Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 2026

Effect of quercetin supplementation on serum level of Asymmetric Dimethylarginine in patients in the chronic Phase of Ischemic stroke

Protocol summary

Summary

This study is a double-blind clinical trial. Seventy two patients who are in the chronic phase of ischemic stroke (6 month-2 years), 50- 75 years old, Body mass index between 25- 35 will be selected. At first the disease in patients is diagnosed by a neurologist and if there are no exclusion criteria include Body mass index more than 35, Body mass index under 25, liver disease, kidney disease, hypo or hyper thyroid, Hemorrhagic stroke, Hormone therapy (HRT), intake of warfarin, they have the permission to participate in this study. Patients will be divided randomly into two groups. Thirty six patients in the intervention group will receive 2 capsules of 500 mg quercetin twice daily for two months. Thirty six patients in the control group will receive 2 capsules placebo twice daily for two months. We need blood samples of these patients at the beginning and the end of the study for comparison and evaluation of serum levels of Asymmetric Dimethylarginine, fasting blood sugar and lipid profile. Moreover we measure weight, height and blood pressure`s patients at the beginning and the end of study.Besides we have 24 hour recall questionnaires in order to check dietary intake of macronutrients and micronutrients in the first 3 days and last 3 days of supplementation. The data will analyze in SPSS.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201202269142N1**
Registration date: **2012-08-04, 1391/05/14**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2012-08-04, 1391/05/14

Registrant information

Name

Farnaz Esmaeelzadeh

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2012-06-20, 1391/03/31

Expected recruitment end date

2012-09-19, 1391/06/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of quercetin supplementation on serum level of Asymmetric Dimethylarginine in patients in the chronic Phase of Ischemic stroke

Public title

Effect of quercetin in treatment of stroke

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients in the chronic phase of ischemic stroke (6 month- 2 years), 50- 75 years old, Body mass index between 25- 35. Exclusion criteria: Body mass index more than 35, Body mass index under

25, liver disease, kidney disease, hypo or hyper thyroid, Hemorrhagic stroke, Hormone therapy (HRT), intake of warfarin.

Age
From **50 years** old to **75 years** old

Gender
Both

Phase
3

Groups that have been masked
No information

Sample size
Target sample size: **72**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Tehran University of Medical Sciences

Street address
6th floor, Central building of Tehran University, Ghods St., Keshavarz blvd

City
Tehran

Postal code

Approval date
2012-06-05, 1391/03/16

Ethics committee reference number
91/130/264/ɔ

Health conditions studied

1

Description of health condition studied
cerebral infarction(ischemic stroke)

ICD-10 code
I63

ICD-10 code description
Cerebral infarction

Primary outcomes

1

Description
Asymmetric Dimethylarginine

Timepoint
Start of survey and end of the second month

Method of measurement
Micromol/L with Human ADMA ELISA Kit

Secondary outcomes

1

Description
Total cholesterol

Timepoint
Start of survey and end of the second month

Method of measurement
mg/dl with kit

2

Description
Triglyceride

Timepoint
Start of survey and end of the second month

Method of measurement
mg/dl with kit

3

Description
Low density lipoprotein

Timepoint
Start of survey and end of the second month

Method of measurement
mg/dl with kit

4

Description
High density lipoprotein

Timepoint
Start of survey and end of the second month

Method of measurement
mg/dl with kit

5

Description
Fast blood glucose

Timepoint
Start of survey and end of the second month

Method of measurement
mg/dl with kit

6

Description
blood pressure

Timepoint

Start of survey and end of the second month

Method of measurement

mmgh

Intervention groups

1

Description

Quercetin, oral capsule 500 mg, twice a day in two months

Category

Treatment - Drugs

2

Description

placebo, oral capsules, twice a day in two months

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Firouzgar General Hospital

Full name of responsible person

Dr. Masoud Mehrpour

Street address

Behafarin St., Hafez St., Karim khan zand St.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Akbar Fatouhi

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Sixth floor, Central building of Tehran University, Ghods st, Keshavarz blvd

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Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tehran 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

Tehran University of Medical Sciences

Full name of responsible person

Farnaz Esmaeelzadeh

Position

MS student in nutrition

Other areas of specialty/work

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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