

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

Effect of preoperative vitamin D supplementation on postoperative hypocalcemia in patients with vitamin D deficiency candidate for total thyroidectomy

Protocol summary

Summary

In current study, we aim to evaluate effect of preoperative vitamin D supplements administration effect in prevention of postoperative hypocalcemia in thyroidectomy patients with moderate and severe vitamin D deficiency. Of all patients with thyroidectomy indication referring to thoracic surgery clinic, during first visit, with due attention to serum vitamin D test results, 100 patients will enroll study and divide to case and control groups randomly. Afterward, case group patients will receive 50000 IU vitamin D supplement weekly up to 4 weeks, and control group patients will receive placebo in the same prescription. All patients will undergo thyroidectomy at the end of the 4th week. Subsequent to surgery, in order to evaluate postoperative hypocalcemia, serum total and ionized calcium levels will be checked in three period as follows: 6 to 12 hours after surgery, 18 to 24 hours after surgery and 48 to 72 hours after surgery. In addition, serum calcium levels will be checked at the end of the 2nd week postoperative to assess the long term hypocalcemia incidence in these patients.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016062016077N6**
Registration date: **2016-06-29, 1395/04/09**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-06-29, 1395/04/09

Registrant information

Name

Ali Ramouz

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 3441 3895

Email address

ali.ramouz@gmail.com

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2015-08-23, 1394/06/01

Expected recruitment end date

2016-07-22, 1395/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of preoperative vitamin D supplementation on postoperative hypocalcemia in patients with vitamin D deficiency candidate for total thyroidectomy

Public title

Effect of vitamin D in prevention of postoperative hypocalcemia in total thyroidectomy patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: multi nodular goiter; thyroid cancers; patients candidates fo thyroidectomy who suffer

moderate to severe vitamin D deficiency in preoperative tests. Exclusion criteria: previous history of head and neck surgeries; coexisting parathyroid diseases; suffering diseases that affect calcium and vitamin D metabolism; patients who have injured or dissected parathyroid glands during surgery; patients who received vitamin supplements before surgery.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 100

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features

Sealed envelope method

Secondary Ids

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of the research and technology department, Tabriz University of Medical sciences

Street address

Research department- laneshgah street- Tabriz

City

Tabriz

Postal code**Approval date**

2016-06-18, 1395/03/29

Ethics committee reference number

ir.tbzmed.rec.1395.214

Health conditions studied**1****Description of health condition studied**

Postoperative hypocalcemia

ICD-10 code

E 89.0

ICD-10 code description

Postprocedural endocrine and metabolic disorders, not elsewhere classified

Primary outcomes**1****Description**

Serum calcium level

Timepoint

Before surgery, 6 to 12 hours after surgery, 18 to 24 hours after surgery and 48 to 72 hours after surgery

Method of measurement

According to laboratory tests

Secondary outcomes

empty

Intervention groups**1****Description**

Vitamin D 50000 IU weekly for 4 week administration in intervention group

Category

Treatment - Drugs

2**Description**

Placebo administration instead of vitamin D in control group

Category

Placebo

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shahid Taleghani hospital

Full name of responsible person

Seyed Ziaeddin Rasihashemi

Street address**City**

Tabriz

2**Recruitment center****Name of recruitment center**

Emma Reza hospital

Full name of responsible person

Seyed Ziaeddin Rasihashemi

Street address**City**

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Ali Ramouz

Street address

Imam Reza hospital, Daneshgah street

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

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

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Position

medical student

Other areas of specialty/work

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Medical Student

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