Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

Investigating the effect of carrot (Daucus carota) seed capsules on the sexual desire of female patients with multiple sclerosis

Protocol summary

Study aim
Investigating the effect of carrot (Daucus carota) seed capsules on the sexual desire of female patients with multiple sclerosis

Design
Phase 2 randomized double-blinded placebo parallel clinical trial on 40 patients Randomization using Randomaization.com

Settings and conduct
Ghaeem hospital MS clinic

Participants/Inclusion and exclusion criteria
Inclusion criteria: Married women; suffering from multiple sclerosis; Age between 18-45 years; complaining of lack or absence of sexual desire; more than 6 months have passed since their marriage; Normal pelvic examination findings; Have a normal pap smear in the past 3 years; Have access to having sex with a partner monthly for at least 15 days. Exclusion criteria: Pregnancy or breastfeeding; Menopause; Disability or serious medical problem that requires constant care and treatment; Suffering from major depressive disorder and other psychiatric disorders; Husband's sexual problems; Divorce.

Intervention groups
Intervention group: Women suffering from multiple sclerosis who use 500 mg capsules containing carrot seed powder 3 times a day for 12 weeks. Placebo group: Women suffering from multiple sclerosis who use placebo capsules similar to carrot seed capsules three times a day for 12 weeks.

Main outcome variables
The overall score of the FSFI questionnaire, which is evaluated at the beginning of the study and every 4 weeks until the 12th week.

General information

Reason for update
Unfortunately, due to the specific family circumstances of some patients, including the lack of consent of the patients' spouses, as well as changes in the project's clinical specialist colleagues due to immigration, the patient recruitment was not completed on time, and the researchers were forced to extend the sampling period for this project.

Acronym

IRCT registration information
IRCT registration number: **IRCT20180103038199N14**
Registration date: **2023-03-14, 1401/12/23**
Registration timing: **prospective**

Last update: **2025-12-16, 1404/09/25**
Update count: **1**

Registration date
2023-03-14, 1401/12/23

Registrant information

Name
Vahid Reza Askari

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 51 3800 2264

Email address
askariv941@mums.ac.ir

Recruitment status
recruiting

Funding source

Expected recruitment start date
2023-04-21, 1402/02/01

Expected recruitment end date
2028-04-20, 1407/02/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date

empty

Scientific title
Investigating the effect of carrot (Daucus carota) seed capsules on the sexual desire of female patients with multiple sclerosis

Public title
Investigating the effect of carrot seed capsules on the sexual desire of female patients with multiple sclerosis

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Married women with multiple sclerosis Age between 18-45 With complaints of lack or absence of sexual desire More than 6 months have passed since their marriage Normal pelvic examination findings Have a normal pap smear in the last 3 years Have access to having sex with a partner monthly for at least 15 days

Exclusion criteria:
Pregnancy or breastfeeding Menopause Any disability or serious medical problem that requires constant care and treatment Suffering from major depressive disorder and other psychiatric disorders Husband's sexual problems Divorce

Age
From **18 years** old to **45 years** old

Gender
Female

Phase
2

Groups that have been masked

- Participant
- Investigator
- Data analyser

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description
The blocked randomization method is used. The volume of each block will be four. Then the list of blocks is written and numbers assigned to them, for example (AABB(1)- BBAA(2)- BABA(3)- BAAB(4)), which will be 10 blocks according to the sample size of 40. Then random numbers between 1 and 10 are selected according to the randomization site Randomaization.com and finally, the treatment allocation list is determined based on the random numbers.

Blinding (investigator's opinion)
Double blinded

Blinding description
Using sealed envelopes Due to the use of a placebo similar to the intervention treatment, the investigator and the participants will not be informed of the assigned treatment, and the analyst will also be unaware of the assigned treatment for the two groups. Finally, after analyzing the data, the researcher who prepared the packages will reveal codes A and B.

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Research Ethics Committees of School of Medicine-Mashhad University of Medical Sciences

Street address
School of medicine, Paradise of University, Vakil-Abad Blvd., Azadi Sq., Mashhad

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Mashhad

Province
Razavi Khorasan

Postal code
9177948564

Approval date
2022-09-06, 1401/06/15

Ethics committee reference number
IR.MUMS.MEDICAL.REC.1401.429

Health conditions studied

1

Description of health condition studied
Women suffering from multiple sclerosis complaining of lack or absence of sexual desire

ICD-10 code
F52.0

ICD-10 code description
Hypoactive sexual desire disorder

Primary outcomes

1

Description
Overall score of the FSFI questionnaire

Timepoint
At the beginning of the study and then every 4 weeks until week 12

Method of measurement
FSFI Questionnaire

Secondary outcomes

1

Description
Fatigue rate

Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
MFIS fatigue assessment questionnaire

2

Description
The level of anxiety and depression
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Spielberger anxiety questionnaire

3

Description
LH levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

4

Description
FSH levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

5

Description
Prolactin levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

6

Description
Testosterone levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

7

Description
CBC diff levels
Timepoint
At the beginning of the study and after 6 and 12 weeks of treatment
Method of measurement
Laboratory kit

8

Description
Interleukin-6 levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

9

Description
TNF-a levels
Timepoint
At the beginning of the study and after 12 weeks of treatment
Method of measurement
Laboratory kit

Intervention groups

1

Description
Intervention group: Women suffering from multiple sclerosis with complaints of lack or absence of sexual desire use 500 mg capsules containing carrot seed powder 3 times a day for 12 weeks.
Category
Treatment - Drugs

2

Description
Control group: Women suffering from multiple sclerosis with complaints of lack or absence of sexual desire use 500 mg placebo capsules similar to carrot seed capsules 3 times a day for 12 weeks.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Ghaem Hospital MS clinic- Mashhad University of Medical Sciences
Full name of responsible person
Dr. Vahid Reza Askari
Street address
Ghaeem hospital, Ahmadabad Blvd, Mashhad
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr. Mohsen Tafaghodi
Street address
Deputy of Research and Technology of the University , Qurashi Building, Next to Hoveyzeh Cinema, University Street
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ramresearch@mums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mashhad 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
Mashhad University of Medical Sciences
Full name of responsible person
Dr. Vahid Reza Askari
Position
Assistant professor of clinical pharmacology
Latest degree
Ph.D.
Other areas of specialty/work
Medical Pharmacy
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Person responsible for updating data

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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