

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

24 Jul 2026

### Efficacy of Repetitive Transcranial Magnetic Stimulation in Treating Refractory Obsessive Compulsive Disorder

#### Protocol summary

##### Summary

The objective of this study is to evaluate Efficacy of Repetitive Transcranial Magnetic Stimulation in Treating Refractory Obsessive Compulsive Disorder. Patients hospitalized in Farshchian hospital and out-patients will be selected. After obtaining informed consent, these patients will be randomly allocated to either first receiving " repeatetive transcranial magnetic stimulation (rTMS)" and then "Sham condition " or vice versa. Sham stimulation will be made at the site of active treatment but with only the side edge resting on the scalp. It will be administered as high frequency left( HFL) and high frequency right (HFR) for 50 minutes but with the coil angled 45-90 degrees away from the skull in a single-wing tilt position.after two weeks, Bilateral rTMS will be delivered according to the following protocol: high frequency left (HFL) stimulation will initially be applied at 20 Hz, in 25 trains of 1.5 second duration with a 30 second interval between trains and at 100% of the RMT for a total of Approximately 12.5 minutes of stimulation. Following this HFR stimulation will be applied at the same parameters. Therefore a total of Approximately 25 minutes of stimulation will be delivered.Two groups will be compared regarding symptom severity and illness improvement using YBOCS and CGI measures,in 1st,last and two weeks after intervention

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201308041743N11**  
Registration date: **2013-11-05, 1392/08/14**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2013-11-05, 1392/08/14

##### Registrant information

###### Name

Mohammad Haghighi

###### Name of organization / entity

Research Center for Behavioral Disorders and Substance Abuse, Hamadan University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 81 1827 4184

###### Email address

haghighi@umsha.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

##### Expected recruitment start date

2013-02-19, 1391/12/01

##### Expected recruitment end date

2014-02-20, 1392/12/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Efficacy of Repetitive Transcranial Magnetic Stimulation in Treating Refractory Obsessive Compulsive Disorder

##### Public title

Efficacy of Repetitive Transcranial Magnetic Stimulation in Treating Refractory Obsessive Compulsive Disorder

##### Purpose

Treatment

## Inclusion/Exclusion criteria

Inclusion Criteria: •voluntary and competent to consent based on their ability to provide a spontaneous narrative description of the key elements of the study •have a Structured Clinical Interview for DSM-IV (SCID) confirmed diagnosis of OCD •are between the ages of 18 and 65 •have failed to achieve a clinical response, or did not tolerate, at least 3 separate antidepressant trials of sufficient dose (included clomipramine) and CBT for at least 10 weeks •have a score of greater than or equal to 17 on the Y-BOCS. A careful medical and neurological history will be taken to ensure that subjects have no unstable conditions that would preclude them from entering into the study. This history will focus on conditions such as seizures, neurologic, other medical problems and presence of metal implants Exclusion Criteria: •have a history of DSM-IV substance dependence in the last 6 months, and have DSM-IV substance abuse in the last month •have a concomitant major unstable medical or neurologic illness or have had a history of seizures •acutely suicidal •are pregnant •have metal implants. With respect to concomitant medications, patients will be excluded if they are currently (or in the last 4 weeks) taking: (a) more than lorazepam 2 mg daily (or equivalent), (b) monoamine oxidase inhibitors, (c) and/or bupropion due to its associated increased risk for seizures.

## Age

From **18 years** old to **65 years** old

## Gender

Both

## Phase

N/A

## Groups that have been masked

*No information*

## Sample size

Target sample size: **21**

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Single blinded

## Blinding description

## Placebo

Used

## Assignment

Crossover

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Hamadan University of Medical Sciences

##### Street address

Shahid Fahmideh Street

## City

Hamadan

## Postal code

65178/518

## Approval date

2013-07-25, 1392/05/03

## Ethics committee reference number

1359/9/35/16/د/پ

## Health conditions studied

### 1

#### Description of health condition studied

refractory obsessive compulsive disorder

#### ICD-10 code

F42.2

#### ICD-10 code description

Mixed obsessional thoughts and acts

## Primary outcomes

### 1

#### Description

improvement rate of refractory OCD

#### Timepoint

after 10th, 20th sessions of rTMS or sham

#### Method of measurement

CGI, YBOCS

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Device: repetitive magnetic stimulation(rTMS) 750 total pulse stimulation at 20 Hz will be delivered with 25 train of 1.5 second duration at 100% of threshold. Bilaterally(right and left) Sham stimulation with coil angled 45-90 degree will applied at the site exactly like rTMS stimulation in total 25 minute.(right and left).This is like true stimulation but have no therapeutic effect

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Farshchian hospital

##### Full name of responsible person

Mehran Shaygan Fard

##### Street address

farshchian hospital

City  
Hamadan

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Research center for behavioral disorders and substance abuse, Hamadan University of Medical Science

**Full name of responsible person**

Dr. Mohamad Ahmadpanah

**Street address**

Farshchian Hospital

**City**

Hamadan

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Research center for behavioral disorders and substance abuse, Hamadan University of Medical Science

**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

**Name of organization / entity**

Research center for behavioral disorders and substance abuse, Hamadan University of Medical Science

**Full name of responsible person**

Mehran Shaygan Fard

**Position**

Resident of psychiatry

**Other areas of specialty/work**

**Street address**

Farshchian Hospital

**City**

Hamadan

**Postal code**

65168-4-8741

**Phone**

+98 81 1827 4192

**Fax**

**Email**

mshayganfard@yahoo.com

**Web page address**

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

**Full name of responsible person**

Dr. Mohammad Haghighi

**Position**

Assistant professor of psychiatry

**Other areas of specialty/work**

**Street address**

Farshchian Hospital

**City**

Hamadan

**Postal code**

65168-4-8741

**Phone**

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## Person responsible for updating data

### Contact

**Name of organization / entity**

Research center for behavioral disorders and substance abuse, Hamadan university of medical sciences

**Full name of responsible person**

Dr. Mohammad Haghighi

**Position**

Assistant professor of psychiatry

**Other areas of specialty/work**

**Street address**

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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*