Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 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 presseure, IL6, IL2, TNF-a, 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

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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 Centeral 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, Centeral 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

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Dr Hassan Mozaffari
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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

Shahid Sadughi University of Medical Sciences and Health Services

City

Yazd

Postal code

Phone

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