

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

short-and long term effects of pomegranate juice consumption in inflammatory factors(hs-CRP; ICAM; VCAM; IL-6; E-Selectin) and blood pressure and endothelial function evaluation (FMD) in hypertensive patients

Protocol summary

2012-08-09, 1391/05/19

Summary

In this Clinical Trial in hypertensive patients, 30 hypertensive patients will be selected. The purpose of this study is to investigate the effect of pomegranate juice consumption on pro-inflammatory cytokines, lipid profile levels, flow-mediated dilatation (FMD) and Blood pressure (BP) in hypertensive patients. Individuals with a history of diabetes; cardiovascular disease; liver and kidney disease as well as those with thyroid disease; pregnant and breastfeeding, metabolic and endocrine diseases and smoking will be excluded. FMD measurement will be done using high-frequency ultrasonography of the brachial artery, blood pressure gauge using a sphygmomanometer and the inflammatory markers (hs-CRP-ICAM-VCAM-IL-6-E-Selectin) and lipid profile levels will be measured using ELISA kits. 30 Participants are randomly divided into two groups. One group is control and another Case (Experiment) group. And case groups will consume 150mL pomegranate juice and control groups will consume 150mL water; once a day between lunch to dinner for 2 weeks, at the beginning and end of a 2-week period, above mentioned factors will be measured.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201206249662N4**
Registration date: **2012-08-09, 1391/05/19**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

Registrant information

Name

Sedigheh Asgary

Name of organization / entity

Isfahan Cardiovascular Research Center ,Isfahan Cardiovascular Research institute , Physiology Re

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Isfahan Cardiovascular Research Center

Expected recruitment start date

2012-07-22, 1391/05/01

Expected recruitment end date

2012-08-04, 1391/05/14

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

short-and long term effects of pomegranate juice consumption in inflammatory factors(hs-CRP; ICAM; VCAM; IL-6; E-Selectin) and blood pressure and endothelial function evaluation (FMD) in hypertensive patients

Public title

effects of pomegranate juice consumption in inflammatory factors(hs-CRP; ICAM; VCAM; IL-6; E-Selectin) and blood pressure and endothelial function evaluation (FMD) in hypertensive patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: hypertensive patients whit :BMI more than 18 and less than 35kg/m² ; Systolic blood pressure (SBP) more than 100 and less than 160 mm Hg; Diastolic blood pressure (DBP) more than 50 and less than 100 mm Hg Exclusion criteria: Individuals with a history of diseases; diabetes; cardiovascular disease; liver and kidney as well as those with thyroid disease; pregnant and breastfeeding; metabolic and endocrine diseases

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 22

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Isfahan Cardiovascular Research Center, Isfahan
Cardiovascular Research in

Street address

Khorram Street, Jomhori Square

City

Isfahan

Postal code

0098

Approval date

2007-10-08, 1386/07/16

Ethics committee reference number

86110

Health conditions studied**1****Description of health condition studied**

Blood pressure

ICD-10 code

I10-I15

ICD-10 code description

Hypertensive diseases

2**Description of health condition studied**

flow-mediated dilatation (FMD)

ICD-10 code

I70-I79

ICD-10 code description

Diseases of arteries, arterioles and capillaries

Primary outcomes**1****Description**

Positive changes in inflammatory markers

Timepoint

Baseline and after 2 weeks

Method of measurement

ELISA kit

2**Description**

Positive changes in endothelial function

Timepoint

Baseline and after 2weeks

Method of measurement

Doppler ultrasonography

Secondary outcomes**1****Description**

blood pressure

Timepoint

Baseline and after 2 weeks

Method of measurement

Sphygmomanometer

2**Description**

Positive changes in lipid profiles

Timepoint

Baseline and after 2 weeks

Method of measurement

kit

3

Description

Cholesterol Level

Timepoint

Before and after 2 weeks

Method of measurement

KIT

4

Description

HDL Level

Timepoint

Before and after 4 weeks

Method of measurement

KIT

5

Description

LDL level

Timepoint

Before and after 2weeks

Method of measurement

KIT

Intervention groups

1

Description

In group 1(case)15 hypertensive patients, 150 ml consumption of fresh Pomegranate juice. once a day between launch to dinner for 2 weeks.

Category

N/A

2

Description

In group 2(Control)15 hypertensive patients, 150 ml consumption of Water for 2 weeks

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Sedigheh tahere Cardiovascular Research Center

Full name of responsible person

Mahtab keshvari

Street address

Khorram Street, Jomhori Square

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Isfahan Cardiovascular Research Center

Full name of responsible person

dr.bahonar

Street address

Khorram Street, Jomhoori Square

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Isfahan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Isfahan Cardiovascular Research Center

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Person responsible for scientific inquiries

Contact

Name of organization / entity

Isfahan Cardiovascular Research Center, Physiology Research Center, Isfahan University of Medical S

Full name of responsible person

Sedigheh Asgary

Position

Pharmacist and PhD Pharmacogenetics

Other areas of specialty/work

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Full name of responsible person

Mahtab keshvari

Position

MSc / BSc Research

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty