Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effectiveness of transcranial direct electrical stimulation (tdcs) on increasing attention and reducing aggression in people with attention deficit hyperactivity disorder.

Protocol summary

Study aim
Investigating transcranial direct electrical stimulation (tdcs) is effective in increasing attention and reducing aggression in people with attention deficit hyperactivity disorder (ADHD).

Design
Among the people who have been diagnosed, according to the entry and exit criteria, we prepare a list and randomly select 40 of them, and randomly divide them into two groups. Then, by chance, one of the groups is used as a witness, and the other group is used as an experimental group (transcranial electrical stimulation of the brain).

Settings and conduct
40 people were selected from among the people suffering from attention deficit hyperactivity disorder who referred to Sama Shahr Psychiatry Clinic in Tehran and answered Bass and Perry Aggression Questionnaire and Attention Deficit Hyperactivity Disorder Self-report Questionnaire then randomly using rand soft function. Excel software was assigned to two groups, and after the two groups were determined, each group was placed in one of the plans, and the control group did not receive any information about the process and implementation method until the end of the research. Treatment sessions in the field of transcranial electrical stimulation of Mughar were received at Sama Psychiatry Clinic twice a week for 10 sessions of 20 minutes.

Participants/Inclusion and exclusion criteria
People with hyperactivity

Intervention groups
group therapy (transcranial electrical stimulation of the brain) control group (the group that does not receive intervention)

Main outcome variables
Physical aggression, verbal aggression, anger, hostility Attention deficit, hyperactivity/impulsivity

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20230806059057N1**
Registration date: **2023-09-04, 1402/06/13**
Registration timing: **retrospective**

Last update: **2023-09-04, 1402/06/13**
Update count: **0**

Registration date
2023-09-04, 1402/06/13

Registrant information

Name
hadiseh afshari

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 910 085 3476

Email address
hafshari1379@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-06-05, 1402/03/15

Expected recruitment end date
2023-07-16, 1402/04/25

Actual recruitment start date
2023-07-17, 1402/04/26

Actual recruitment end date
2023-08-01, 1402/05/10

Trial completion date
2023-08-09, 1402/05/18

Scientific title
The effectiveness of transcranial direct electrical stimulation (tdcs) on increasing attention and reducing aggression in people with attention deficit hyperactivity disorder.

Public title
Investigating the effect of transcranial direct electrical stimulation on increasing attention and reducing aggression

Purpose
Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
All people with hyperactivity
Exclusion criteria:
Taking psychiatric drugs History of psychiatric interventions over the past years Having epilepsy

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**
Actual sample size reached: **40**

Randomization (investigator's opinion)
Randomized

Randomization description
After performing the pre-test stage in a joint meeting, people will receive a number randomly using a list of numbers, and based on the lottery, the first person will be in group 1, the second person will be in group 2, then each group will be named randomly. . It was arranged that the first group was given (transcranial electrical movement therapy of the brain) and the second group did not receive any intervention as a control group.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research Ethics Committees of Islamic Azad University- Semnan Branch
Street address
5 km of Semnan road
City
Semnan
Province
Semnan
Postal code
35147-99442

Approval date
2023-05-30, 1402/03/09

Ethics committee reference number
IR.IAU.SEMNAN.REC.1402.035

Health conditions studied

1

Description of health condition studied
adhd

ICD-10 code
F90.0

ICD-10 code description
Attention-deficit hyperactivity disorder, predominantly inattentive type

Primary outcomes

1

Description
Increased attention

Timepoint
The beginning of the study (before the start of the intervention) and the end of the study (after the end of the intervention) 45 days later

Method of measurement
Adler, Kessler and Spencer self-report questionnaire of attention deficit hyperactivity disorder

2

Description
Reduction of aggression

Timepoint
The beginning of the study (before the start of the intervention) and the end of the study (after the end of the intervention) 45 days later

Method of measurement
Bass and Perry aggression questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Transcranial direct electrical stimulation intervention treatment (through the TDCS device during 10 sessions of 20 minutes) was performed in such a way that the electrodes are covered by

sponges soaked in saline and the current is transferred to the head. The sessions were conducted twice a week for a total of ten treatment sessions. In each session, after placing the electrodes, a current of 1.5 milliamps is applied to the individual for 20 minutes in order to electrically stimulate the brain.

Category

Behavior

2

Description

Control group: Control group: no intervention (during the course, they only participated in the pre-test and post-test stages and did not receive any intervention.)

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center
Sama Psychiatry Clinic

Full name of responsible person
Dr. Mena Danai Kosha

Street address
Shariati

City
Tehran

Province
Tehran

Postal code
1559716414

Phone
+98 912 922 7761

Email
mona.dk@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Semnan University of Medical Sciences

Full name of responsible person
Dr. Mehdi Mansouri

Street address
Kilometer 5 Semnan road

City
Semnan

Province
Semnan

Postal code
35147-99442

Phone
+98 910 085 3476

Email
hafshari1379@gmail.com

Grant name

Grant code / Reference number

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

No

Title of funding source

Financial sponsor

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Other

Person responsible for general inquiries

Contact

Name of organization / entity
Semnan University of Medical Sciences

Full name of responsible person
Hadiseh Afshari

Position
Student

Latest degree
Bachelor

Other areas of specialty/work
Psychology

Street address
Republic

City
Tehran

Province
Tehran

Postal code
1311695115

Phone
+98 910 085 3476

Email
hafshari1379@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Semnan University of Medical Sciences

Full name of responsible person
Saqqah Afrokhate

Position
University faculty

Latest degree
Ph.D.

Other areas of specialty/work
Psychology

Street address
Beryanak

City
Tehran

Province
Tehran
Postal code
131169511
Phone
0216424004
Email
af51amir@gmail.com

Person responsible for updating data

Contact
Name of organization / entity
Semnan University of Medical Sciences
Full name of responsible person
Hadiseh Afshari
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Psychology
Street address
Republic
City
Tehran
Province
Tehran
Postal code
1311695116
Phone
+98 910 085 3476
Email
hafshari1379@gmail.com

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
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable
Title and more details about the data/document
Files and report of the research method and the results of this research in the form of an article It will be published in a reputable journal. The files in the software SPSS can be provided upon request of the relevant journal.
When the data will become available and for how long
1401-1402
To whom data/document is available
Officials, managers and supervisors related to this study in the University of Science Zanjan Medicine allowed access to the data and documents of this research They have to maintain the privacy of the participants and observe ethical points.
Under which criteria data/document could be used
داده های مطالعه حاضر جهت تصمیم گیری مدیران ارشد دانشگاه علوم پزشکی زنجان و با حفظ محرمیت مشارکت کنندگان و رعایت نکات اخلاقی قابل استفاده خواهد بود.
From where data/document is obtainable
Haditha Afshari - Semnan University of Medical Sciences
What processes are involved for a request to access data/document
Contact the responsible author of this study - Haditha Afshari
Comments