Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of curcumin on painful symptoms of endometriosis: a randomized controlled trial

Protocol summary

Study aim
To determine the effect of curcumin on painful symptoms of endometriosis

Design
Randomized control group with parallel groups, triple blind on 68 women, phase 3

Settings and conduct
Sampling will be done in Shahid Beheshti Infertility Treatment Center in Isfahan. The eligible women will be invited to attend in the relevant medical center on the 7th to 12th day of the menstrual cycle. After completing the consent form and questionnaires, they will be assigned to the intervention (recipient of curcumin capsules) and control (placebo recipients) groups by random blocking method with the size of block sizes of 4 and 6 and a 1:1 allocation ratio.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Women with endometriosis whose endometriosis has been confirmed by laparoscopy, women with symptomatic endometriosis, not taking anti-inflammatory or hormonal medication in the last three months, not having endometrial hypoplasia or neoplasia, women who are married and sexually active. Exclusion criteria: Women who are allergic to ginger plants, women with gallstones, jaundice due to bile duct obstruction, and acute biliary colic, women with gastrointestinal diseases.

Intervention groups
The intervention group will receive curcumin capsules at a dose of 500 mg and the control group will receive placebo at the same dose twice a day for eight weeks.

Main outcome variables
Score of painful symptoms of endometriosis

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20120718010324N66**
Registration date: **2021-03-01, 1399/12/11**
Registration timing: **prospective**

Last update: **2021-03-01, 1399/12/11**
Update count: **0**

Registration date
2021-03-01, 1399/12/11

Registrant information

Name
Mojgan Mirghafourvand

Name of organization / entity
Tabriz University of Medical Sciences

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-03-19, 1399/12/29

Expected recruitment end date
2021-05-21, 1400/02/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of curcumin on painful symptoms of endometriosis: a randomized controlled trial

Public title

The effect of curcumin on painful symptoms of endometriosis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Women with endometriosis whose endometriosis has been confirmed by laparoscopy Women with symptomatic endometriosis Not taking of anti-inflammatory or hormonal medication in the last three months Not having endometrial hypoplasia or neoplasia Women who are married and sexually active

Exclusion criteria:

Women who have allergic to ginger plants Women with gallstones, jaundice due to bile duct obstruction, and acute biliary colic Women with gastrointestinal diseases

Age

No age limit

Gender

Female

Phase

3

Groups that have been masked

- Participant
- Investigator
- Data analyser

Sample size

Target sample size: **68**

Randomization (investigator's opinion)

Randomized

Randomization description

Participants in the study will be assigned to two groups of intervention (recipient of curcumin capsule) and control (recipient of placebo) by block randomization method with block sizes of 4 and 6 and a allocation ratio of 1: 1 and using the website www.random.org . To hide the Allocation (Allocation Concealment), the allocation sequence will be identified by a person not involved in the study using a randomizer, and the curcumin and placebo will be placed in the same packages numbered sequentially.

Blinding (investigator's opinion)

Triple blinded

Blinding description

The participants, researcher and data analyst will be blinded completely in this study. Drug and placebo will be similar in appearance (shape, color, smell) and packaging of drug and placebo will be conducted by a person not involved in the research.

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Tabriz University of Medical Sciences

Street address

Research department, third floor, central construction number 2, Tabriz University of Medical Sciences, Golgasht Street, Azadi Avenue, Tabriz, East Azerbaijan

City

Tabriz

Province

East Azarbaijan

Postal code

5166616471

Approval date

2021-02-28, 1399/12/10

Ethics committee reference number

IR.TBZMED.REC.1399.1086

Health conditions studied

1

Description of health condition studied

Endometriosis

ICD-10 code

N80

ICD-10 code description

Endometriosis

Primary outcomes

1

Description

Painful symptoms of endometriosis

Timepoint

Before the intervention and 8 weeks after starting of intervention

Method of measurement

ENDOPAIN-4D questionnaire

Secondary outcomes

1

Description

Quality of life

Timepoint

Before the intervention and 8 weeks after starting the intervention

Method of measurement

EHP-30 questionnaire

2

Description
Severity of dysmenorrhea
Timepoint
The first three days of the menstrual cycle before the intervention and then the first three days of the next two cycles
Method of measurement
VAS ruler

3

Description
Frequency of analgesic use
Timepoint
During the intervention
Method of measurement
Checklist

4

Description
Side effects
Timepoint
During the intervention
Method of measurement
Side effects checklist

Intervention groups

1

Description
Intervention group: The intervention group will receive curcumin capsules at a dose of 500 mg twice a day for eight weeks. Curcumin and placebo capsules will be prepared by Dineh Pharmaceutical Company with a completely similar appearance. For each participant, an envelope containing the drug (curcumin or placebo) will be prepared and will be given to the participants at the beginning of the intervention and they will be reminded that the next follow-up is eight weeks after the beginning of the intervention.
Category
Treatment - Drugs

2

Description
Control group: For the control group, placebo will be given at a dose of 500 mg twice a day for eight weeks. Curcumin and placebo capsules will be prepared by Dineh Pharmaceutical Company with a completely similar appearance. For each participant, an envelope containing the drug (curcumin or placebo) will be prepared and will be given to the participants at the beginning of the intervention and they will be reminded that the next follow-up is eight weeks after the beginning of the intervention.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Isfahan Shahid Beheshti Hospital
Full name of responsible person
Reyhaneh Goodarzi
Street address
Shahid Beheshti Hospital, the beginning of Motahhari, Metal bridge
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
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Research Department, third floor, Central Construction number 2, Tabriz University of Medical Sciences, Golgasht Street, Azadi Avenue, Tabriz
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iro@tbzmed.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tabriz 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
Tabriz University of Medical Sciences
Full name of responsible person
Reyhaneh Goodarzi
Position
Master student of midwifery
Latest degree
Bachelor
Other areas of specialty/work
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
Participant data is confidential.
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
Not applicable
Informed Consent Form
No - There is not 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
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available