

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 May 2026

Premedication with single dose of Acetazolamid for the control of referred shoulder pain after laparoscopic cholecystectomy

Protocol summary

Summary

Post laparoscopic Shoulder pain is a common problem. It is assumed Acetazolamid prevents the occurrence of shoulder pain in the postoperative period. The reason is that, Acetazolamid prevents compounding of carbon dioxide with water which decreases sub diaphragmatic fluid acidity and cause referred shoulder pain Seventy patients who are candidates for the laparoscopic Cholecystectomy, after written consent randomly are placed in the two equal groups (Acetazolamid group and the control group). Main inclusion criteria are patients undergoing laparoscopic cholecystectomy in rang Of 30-60 years old. And some of exclusion criteria are: Sensitivity to sulfonamides, Renal and Hepatic failer, psychopathic patients, addiction, previous acidosis. The first group was given Acetazolamid 5mg/kg one hour before surgery by oral route, while the second group didn't received any drugs All patients Premedicated by midazolam /05mg/kg and Fentanyl 1µg/kg then Induction by Propofol 2mg/kg and Atracorium/.8 mg/kg were performed. After intubation, Maintenance of anesthesia continued by Isoflurane and N2O. All subsequent stages of anesthesia are similar in both groups. At the end of surgery and after awaking severity pain and analgesic consumption are recorded in (awaking) time 0, 2,4, 6, 12 and 24 hours post operative. And at the end of the study the results analyzed and compared

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201407111772N15**

Registration date: **2014-07-19, 1393/04/28**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-07-19, 1393/04/28

Registrant information

Name

Dawood Aghamohammadi

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1381 8940

Email address

aghamohammadid@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research / Tabriz University of Medical Sciences

Expected recruitment start date

2013-05-22, 1392/03/01

Expected recruitment end date

2014-05-22, 1393/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Premedication with single dose of Acetazolamid for the control of referred shoulder pain after laparoscopic cholecystectomy

Public title

Post laparoscopy shoulder pain

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: all patients undergoing laparoscopic cholecystectomy in rang of 30-60 years old. Exclusion criteria:1- addiction 2- psychopathic patients 3- patient avoidance 4-previous pain full disease 5-Sensitivity to sulfonamides 6- renal failer 7-COPD and lung disease8- pregnancy 9-hematologic disorder 10- previous acidosis 11- renal implantation 12-exitance of electrolyte imbalance 13- previous Lithium consumption 14- CNS disorder 15-Hepatic disorder16-use of other diuretics 17- previous shoulder pathology 18- previous muscle disease 19- hypoglycemia

Age

From **30 years** old to **60 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **70**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tabriz university of medical science , reseach ethical committee

Street address

Daneshghah street/ Tabriz university of medical science/ Vice chancellor of reseach/ ethical committee

City

Tabriz

Postal code

Approval date

2013-09-23, 1392/07/01

Ethics committee reference number

9273

Health conditions studied

1

Description of health condition studied

post laparascopy shoulder pain

ICD-10 code

T50.2

ICD-10 code description

Carbonic-anhydrase inhibitors

Primary outcomes

1

Description

Pain

Timepoint

0, 2, 4, 6, 12 and 24 hours after operation

Method of measurement

Visual Analogue Scale

Secondary outcomes

1

Description

Opioid cosumption

Timepoint

0, 2, 4, 6, 12 and 24 hours after operation

Method of measurement

Total Dose

Intervention groups

1

Description

Acetazolamide 5mg/kg one hour before surgery

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Reza Hospital/Tabriz

Full name of responsible person

Dawood Aghamohammadi

Street address

Daneshghah street/ Imam Reza Hospital

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz university of medical science/ Vice chancellor

of reseach

Full name of responsible person

Dawood Aghamohammadi

Street address

Daneshghah street/ Tabriz university of medical science/ Fuculty of medicin

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 science/ Vice chancellor of reseach

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 science/fuculty of medicin/ Anesthesiology Dept

Full name of responsible person

Dawood Aghamohammadi

Position

Associated Professor

Other areas of specialty/work

Street address

Daneshghah street/ Tabriz university of medical science//fuculty of medicin/ Anesthesiology Dept

City

Tabriz

Postal code

Phone

+98 41 1381 8940

Fax

Email

aghamohammadid@tbzmed.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tabriz university of medical science/fuculty of

medicin/ Anesthesiology Dept

Full name of responsible person

Dawood Aghamohammadi

Position

Associated Professor

Other areas of specialty/work

Street address

Daneshghah street/ Tabriz university of medical science/ Fuculty of medicin Tabriz

City

Tabriz

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Phone

+98 41 1381 8940

Fax

Email

aghamohammadid@tbzmed.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Tabriz university of medical science/fuculty of medicin/ Anesthesiology Dept

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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