Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Investigating the effects of low-frequency pulsed magnetic field adjuvant therapy in patients with obsessive-compulsive disorder (OCD)

Protocol summary

Study aim
Evaluation of the effects of low-frequency pulsed magnetic field adjuvant therapy in patients with obsessive-compulsive disorder

Design
randomized double-blind clinical trial

Settings and conduct
This research is a double-blind clinical trial study on 30 patients with obsessive-compulsive disorder in 2024 in Taleghani and Imam Hossein hospitals in Tehran.

Participants/Inclusion and exclusion criteria
Consent to participate in the study Primary diagnosis of OCD based on the criteria of Diagnostic and Statistical Manual of Mental Disorders, 5th edition At least moderate intensity based on the obsessive-compulsive scale (YBOCS; score ≥20) 18 to 60 years

Intervention groups
Patients with an initial diagnosis of OCD and suffering from OCD symptoms of at least moderate severity based on the obsessive compulsive scale (YBOCS; score ≥16) were included in the study into two intervention and control groups based on the rule of random assignment (by lottery and without replacement and in considering the sequence) are divided. The LFMPF method is performed using a Transcranial magnetic stimulator. Stimulation parameters in the intervention group for 3 weeks are performed as follows: frequency 10, 15, 20 Hz and intensity 0.1 to 0.4 milliTesla, for 30 minutes (1200 pulses per day) at 100% of the rest movement threshold, once daily, 3 days a week for 3 weeks.

Main outcome variables
Determining the effects of low-frequency pulsed magnetic field auxiliary treatment in patients with obsessive-compulsive disorder can lead to the use of this method to increase the probability of success in treating patients with this disorder by increasing the Yale Brown Obsessive Compulsive Scale (YBOCS) score and Hamilton score.

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20230910059393N1**
Registration date: **2024-09-11, 1403/06/21**
Registration timing: **prospective**

Last update: **2024-09-11, 1403/06/21**
Update count: **0**

Registration date
2024-09-11, 1403/06/21

Registrant information
Name
Zohre Rajabizade
Name of organization / entity
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2024-09-22, 1403/07/01
Expected recruitment end date
2025-09-23, 1404/07/01
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title

Investigating the effects of low-frequency pulsed magnetic field adjuvant therapy in patients with obsessive-compulsive disorder (OCD)

Public title

investigation the effectiveness of low-frequency pulsed magnetic field in the treatment of obsessive-compulsive disorder

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

consent to participate in the study 18 to 60 years at least moderate intensity based on the obsessive compulsive scale initial diagnosis of OCD based on diagnostic and statistical guidelines for mental disorder.fifth edition

Exclusion criteria:

history of epilepsy drug abuse significant head injury or any neurosurgery metal implants and pacemakers those who received an electrical shock in the last 6 months people with co-occurring psychiatric disorder other than depression

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients entering the study are divided into two groups based on the random allocation law (by lottery and without replacement and considering the sequence). The study will be conducted as a single-blind study so that the patients will be completely unaware of the nature of the adjuvant treatment and how the groups will be randomized.

Blinding (investigator's opinion)

Double blinded

Blinding description

the blinding of the study will be done bilaterally/so that the patients will be completely unaware of the nature of the adjuvant treatment and how the groups will be randomized. considering that this is an auxiliary treatment and treatment must be done correctly.the doctor dose not know the patient's condition and the doctor is also blinded

Placebo

Not used

Assignment

Factorial

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Shahid Beheshti University of Medical Sciences

Street address

Faculty of Medicine, Shahid Beheshti University of Medical Sciences, next to Shahid Beheshti University of Medical Sciences, Shahid Arabi Street, Yemen Street, Shahid Chamran Highway

City

Tehran

Province

Tehran

Postal code

1985711151

Approval date

2024-04-15, 1403/01/27

Ethics committee reference number

IR.SBMU.MSP.REC.1403.020

Health conditions studied

1

Description of health condition studied

obsessive-compulsive disorder (OCD)

ICD-10 code

F42

ICD-10 code description

Obsessive-compulsive disorder

Primary outcomes

1

Description

Yale Brown Obsessive Compulsive Scale Score (YBOCS)

Timepoint

30 days after the last round of interventions

Method of measurement

Interviewing the patient and performing the Yale Brown Obsessive-Practice Scale (YBOCS) test

Secondary outcomes

1

Description

Hamilton Depression Rating Scale Score

Timepoint

30 days after the last round of interventions

Method of measurement

Interviewing the patient and performing Hamilton Test

Intervention groups

1

Description
Intervention group: In addition to the treatment according to the protocol of the reference book by therapy sessions and drug therapy, the low-frequency pulsed magnetic field (LFMPF) method is performed using a Transcranial magnetic stimulator. Stimulation parameters in the intervention group for 3 weeks are performed as follows: frequency 10, 15, 20 Hz, with an intensity of 0.1 to 0.4 milliTesla and for 30 minutes (1200 pulses per day) at 100% of the rest movement threshold, once in day, 3 days a week

Category
Treatment - Other

2

Description
Control group: Patients will be treated according to the protocol of the reference book and in the form of therapy sessions and drugs.

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Imam hosein hospital

Full name of responsible person
mrs annafche

Street address
Madani street, imam hosein hospital

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
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Full name of responsible person
Afshin Zarghi

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Tehran Province, Tajrish، Velenjak، 7th Floor, Bldg No.2 SBUMS, Arabi Ave

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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
Shahid Beheshti 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
Shahid Beheshti University of Medical Sciences

Full name of responsible person
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Position
Associate Professor

Latest degree
Specialist

Other areas of specialty/work
Psychiatrics

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Other areas of specialty/work
Psychiatrics

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Not applicable

Data Dictionary
Not applicable

Title and more details about the data/document
All data can be shared after de-identification.

When the data will become available and for how long
One year after the results are published

To whom data/document is available
Access to the data will be free for all researchers in the field of psychiatry and psychology.

Under which criteria data/document could be used
Only the obligation to cite the source is required and there are no other conditions

From where data/document is obtainable
The data of this research can be made available after request by e-mail.

What processes are involved for a request to access data/document
The applicant may access the data after one month by stating the purpose and reason for the need for the data documented in this research, if there is no interference with the above-mentioned criteria.

Comments