Mirmohammadkhani
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majidmirmohammadkhani@yahoo.com
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
Seyed Abolfazl Tohidast
Position
Associate Professor
Latest degree
Ph.D.
Other areas of specialty/work
Speech therapy
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Person responsible for scientific inquiries

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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

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available