

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 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

Country

Iran (Islamic Republic of)

Phone

+98 61 1221 6553

Email address

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
Ahvaz

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

Full name of responsible person

Dr. Sara Saffarian

Position

Internal Medicine Resident

Other areas of specialty/work

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Person responsible for scientific inquiries

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Full name of responsible person

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Person responsible for updating data

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Other areas of specialty/work

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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