Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

A survey effect of chromium picolinate on glycemic control in type 2 diabetic patients

Protocol summary

Summary

This is a prospective, double blind randomized and placebo controlled trial which survey effect of chromium picolinate on FBS, HbA1C, lipid profile, serum chromium level, and BMI in type 2 diabetic patients. A total of 40 patients with type 2 diabetes who are poor controlled with oral hypoglycemic agents will be enrolled. The patients will be randomly assigned to receive 200 micrograms per day of chromium picolinate or placebo, once daily for 3 months. Placebo will be made of all ingredients of chromium picolinate manufactured by 21st century co. unless chromium element. After 3 months, FBS, HbA1C, lipid profile, BUN, Cr, serum chromium level, and BMI will be checked again and the changes before and after treatment will be evaluated between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201009264817N1**
Registration date: **2010-10-16, 1389/07/24**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2010-10-16, 1389/07/24

Registrant information

Name
Sara Saffarian
Name of organization / entity
Medical Resident
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Iran (Islamic Republic of)
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+98 61 1221 6553
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sarasaffarian@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur University Of Medical Sciences

Expected recruitment start date

2010-05-02, 1389/02/12

Expected recruitment end date

2010-11-01, 1389/08/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A survey effect of chromium picolinate on glycemic control in type 2 diabetic patients

Public title

Effect of chromium administration in controlling blood sugar in diabetic patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: type 2 diabetic patients with HbA1C>7% Exclusion criteria: renal, hepatic, or heart failure

Age

From **30 years** old to **100 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **40**

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, Ahvaz Jundishapur University

Street address
Ahvaz Jundishapur University

City
Ahvaz

Postal code

Approval date
2010-07-07, 1389/04/16

Ethics committee reference number
1848/20/8/پ

Health conditions studied

1

Description of health condition studied
Diabetes mellitus

ICD-10 code
E11

ICD-10 code description
Non-insulin-dependent diabetes mellitus

Primary outcomes

1

Description
HbA1C

Timepoint
at first and 3 months later

Method of measurement
HPLC

2

Description
FBS

Timepoint
at first and 3 months later

Method of measurement
R-1000 device

Secondary outcomes

1

Description
BMI

Timepoint
At first and 3 month later

Method of measurement
weight/height2

2

Description
Serum chromium level

Timepoint
at first and 3 months later

Method of measurement
Atomic absorption spectrophotometry

3

Description
serum lipids

Timepoint
At first and 3 months later

Method of measurement
Direct LDL-Chol

Intervention groups

1

Description
chromium picolinate 200 microgram daily for 3 months

Category
Treatment - Drugs

2

Description
Placebo once daily for 3 months

Category
Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center
Ahvaz Golestan Hospital

Full name of responsible person
Sara Saffarian

Street address
Golestan Hospital, Ahvaz

City
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Research Deputy, Jundishapur University Of Ahvaz
Full name of responsible person
Dr. Peyman Payami
Street address
Ahvaz Jundishapur University Of Medical Sciences
City
Ahvaz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Research Deputy, Jundishapur University Of Ahvaz
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
Jundishapur University
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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