

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effect of Sesame Seed on inflammatory markers and clinical sign in patient with knee osteoarthritis

Protocol summary

Summary

The purpose of this study was to investigate the effects of sesame on lowering serum lipids and enhancing antioxidant capacity and improving clinical signs in people with knee osteoarthritis. A total of 50 patients grade 1-3 osteoarthritis, aged 50 to 70 years old, were randomly assigned into intervention or control group. The patients in both groups received physiotherapy (20 1-hour sessions for both knees) as well as Acetaminophen 500mg twice a day and Glucosamine one tablet daily for two months. The patients in the intervention group received, as well, 40 grams of sesame powder daily for 2 months. The inflammatory markers including IL-6 and hs-CRP as well as lipid profile, clinical signs and anti-oxidative status were measured before and after the intervention and compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201011164105N4**

Registration date: **2011-01-15, 1389/10/25**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-01-15, 1389/10/25

Registrant information

Name

Beit Allah Alipour

Name of organization / entity

Health & Nutrition Faculty

Country

Iran (Islamic Republic of)

Phone

+98 41 1335 7580

Email address

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Recruitment status

Recruitment complete

Funding source

faculty of health and nutrition-tabriz

Expected recruitment start date

2010-11-01, 1389/08/10

Expected recruitment end date

2010-11-20, 1389/08/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Sesame Seed on inflammatory markers and clinical sign in patient with knee osteoarthritis

Public title

Effect of Sesame Seed on inflammatory markers and clinical sign in patient with knee osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age 50-70 years old, primary bilateral knee osteoarthritis based on ACR criteria, ability to consume and sesame Exclusion criteria: grade IV osteoarthritis, secondary OA, active synovitis, knee surgery or intra-articular injection, neuromuscular diseases, diabetes, metabolic diseases, cardiovascular diseases, hepatic diseases, smoking, alcohol, vitamin, and mineral supplement consumption, MI

Age

From **50 years** old to **70 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

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tabriz University of Medical Sciences and Health Services

Street address

Attare Neyshaburi St, Tabriz

City

Tabriz

Postal code

Approval date

2010-11-08, 1389/08/17

Ethics committee reference number

8941

Health conditions studied

1

Description of health condition studied

knee OA

ICD-10 code

M17.0

ICD-10 code description

Primary gonarthrosis, bilateral

Primary outcomes

1

Description

Inflammatory markers (IL-6)

Timepoint

Before and after the intervention

Method of measurement

Elisa

2

Description

Markers of Lipidemia

Timepoint

Before and after the intervention

Method of measurement

Espectrophotometry(mg/dl)

3

Description

clinical sign

Timepoint

Before and after the intervention

Method of measurement

physical assessment

4

Description

Timed up and go test

Timepoint

Before and after the intervention

Method of measurement

based on walking time

5

Description

hs-CRP

Timepoint

Before and after the intervention

Method of measurement

Imonoturbidometry

6

Description

Koos questionnaire

Timepoint

before and after intervention

Method of measurement

Koos questionnaire

Secondary outcomes

1

Description

GPX

Timepoint

Before and after the intervention

Method of measurement

u/gr Hemoglobin- spectrophotometry

2

Description

SOD

Timepoint

Before and after the intervention
Method of measurement
spectrophotometry

3

Description
MDA

Timepoint
Before and after the intervention

Method of measurement
spectrophotometry

4

Description
Total Antioxidant

Timepoint
Before and after the intervention

Method of measurement
spectrophotometry

Intervention groups

1

Description
Sesame powder, 40 grams daily, for 2 months as well as physiotherapy (20 an-hour sessions for both knees), Acetaminophen 500mg twice a day, and Glucosamine one tablet daily for two months

Category
Treatment - Other

2

Description
Physiotherapy (20 an-hour sessions for both knees) as well as Acetaminophen 500mg twice a day and Glucosamine one tablet daily for two months

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Shohadaa hospital
Full name of responsible person
Dr Eftekhar Sadat
Street address
Golshahr St.
City
Tabriz

2

Recruitment center
Name of recruitment center
Shahid Madani hospital

Full name of responsible person
Dr Eftekhar Sadat
Street address
City
Tabriz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tabriz University of Medical Sciences and Health Services
Full name of responsible person
Dr Rasool Azarfarin
Street address
Daneshgah St.
City
Tabriz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tabriz University of Medical Sciences and Health Services
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
Tabriz University of Medical Sciences
Full name of responsible person
Beit Allah Alipour
Position
Assistant Professor
Other areas of specialty/work
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Person responsible for updating data

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Name of organization / entity
Tabriz University of Medical Sciences
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+98 41 1335 7580

Fax
Email
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