

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jun 2026

Effect of carnitine supplementation on visceral proteins in hemodialysis patients

Protocol summary

Summary

In 2009, there were approximately 25,000 patients with Iran (3), this number increased to about 8% annually (4). In approximately 52.7% of the patients were treated with hemodialysis (5) the annual increase of 15% (6). Despite adequate hemodialysis for renal disease and adequate protein intake, long-term dialysis patients who are malnourished are. Protein malnutrition - energy is common in hemodialysis patients (7, 8). Studies performed in various states of protein malnutrition - Energy in hemodialysis patients from 16% to 90% have been reported (10-7).through the reduction of acyl-CoA reduces cardiac arrhythmias and ischemia, which is caused by reduced apoptosis. Deficiency of carnitine in patients with ESRD who have long dialysis are the most commonly happens while carnitine in the body from lysine and methionine synthesis is to achieve a balance of daily substance the body needs carnitine Exogenous the meat and dairy sources of carnitine exogenous precursors are (34), but patients on hemodialysis limited amounts of foods containing carnitine and the material it receives as cofactors and precursors of carnitine (such as B6 and niacin and vitamin C and lysine and methionine) is not, therefore, important to justify a clinical trial designed to study the effect of carnitine supplementation on visceral protein levels in patients undergoing hemodialysis is designed.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013042913160N1**
Registration date: **2013-07-16, 1392/04/25**
Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2013-07-16, 1392/04/25

Registrant information

Name

Shima Dehghan

Name of organization / entity

Yazd Shahid Sadoughi University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 35 1624 5453

Email address

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Recruitment status

Recruitment complete

Funding source

Yazd Shahid Sadoughi University of Medical Sciences

Expected recruitment start date

2013-08-05, 1392/05/14

Expected recruitment end date

2014-01-04, 1392/10/14

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of carnitine supplementation on visceral proteins in hemodialysis patients

Public title

Effect of l-carnitine on malnutrition in hemodialysis patients

Purpose

Basic science

Inclusion/Exclusion criteria

Inclusion criteria: patients on hemodialysis in last year,

above 21 years old and did not use the drug for 8 weeks. Did not participate in other research projects. Exclusion criteria: if a patient is suffering from an infectious disease or fever in last month or is taking antibiotics are excluded

Age

From **20 years** old to **70 years** old

Gender

Both

Phase

2

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

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

Street address

yazd-sadoughi street

City

yazd

Postal code

۸۹۱۶۹۷۸۴۷۷

Approval date

2013-04-29, 1392/02/09

Ethics committee reference number

20229

Health conditions studied

1

Description of health condition studied

Hemodialysis

ICD-10 code

Z49

ICD-10 code description

Care involving dialysis

2

Description of health condition studied

Malnutrition

ICD-10 code

E40-46

ICD-10 code description

Malnutrition

Primary outcomes

1

Description

pre albumin

Timepoint

First, after 3 months at the end of the study

Method of measurement

blood samples,mg/dl

2

Description

transferrin

Timepoint

First, after 3 months at the end of the study

Method of measurement

blood samples,mg/dl

3

Description

total lymphocyte count

Timepoint

First, after 3 months at the end of the study

Method of measurement

blood samples,mg/dl

4

Description

pre albumin

Timepoint

First, after 3 months at the end of the study

Method of measurement

blood samples,mg/dl

5

Description

c-reactive protein

Timepoint

First, after 3 months at the end of the study

Method of measurement

blood samples,mg/dl

Secondary outcomes

empty

Intervention groups

1

Description

treatment group, received 1 carnitin oral vial of 1000 mg

Category

Treatment - Drugs

2

Description

The control group did not receive carnitine.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shhid Dr. Rahnamoon hospital

Full name of responsible person

Shima Dehghan

Street address

Yazd. Farrokhi str.

City

Yazd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Yazd Shahid Sadoughi University of Medical Science

Full name of responsible person

Hasan Mozaffari

Street address

Daneshjoo Boulevard

City

Yazd

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Yazd Shahid Sadoughi University of Medical Science

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

Yazd Shahid Sadoughi University of Medical Science

Full name of responsible person

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Position

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Other areas of specialty/work

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Web page address

Person responsible for updating data

Contact

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