Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Effect of Ginger (Zinger offiicinale Roscoe) on clinical symptoms in patients with slow coronary flow on angiography

Protocol summary

Study aim
Effect of Ginger (Zinger offiicinale Roscoe) on clinical symptoms in patients with slow coronary flow on angiography

Design
Phase 2 randomized double-blinded placebo parallel clinical trial on 48 patients Randomization using Randomaization.com

Settings and conduct
This study will perform in the heart ward and clinic of Ghaem Hospital in Mashhad. Patients are randomly assigned to Ginger and placebo groups. Patients and the main researcher are unaware of the group assignment.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Consent to admission to the study; Age more than 30 years old; Patients with slow coronary flow with a corrected TIMI frame count of more than 27 frames per second Exclusion criteria: Cardiovascular disease other than mild coronary atherosclerosis; congenital heart disease; stomach ulcers or duodenal ulcers; Taking anticoagulants such as warfarin, aspirin, and enoxaparin; Breastfeeding or pregnancy; consumption of omega-3 (fish oil), ciprofloxacin, loratadine, escitalopram, montelukast, and levothyroxine; kidney stone

Intervention groups
Intervention group: Patients with slow coronary disease receiving common treatments (including aspirin, statins, beta-blockers and ACEIs) + Ginger 250 mg once daily for one month Placebo group: Patients with slow coronary disease receiving common treatments + placebo tablet once daily for one month

Main outcome variables
Changes in the score of quality of life according to the EuroQol-VAS (0-100; 100 is the best quality of life and 0 is the worst quality of life)

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20230625058582N1**
Registration date: **2023-07-29, 1402/05/07**
Registration timing: **registered_while_recruiting**

Last update: **2023-07-29, 1402/05/07**
Update count: **0**

Registration date
2023-07-29, 1402/05/07

Registrant information

Name
Sara Afshar

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 51 3802 2000

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-07-23, 1402/05/01

Expected recruitment end date
2025-07-23, 1404/05/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title

Effect of Ginger (Zinger offiicinale Roscoe) on clinical symptoms in patients with slow coronary flow on angiography

Public title
Effect of Ginger (Zinger offiicinale Roscoe) on patients with slow coronary flow

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Consent to admission to the study Age more than 30 years old Patients who have less than 50% stenosis in each of the 3 main coronary arteries in their coronary angiography and have delayed filling in at least one of the coronary arteries and have slow coronary flow in a corrected TIMI frame count of more than 27 frames per second

Exclusion criteria:
Stomach ulcers or duodenal ulcers Taking anticoagulants such as warfarin, aspirin and enoxaparin Breastfeeding or pregnancy Consumption of omega 3 (fish oil), ciprofloxacin, loratadine, citalopram, montelukast, and levothyroxine Kidney stone History of known congenital heart disease History of any cardiovascular diseases other than mild coronary atherosclerosis

Age
From **30 years** old

Gender
Both

Phase
2

Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser

Sample size
Target sample size: **48**

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 12 blocks according to the sample size of 48. Then random numbers between 1 and 12 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
Blinding is done using sealed envelopes. Furthermore, due to using 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 the 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 Committee of Imam Reza Hospital Educational, Research and Treatment Center, Mashhad

Street address
Imam Reza Hospital educational complex building, Imam Reza Hospital, Mashhad

City
Mashhad

Province
Razavi Khorasan

Postal code
۹۱۳۷۹۱۳۳۱۶

Approval date
2023-05-01, 1402/02/11

Ethics committee reference number
IR.MUMS.IRH.REC.1402.024

Health conditions studied

1

Description of health condition studied
Coronary slow flow syndrome

ICD-10 code
I20.8

ICD-10 code description
Other forms of angina pectoris

Primary outcomes

1

Description
Changes in the score of quality of life according to the EuroQol-VAS scale (0-100; 100 is the best quality of life and 0 is the worst quality of life)

Timepoint
Before intervention and one month after beginning the intervention

Method of measurement
According to the EuroQol-VAS scale (0-100; 100 is the best quality of life and 0 is the worst quality of life)

Secondary outcomes

1

Description
Frequent pain during the day
Timepoint
Before intervention and one months after beginning the intervention
Method of measurement
Checklist

2

Description
Duration of pain in minutes
Timepoint
Before intervention and one months after beginning the intervention
Method of measurement
Checklist

3

Description
Quality of life according to Seattle Angina Questionare
Timepoint
Before intervention and one months after beginning the intervention
Method of measurement
Seattle Angina Questionare

Intervention groups

1

Description
Intervention group: Patients with slow coronary artery disease receiving routine treatment (including aspirin, statins, beta-blockers and angiotensin-converting enzyme inhibitors) along with edible ginger rhizome powder at a dose of 250 mg once daily for one month
Category
Treatment - Drugs

2

Description
Control group: Patients with slow coronary artery disease receiving routine treatment (including aspirin, statins, beta-blockers and angiotensin-converting enzyme inhibitors) along with placebo capsule with similar shape, size, and color once daily for one month. The placebo capsule contains 250 mg of Avicel® and is prepared by Dr. Askari's research laboratory at Mashhad University of Medical Sciences.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Ghaem Hospital in Mashhad
Full name of responsible person
Dr. Sara Afshar
Street address
Ghaeem hospital, Ahmadabad Blvd, Mashhad
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9138813944
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afshars@mums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr. Majid Ghayour-Mobarhan
Street address
Qurashi Building, Next to Hoveyzeh Cinema, University Street, Mashhad
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9138813944
Phone
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Email
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. Sara Afshar
Position
Assistant professor
Latest degree
Subspecialist
Other areas of specialty/work
Cardiology
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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