

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jul 2026

Assessing the effects of pomegranate juice consumption on clinical signs, matrix metalloproteinase 13 & glutathione peroxidase in patients with osteoarthritis of the knee.

Protocol summary

Summary

Assessing the effects of pomegranate juice consumption on clinical signs, matrix metalloproteinase 13 & glutathione peroxidase in patients with osteoarthritis of the knee. Objectives: The aim of this study is Effects of pomegranate juice consumption on clinical signs, matrix metalloproteinase 13 & glutathione peroxidase in patients with osteoarthritis of the knee. Design: Thirty eight patients with knee osteoarthritis participate in this study. The patients randomly divide into two groups of pomegranate juice and control. Pomegranate juice group consume 200 ml pomegranate juice daily for 6 weeks. No intervention do on the control group. Inclusion criteria: age: 30-80 yrs; diagnosis of osteoarthritis of the knee by a rheumatologist according to ACR criteria (based on pain history, physical examination, laboratory and radiological findings); Willingness and ability to drink pomegranate juice and no allergy to this. Exclusion criteria: patients with inflammatory diseases; rheumatoid arthritis; diabetes mellitus; cardiovascular diseases; liver diseases; renal diseases; cancer; who treated with oral corticosteroids in the last 4 weeks; who injected corticosteroids in the last 6 months; antioxidants consumption and pregnancy. Main outcome variables: patients clinical signs included pain, stiffness and physical function ask from patients at baseline and after intervention according to WOMAC questionnaire. Anthropometric assessment and nutritional status of patients will evaluate. Matrix metalloproteinase 13 & glutathione peroxidase in patients evaluate in two times.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2014031517017N1**

Registration date: **2014-11-21, 1393/08/30**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date
2014-11-21, 1393/08/30

Registrant information

Name

Nasrin Ghoochani

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

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Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research and Technology Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2014-03-21, 1393/01/01

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessing the effects of pomegranate juice consumption

on clinical signs, matrix metalloproteinase 13 & glutathione peroxidase in patients with osteoarthritis of the knee.

Public title

Effects of pomegranate juice on osteoarthritis of the knee

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: age:30-80 yrs; diagnosis of osteoarthritis of the knee by a rheumatologist according to ACR criteria (based on pain history, physical examination, laboratory and radiological findings); ability to drink pomegranate juice and no allergy to this.

Exclusion criteria: patients with inflammatory diseases; rheumatoid arthritis; diabetes mellitus; cardiovascular diseases; liver diseases; renal diseases; cancer; who treated with oral corticosteroids in the last 4 weeks; who injected corticosteroids in the last 6 months; antioxidants consumption and pregnancy.

Age

From **30 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Randomization between the two groups do by Block randomization method.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Ahvaz Jundishapur University of Medical Sciences

Street address

Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

City

Ahvaz

Postal code

15794-61357

Approval date

2013-12-28, 1392/10/07

Ethics committee reference number

ajums.REC.1392.211

Health conditions studied

1

Description of health condition studied

knee osteoarthritis

ICD-10 code

M17

ICD-10 code description

Gonarthrosis [arthrosis of knee]

Primary outcomes

1

Description

pain

Timepoint

before and after the intervention

Method of measurement

WOMAC questionnaire

2

Description

stiffness

Timepoint

before and after the intervention

Method of measurement

WOMAC questionnaire

3

Description

physical function

Timepoint

before and after the intervention

Method of measurement

WOMAC questionnaire

Secondary outcomes

1

Description

sreum mmp13

Timepoint

before and after the intervention

Method of measurement

before and after the intervention

2

Description

serum glutathione peroxidase

Timepoint

before and after the intervention

Method of measurement

before and after the intervention

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

Intervention group: Daily consumption of 200 ml pomegranate juice produced by Takdaneh company for 6 weeks in intervention group

Category

Treatment - Other

2**Description**

Control group: No intervention will do in control group.

Category

N/A

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

Ahvaz Golestan hospital, clinic of rheumatology

Full name of responsible person

Dr Karim mowla

Street address

Golestan university hospital, Farvardin street, Golestan, Ahvaz

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

Vice Chancellor for Research and Technology Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

dr Nader Saki

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Ahvaz, Ahvaz Jundishapur University of Medical Sciences-Vice Chancellor for Research and Technology

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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

Vice Chancellor for Research and Technology Ahvaz Jundishapur University of Medical Sciences

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****Name of organization / entity**

Nutrition & Metabolic Diseases Research Center , Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Nasrin Ghoochani

Position

MSc student of nutrition science

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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