

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 May 2026

The effect of cinnamon supplementation on blood pressure in patients with stage 1 hypertension

Protocol summary

Study aim

Effect of oral cinnamon supplementation on blood pressure in individuals with stage 1 hypertension

Design

A randomized, placebo-controlled, double-blind clinical trial

Settings and conduct

In this double-blind clinical trial study, new hypertensive patients referred to Imam Reza Hospital Clinic, Mashhad, Iran, with systolic pressure between 130-139 mmhg and or diastolic blood pressure 80-89 mmhg without receiving any anti hypertensive drug, are selected and confirmed by 24-hour Holter monitoring of the blood pressure. Patients are randomly divided into two groups of cinnamon and placebo. Patients in the intervention group are given three capsules of 500 mg cinnamon daily. Written informed consent is obtained from these patients. Lipid profile, fasting blood sugar and systolic and diastolic blood pressure are measured at baseline and 90 days after the start of the trial (end of the study). At the end of the study, patients will be re-tested under 24-hour blood pressure monitoring.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Individuals of 40-79 years old, having systolic blood pressure of 139-130 mmhg and or diastolic blood pressure 80-89 mmhg (as measured in the office and confirmed by 24-hour Holter monitoring of the blood pressure). Exclusion criteria: presence of end organ damage during the last 6 months, secondary hypertension, pregnancy and lactation, patients receiving any type of antihypertensive medication.

Intervention groups

Patients with STAGE 1 hypertension

Main outcome variables

Systolic blood pressure Diastolic blood pressure BMI
Lepid profile Fasting sugar

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20191204045605N1**

Registration date: **2019-12-27, 1398/10/06**

Registration timing: **registered_while_recruiting**

Last update: **2019-12-27, 1398/10/06**

Update count: **0**

Registration date

2019-12-27, 1398/10/06

Registrant information

Name

Alireza Abdollahimoghadam

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3802 2000

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-02-04, 1397/11/15

Expected recruitment end date

2020-02-20, 1398/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of cinnamon supplementation on blood pressure in patients with stage 1 hypertension

Public title

The effect of cinnamon supplementation on blood pressure in patients with stage1 hypertension

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients who are a new case of systolic hypertension (139-130 mmhg) and or diastolic hypertension (89-80 mmhg) being 40-79 years old 10-year cardiovascular risk less than 10%

Exclusion criteria:

Symptoms of end organ damage arbitrary discontinuation of medication, secondary causes of hypertension, pregnancy and lactation patients receiving any type of antihypertensive medication failure to cooperate till the end of the study complications of cinnamon diabetes

Age

From **40 years** old to **79 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Care provider

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Using random number extraction software, a list of number is obtained; based on the random-numbers list, participants are divided into two groups to receive either placebo or cinnamon.

Blinding (investigator's opinion)

Double blinded

Blinding description

Cinnamon and placebo will be purchased and given to the research unit. Both containers of cinnamon and placebo are quite similar in appearance and will be labeled as A or B.

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Mashhad University of Medical Sciences

Street address

Daneshgah

City

Mashhad

Province

Razavi Khorasan

Postal code

9179943835

Approval date

2018-11-04, 1397/08/13

Ethics committee reference number

IR.MUMS.MEDICAL.REC.1397.577

Health conditions studied

1

Description of health condition studied

HYPERTENSION

ICD-10 code

I10

ICD-10 code description

Essential (primary) hypertension

Primary outcomes

1

Description

HYPERTENSION

Timepoint

At baseline and 90 days later

Method of measurement

24-hour blood pressure monitoring using Holter

Secondary outcomes

1

Description

Fasting blood sugar

Timepoint

The first day of study and 90days after the start

Method of measurement

mg/dl

2

Description

Body max index

Timepoint

The first day of study and 90days after the start

Method of measurement

Kg/m2

3

Description

lipid profile

Timepoint

The first day of study and 90days after the start

Method of measurement

mg/ dl

Intervention groups**1****Description**

500 mg Cinnamon Capsule 3 times daily for 90 days

Category

Treatment - Drugs

2**Description**

Control group: 500 mg placebo capsule 3 times daily for 90 days

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Emam Reza Hospital

Full name of responsible person

Alireza Abdollahi Moghadam

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Emam Reza Hospital ,Emam Reza Squre ,Ebne-Sina Street ,Mashhad ,Iran

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

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Full name of responsible person

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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

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

Fatemeh Shirzad Shahraki

Position

Cardiology Resident

Latest degree

Medical doctor

Other areas of specialty/work

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

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Full name of responsible person

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Position

Cardiologist

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data

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Full name of responsible person

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Web page address

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