Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect of aerobic exercise and Aphrodite supplement on the level of some oxidative stress factors and neurogenesis of transmitters related to mental and psychological disorders of postmenopausal women with depression

Protocol summary

Study aim
The aim of this study was to investigate the effect of twelve weeks of moderate-intensity aerobic exercise and Aphrodite supplement on level of some neural factors related to mental and psychological disorders of postmenopausal women

Design
200 married postmenopausal women are divided into four groups. The first group, the control group, the second group, the program of aerobic exercises, walking and light jogging with moderate intensity of 65-70% heart rate on the treadmill for twelve weeks, the third group, twelve weeks of aerobic exercise plus two doses per day of Aphrodite supplement, and the fourth group only two doses per day of the supplement. Aphrodite

Settings and conduct
Study place: Mostaghni gym club. We will give a questionnaire to 200 married postmenopausal women between 55 and 60 years of age with six-month LMP and serum estradiol less than 35 picogram per deciliter with healthy physical condition. Each of them is tested and sampled and then they are divided into four groups and they benefit from supplements and aerobic exercise for 12 weeks and at the end, the testing is done again.

Participants/Inclusion and exclusion criteria
Two hundred menopausal women residing in Isfahan Province, who had mild depression according to the Hamilton Depression Questionnaire, people should not have certain chronic and systemic diseases (especially cardiovascular problems) and should not take any other drugs during the study period.

Intervention groups
Participants were divided into six groups: control, aerobic exercise, aphrodisiac supplementation, and aerobic exercise+ aphrodisiac supplementation, based on the inclusion criteria.

Main outcome variables
Superoxide dismutase (SOD); malondialdehyde (MDA);

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20231009059661N1**
Registration date: **2023-12-30, 1402/10/09**
Registration timing: **retrospective**

Last update: **2023-12-30, 1402/10/09**
Update count: **0**

Registration date
2023-12-30, 1402/10/09

Registrant information

Name
Farzaneh Mostaghni

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
2023-11-01, 1402/08/10

Expected recruitment end date
2023-11-21, 1402/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of aerobic exercise and Aphrodite supplement on the level of some oxidative stress factors and neurogenesis of transmitters related to mental and psychological disorders of postmenopausal women with depression

Public title

Effect of aerobic exercise and supplement on ROS and neurogenesis in depressed postmenopausal women

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

6 months old LMP and serum estradiol less than 35 picogram per deciliter BMI between 26-29 Moderate depression using a questionnaire based on Beck anxiety inventory (BAI)

Exclusion criteria:

Not having any special chronic or systemic disorder

Age

From **55 years** old to **60 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **200**

Randomization (investigator's opinion)

N/A

Randomization description

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

Ethics committee of Azad Islamic University of Isfahan(Khorasgan)

Street address

Azad Islamic University- Daneshgah Blvd- Arghavanieh Street

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Khorasgan

Province

Isfehan

Postal code

8155139998

Approval date

2023-02-14, 1401/11/25

Ethics committee reference number

IR.IAU.KHUISF.REC.1401.389

Health conditions studied

1

Description of health condition studied

Depression

ICD-10 code

F32.8

ICD-10 code description

Other depressive episodes

Primary outcomes

1

Description

Malondialdehyde(MDA)

Timepoint

Before starting the intervention and twelve weeks after that

Method of measurement

serum concentration of CGRP by ELISA method

2

Description

Superoxide dismutase(SOD)

Timepoint

Before starting the intervention and twelve weeks after that

Method of measurement

serum concentration of superoxide dismutase by ELISA method

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: twelve weeks aerobic exercise, from 50 pre cent of HRm(in first week) to 70 pre cent of that in last five weeks

Category

Treatment - Drugs

2

Description
Intervention group 2: 12 weeks of aerobic training plus Aphrodite supplement twice a day (each capsule contains 40 mg of sea buckthorn fruit, 72.12 mg of ginger, 3.3 mg of saffron and 11 mg of cinnamon and weighs approximately 70 mg has it .
Category
Treatment - Drugs

3

Description
Intervention group 3: using Aphrodite supplement twice a day for twelve weeks (each capsule contains 40 mg of sea buckthorn fruit, 72.12 mg of ginger, 3.3 mg of saffron and 11 mg of cinnamon and weighs approximately 70 mg has it)
Category
Treatment - Drugs

4

Description
Control group: without intervention
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Mostaghni gym
Full name of responsible person
Farzaneh Mostaghni
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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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
Islamic Azad University Isfahan(Khorasgan) branch research Deputy
Proportion provided by this source
50
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
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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
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available