Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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

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 exclude. FMD measurement will 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-Selecti) and lipid profile levels will be measured using ELISA kits. 30 Participants are randomly divided into two groups. One groups control and another Case (Experiment) groups. And case groups will be consume 150mL pomegranate juice and control groups will be consume 150mL water ; once a day between launch 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

2012-08-09, 1391/05/19

Registrant information

Name
Sedigheh Asgary
Name of organization / entity
Isfahan Cardiovascular Research Center ,Isfahan Cardiovascular Research institute , Physiology Re
Country
Iran (Islamic Republic of)
Phone
+98 31 1335 9090
Email address
s_asgari@crc.mui.ac.ir

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
City
Isfahan

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
City
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
Street address
Khorram Street, Jomhoori Square
City
Isfahan
Postal code
Phone
+98 31 1355 9595
Fax
Email
sasgary@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity

Isfahan Cardiovascular Research Center
Full name of responsible person
Mahtab keshvari
Position
MSc / BSc Research
Other areas of specialty/work
Street address
Cardiovascular Research Center, Khorram Street, Jomhoori Square
City
Isfahan
Postal code
Phone
+98 31 1335 9595
Fax
Email
mahtabkeshvari87@yahoo.com
Web page address

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