Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

The effect of fructose on hyperphosphatemia in hemodialysis patients

Protocol summary

Summary

The aim of the present study was to evaluate the effect of fructose on the hyperphosphatemia in hemodialysis patients. 30 hemodialysis patients were enrolled in before and after randomized clinical trial. This patient's blood phosphate was above 5.5 mg/dl for three month. The inclusion criteria were age more than 18 years; Able to cooperation; Constant consumption of fruit and fructose containing foods; Tolerance to drug; Have passed more than six months from diagnosis of chronic renal failure and to be at 4,5 stages of disease. All Patients in the intervention group (n=30) received fructose for two month (15 gr fructose daily). Other biochemical factors that were evaluated before and after intervention were TG, LDL, HDL, PTH, Na, K, Ca, HG, WBC, and platelet. Patients did not complete study were excluded. Data were analyzed by using SPSS16 and paired T test.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201307272017N15**
Registration date: **2013-12-02, 1392/09/11**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2013-12-02, 1392/09/11

Registrant information

Name

Alireza Ostadrahimi

Name of organization / entity

Tabriz University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Tabriz university of medical science

Expected recruitment start date

2013-10-02, 1392/07/10

Expected recruitment end date

2013-12-06, 1392/09/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of fructose on hyperphosphatemia in hemodialysis patients

Public title

Fructose effect on phosphate absorption from the gastrointestinal tract

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: More than six months have passed from diagnosis of Chronic Renal Failure and to be at 4,5 stages of disease, >18 years old, Satisfaction and cooperation of patient, Constant consumption of fruit and fructose containing foods, Tolerance to drug and side effects.

Age

From **18 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked
No information
Sample size
Target sample size: **30**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Tabriz University of Medical Scinces
Street address
Golgasht street - Medical college
City
Tabriz
Postal code
5166614711
Approval date
2013-09-30, 1392/07/08
Ethics committee reference number
92101

Health conditions studied

1

Description of health condition studied
Chronic Kidney Failure
ICD-10 code
N18.4, N18
ICD-10 code description
Chronic Kidney Failure

Primary outcomes

1

Description
Phosphate
Timepoint
Before and two months after the begining of trial
Method of measurement
Laboratory and mgr/dl

Secondary outcomes

1

Description
Leucocytes
Timepoint
Before and two months after of beginning of trial
Method of measurement
Labratory and Numerical

2

Description
HDL
Timepoint
Before and two months after the beginning of trial
Method of measurement
Laboratory and mgr/dl

3

Description
Triglycerides
Timepoint
Before and two months after the beginning of trial
Method of measurement
Laboratory and mgr/dl

4

Description
Na
Timepoint
Before and two months after the beginning of trial
Method of measurement
Laboratory and mgr/dl

5

Description
Calcium
Timepoint
Before and two months after the beginning of trial
Method of measurement
Laboratory and mgr/dl

6

Description
K
Timepoint
Before and after two months of beginning of trial
Method of measurement
Laboratory and mgr/dl

7

Description
PTH
Timepoint
Before and after two months of beginning of trial
Method of measurement

Laboratory and by kit

8

Description
LDL
Timepoint
Before and after two months of beginning of trial
Method of measurement
Laboratory and mgr/dl

9

Description
Cholesterol
Timepoint
Before and after two months of beginning of trial
Method of measurement
Laboratory and mgr/dl

10

Description
Platelet
Timepoint
Before and after two months of beginning of trial
Method of measurement
Laboratory and Numerical

11

Description
Hemoglobin
Timepoint
Before and after two months of beginning of trial
Method of measurement
Laboratory and Numerical

Intervention groups

1

Description
Intervention group: 15 grams fructose daily for two months
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Tabriz university of medical sciences
Full name of responsible person
Hamid Tayebikhosroshahi
Street address
Golgasht street - Emam reza hosbital - Hemodialysis department
City
Tabriz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for research of Tabriz University of Medical Sciences
Full name of responsible person
Ali Meshkini
Street address
Golgasht street- Medical college
City
Tabriz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for research of Tabriz 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
Tabriz university of medical sciences
Full name of responsible person
Hamid Tayebikhosroshahi
Position
Nephrologist - Manager of hemodialysis department
Other areas of specialty/work
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Person responsible for updating data

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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