

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Patients blood calcium level changes in thyroidectomy by Ligasure Small Jaw Instrument in comparison to Clamp and tie method

Protocol summary

Summary

In current study, we aim to discuss effect of Ligasure Small Jaw Instrument on hypocalcemia prevalence decrease in thyroidectomy patients. One hundred and fifty patients with thyroidectomy indication, who will be admitted in surgery wards of Tabriz Taleghani and Emam Reza hospitals from March 2014 till March 2015, enroll our study. All patients take part in case or control group by their own willing, as they choose surgery method on their own, and some will receive Ligasure Small Jaw and others Clamp and tie method. Sampling is non-randomized and census and patients candidate for thyroidectomy such as thyroidectomy cancers will enroll our study. In all individuals, one day before intervention, total and ionized calcium levels will be check. This tests will be repeated in first visit after surgery approximately in 2nd week after discharge, and in case of hypocalcemia presence, in 6th week after operation, tests will be repeated again. Also, during admission in hospital, patients will be examined for hypocalcemia clinical signs and symptoms. Finally, we will analyses results for investigating Ligasure Small Jaw role on post-operative hypocalcemia prevalence decrease.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014010516077N1**

Registration date: **2014-05-23, 1393/03/02**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2014-05-23, 1393/03/02

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

Student Research Committee, Tabriz University of Medical Sciences

Expected recruitment start date

2014-02-20, 1392/12/01

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Patients blood calcium level changes in thyroidectomy by Ligasure Small Jaw Instrument in comparison to Clamp and tie method

Public title

Clinical trial on blood calcium level changes in patients undergo thyroidectomy by Ligasure Small Jaw Instrument comparing to Clamp and tie method

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion Criteria: Multi Nodular Goiter; Thyroid cancers; Retrosternal goiter Exclusion Criteria: Bilateral recurrent

laryngeal nerve paresis; Secondary thyroid surgery;
History of previous head and neck surgery; Parathyroid comorbidity

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **150**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
Because patients choose the surgery type by their own willing and economical situation, so both case and control groups are non randomized.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Research and Technology
Department, Tabriz University of Medical Sciences

Street address

Research and technology department, Daneshgah
Street, Tabriz

City

Tabriz

Postal code

Approval date

2014-01-20, 1392/10/30

Ethics committee reference number

92170

Health conditions studied

1

Description of health condition studied

Thyroid diseases

ICD-10 code

E07

ICD-10 code description

Other disorders of thyroid

Primary outcomes

1

Description

Investigating postoperative hypocalcemia prevalence in patients undergo surgery with 2 methods

Timepoint

1 day before surgery, 1 day after surgery, 2 weeks after surgery, 6 weeks after surgery

Method of measurement

Calculating total and ionized blood calcium amount

Secondary outcomes

1

Description

Comparing hypocalcemia severity in patients in both surgery methods

Timepoint

1 day before, 1 day after, 2 weeks after, 6 weeks after

Method of measurement

Calculating ionized and total blood calcium amounts

Intervention groups

1

Description

Thyroidectomy by Ligasure small jaw instrument:
Ligasure Small Jaw Instrument helps to coagulate and cut the thyroid nutrient vessels without any knot and suture, and facilitates thyroid resection procedure.

Category

Treatment - Surgery

2

Description

Thyroidectomy by Clamp and Tie method: This method is also known as Conventional thyroidectomy, which perform by several knots on nutrient vessels of thyroid, for completing thyroid resection.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Tabriz Emam Reza Hospital and Tabriz Shahid
Taleghani Hospital

Full name of responsible person

Street address

Emam Reza hospital, Daneshgah Street, Tabriz, Iran

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Student Research Committee, Tabriz University of Medical Sciences

Full name of responsible person

Hossein Mazouchian

Street address

Student Research Committee of Tabriz University of Medical Sciences, Pashmine Complex, Daneshgah Street, Tabriz, Iran

City

Tabriz

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Student Research Committee, 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

Ali Ramouz

Position

Medical student

Other areas of specialty/work**Street address**

Ramouz building, Rah ahan Street, Tabriz

City

Tabriz

Postal code**Phone**

+98 41 1441 3895

Fax**Email**

ali.ramouz@gmail.com

Web page address

Person responsible for scientific inquiries

Contact**Name of organization / entity**

Tabriz University of Medical Sciences

Full name of responsible person

Dr. Seyed Ziaeddin Rasi Hashemi

Position

Thoracic Surgery Subspecialist

Other areas of specialty/work**Street address**

Emam Reza Hospital, Daneshgah Street, Tabriz

City

Tabriz

Postal code**Phone**

+98 41 1441 3895

Fax**Email**

zia.hashemi@yahoo.com

Web page address

Person responsible for updating data

Contact**Name of organization / entity**

Student Research Committee, Tabriz University of Medical Sciences

Full name of responsible person

Ali Ramouz

Position

Student

Other areas of specialty/work**Street address**

Student Research Committee, Pashmine Complex, Daneshgah Street, Tabriz, Iran

City

Tabriz

Postal code**Phone**

00

Fax**Email****Web page address**

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