

Clinical Trial Protocol

Iranian Registry of Clinical Trials

28 May 2026

The study of coenzyme Q10 supplementation on blood pressure, inflammation factors & Adiponectin in hypertensive patients

Protocol summary

Summary

The study aims to determine the effect of coenzyme Q10 supplementation on blood pressure, adiponectin and inflammatory factors in the patients with hypertension on the target population of hypertensive patients referred to the Tuba health center, Sari. A total of 36 hypertensive patients will be recruited to receive Q10, oral capsules, 100 mg once daily or placebo for three months. Blood pressure, IL6, IL2, TNF- α , CRP, and adiponectin will be measured at the beginning and in the first and six and twelve weeks after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201103086002N1**
Registration date: **2011-05-29, 1390/03/08**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-05-29, 1390/03/08

Registrant information

Name

Nasim BagheriNesami

Name of organization / entity

Shahid Sadughi University of Medical Sciences and Health Services

Country

Iran (Islamic Republic of)

Phone

+98 35 1624 0691

Email address

nbagherinesami@gmail.com

Recruitment status

Recruitment complete

Funding source

Shahid Sadughi University of Medical Sciences

Expected recruitment start date

2011-03-11, 1389/12/20

Expected recruitment end date

2011-05-15, 1390/02/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The study of coenzyme Q10 supplementation on blood pressure, inflammation factors & Adiponectin in hypertensive patients

Public title

The study of coenzyme Q10 supplementation on blood pressure, inflammation factors & Adiponectin in hypertensive patients

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: willingness to cooperate in the project and complete a written informed consent, diagnosis of hypertensive patients based on diagnostic criteria and clinical examination by a physician, No pregnant or breastfeeding women, the absence of any autoimmune disorders, cardio - vascular, or renal diseases, lack of nutritional supplements during the past six months
Exclusion criteria: diabetes mellitus type 1 or type 2, the history of disease such as myocardial infarction, cardiac dysfunction, cardiac arrhythmia, angina and kidney disease, autoimmune diseases like MS, rheumatism, etc, BMI > 40, factors causing secondary hypertension, supplementation of vitamin, mineral or other nutritional supplements, Alcohol or drug use, Incidence of severe

side effects, non-compliance with study protocol

Age

From **35 years** old to **55 years** old

Gender

Both

Phase

N/A

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

Shahid Sadughi University of Medical Sciences and Health Services

Street address

Second Central Building of Shahid Sadughi University of Medical Sciences and Health Services, Shahid Bahonar square

City

Yazd

Postal code

891697847

Approval date

2010-10-26, 1389/08/04

Ethics committee reference number

79735/1/17/پ

Health conditions studied

1

Description of health condition studied

hypertension

ICD-10 code

I10

ICD-10 code description

High blood pressure

Primary outcomes

1

Description

IL6

Timepoint

At baseline, after the sixth week and twelfth week baseline

Method of measurement

ELISA

2

Description

hypertension

Timepoint

At At baseline, weeks after the sixth and twelfth week baseline

Method of measurement

Measured by standard mercury blood pressure measuring device sitting

3

Description

IL2

Timepoint

At baseline, after the sixth week and twelfth week baseline

Method of measurement

ELISA

4

Description

hs-CRP

Timepoint

At baseline, after the sixth week and twelfth week baseline

Method of measurement

ELISA

5

Description

TNF-a

Timepoint

At baseline, after the sixth week and twelfth week baseline

Method of measurement

ELISA

6

Description

Adiponectin

Timepoint

At baseline, after the sixth week and twelfth week baseline

Method of measurement

ELISA

Secondary outcomes

empty

Intervention groups

1

Description

Placebo, 100 mg, once daily for three months

Category

Placebo

2

Description

Coenzyme q10, 100 mg orally, once daily for three months

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Tuba Medical Center

Full name of responsible person

Street address

City

Sari

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Sadughi University of Medical Sciences and Health Services

Full name of responsible person

Hassan Mozaffari

Street address

3rd floor, Central Building of Shahid Sadughi University of Medical Sciences and Health Services, Shahid Bahonar sq.

City

Yazd

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahid Sadughi 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

Name of organization / entity

Shahid Sadughi University of Medical Sciences and Health Services

Full name of responsible person

Seied Mohammad Mohammadi Zarchi

Position

Assistant Professor of Endocrinology and Metabolism

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Dr Hassan Mozaffari

Position

PhD, Nutritionist

Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

Shahid Sadughi University of Medical Sciences and

Health Services

Full name of responsible person

Nasim Bagheri Nesami

Position

MS student of Health Science in Nutrition

Other areas of specialty/work

Street address

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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