Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Nov 2026

The effects of low frequncy Transcranial Magntic Stimulation(TMS) and sham condition TMS on behavioural language in post strock broca aphasia in the farshchian hospital at 2015- 2016

Protocol summary

Summary

Objectives: Broca aphasia is characterized by nonfluent speech that is agrammatic and inability to write, repeat, name and comprehend which is occurred to 20 percent of patients of ischemic stroke. The present study investigated a method treatment for this disorder that is efficient and is known as TMS. So we decided to study the effects of TMS on clinical outcomes patients with post strock broca aphasia. Design: This study is double-blind clinical trial which be carried out on 12 patients with post strock broca aphasia. Setting and conduct: Patients are randomly divided into two groups of 6 people. The intrvention group will receive Low frequency (1 Hz) rTMS to the right hemisphere for 30 minutes per day for 10 days.both intervention and control group have speech therapy at the end of every session. Participants including major eligibility criteria:Inclusion criteria:Patient with left hemisphere stroke; 45-80 yrs old; Right-handed; More than 1 month from stroke onse.Exclusion criteria: Metal implants in the body; Medical history of seizures in last year; perviuse speech thrapy.intervntion: 10 session of TMS+speech therapy. main outcome measures: Persian Diagnostic Aphasia Battery Before rTMS(baseline), after the completion of 10 session of treatment (rTMS+speech therapy).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015050722142N1**
Registration date: **2016-04-29, 1395/02/10**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-04-29, 1395/02/10

Registrant information

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Recruitment status

Recruitment complete

Funding source

Vice-chancellor for research and technology Hamadan University of Medical Sciences

Expected recruitment start date

2015-09-01, 1394/06/10

Expected recruitment end date

2016-07-22, 1395/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of low frequncy Transcranial Magntic Stimulation(TMS) and sham condition TMS on behavioural language in post strock broca aphasia in the farshchian hospital at 2015- 2016

Public title

The effects of low frequncy Transcranial Magntic Stimulation(TMS)on behavioural language in post strock

broca aphasia

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:Patient with left hemisphere stroke; 45-80 yrs old; Right-handed; More than 1 month from stroke onse.Exclusion criteria: Metal implants in the body; Medical history of seizures in last year; perviuse speech thrapy

Age

From **45 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **12**

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

Hamadan University of Medical Sciences, Ethics Committee

Street address

Floor2, Faculty of Medicine, Shahid Fahmideh St, Pajuhesh Sq

City

Hamedan

Postal code

Approval date

2015-04-18, 1394/01/29

Ethics committee reference number

UMSHA.REC.1394,41

Health conditions studied

1

Description of health condition studied

Broca aphasia

ICD-10 code

I69.3

ICD-10 code description

Sequelae of cerebral infarction

Primary outcomes

1

Description

Comprehension

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

2

Description

repetition

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

3

Description

naming

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

4

Description

Commands

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

5

Description

Verbal Fluency

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

6

Description

The content of speech

Timepoint

before and after test

Method of measurement

Persian Diagnostic Aphasia Battery

Secondary outcomes

empty

Intervention groups

1

Description
The intrvention group will receive Low frequency (1 Hz) TMS to the right hemisphere for 30 minutes per day for 10 days. both intervention and control group have speech therapy at the end of every session
Category
Rehabilitation

2

Description
The control and intervention group are in the same condition but the angle of magnetic field of control patients is in the position that not touching patient's head.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Farshchian hospital
Full name of responsible person
Dr Mehrdokht Mazdeh
Street address
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Hamadan University of Medical Sciences, Vice-chancellor for research and technology , Hamedan
Full name of responsible person
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Floor2, Faculty of Medicine, Shahid Fahmideh St, Pajuhesh Sq
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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
Hamadan University of Medical Sciences, Vice-chancellor for research and technology , Hamedan
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

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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