

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of pregabalin-paracetamol on shoulder pain in patients after laparoscopic cholecystectomy, Double-blind controlled randomized trial

Protocol summary

Study aim

Determination of the effect of pregabalin-paracetamol on shoulder pain in patients after laparoscopic cholecystectomy

Design

double-blind randomized clinical trial, phase 3 on 90 patients, web-based randomization software was used for randomization.

Settings and conduct

The present study will be performed in the field of pain relief in 90 patients aged 20-60 years who are candidates for laparoscopic cholecystectomy in Imam Ali Hospital of North Khorasan University of Medical Sciences. Patients are randomly assigned to the three groups (two Intervention groups and placebo) using a web-based system. Evaluation of shoulder pain by visual analogue scale pain gauges in time intervals: recovery, 6, 12, 18 and 24 hours after surgery. To perform blinding, patients, surgeons, and individuals performing pain assessments at various intervals will be blinded to the groups.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 20 to 60 years, ASA physical status I-II, No drug addiction, No disease with chronic pain, No hypersensitivity to Pregabalin and Paracetamol, No history of disease and surgery in the shoulder and chest area Exclusion criteria: Conversion of laparoscopic surgery to laparotomy, any complication that increases postoperative pain

Intervention groups

The first group: Administration One hour before surgery, a single dose of pregabalin 300 mg orally. And 30 minutes before the end of surgery Paracetamol 1 gr per 100 cc of normal saline 0.9% diluted are given as an infusion. Also they will receive 1 gr Paracetamol per 100 cc N/S 0.9% diluted as an infusion per 6 to 24 hours after surgery The second group: Administration a single dose of pregabalin 300 mg orally, One hour before surgery placebo group: Administration of placebo, One hour

before surgery

Main outcome variables

Post Operative Pain

General information

Reason for update

Acronym

تأثیر پیرگابالین-پاراستامول بر درد شانه

IRCT registration information

IRCT registration number: **IRCT20141001019359N11**

Registration date: **2022-01-09, 1400/10/19**

Registration timing: **registered_while_recruiting**

Last update: **2022-01-09, 1400/10/19**

Update count: **0**

Registration date

2022-01-09, 1400/10/19

Registrant information

Name

Hossein Zeraati

Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-12-22, 1400/10/01

Expected recruitment end date

2022-06-22, 1401/04/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of pregabalin-paracetamol on shoulder pain in patients after laparoscopic cholecystectomy, Double-blind controlled randomized trial

Public title

Pregabalin and Paracetamol effect on pain after Laparoscopic cholecystectomy

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

20 to 60 years ASA physical status I-II No drug addiction No disease with chronic pain No hypersensitivity to Pregabalin and Paracetamol No history of disease and surgery in the shoulder and chest area and abdominal surgery

Exclusion criteria:

Conversion of laparoscopic surgery to laparotomy any complication that increases postoperative pain

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

3

Groups that have been masked

- Care provider
- Investigator
- Data analyser

Sample size

Target sample size: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Sampling in this study will be that first in order to enter the study patients will be in the form of non-random sampling of the type "available" and then divide them into three intervention groups by randomly assigned blocking using a web-based system. Random blocking at www.randomization.com will be done in 15 blocks of 6. So that in each block, there are 2 people in the first group (A), two people in the second group (B) and two people in the third group (C). After a random sequence was identified in all blocks, cards were written by writing C, B, and A to indicate which group each patient was assigned to, and by someone other than the research team from 1 to 90 in all blocks, respectively. They are numbered and these cards are placed in sealed non-transparent envelopes, respectively. Then, in order to hide the random allocation, when the patient visits, the opaque sealed envelope will be opened and then one by one, it will be determined for each sample of the relevant group.

Blinding (investigator's opinion)

Double blinded

Blinding description

None of the participants in the study will be aware of the randomization list and also to apply allocation concealment randomization, the groups are placed in closed envelopes in the admission section and eligible individuals who enter the study are included respectively. Therefore, the study was double-blind so that patients and outcome evaluation specialist are unaware of the allocation status of the three groups to the study.

Placebo

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of North Khorasan University of Medical Sciences

Street address

Vice Chancellor for Research of North Khorasan University of Medical Sciences, Bojnurd

City

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North Khorasan

Postal code

9416678894

Approval date

2021-05-02, 1400/02/12

Ethics committee reference number

IR.NKUMS.REC.1400.019

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

pain

ICD-10 code

R52.0

ICD-10 code description

Pain, not elsewhere classified

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

Post Operative Pain

Timepoint

Assay of pain at 0, 2, 4, 6, 8, 12 and 24 hours after surgery

Method of measurement

Visual Analog Score (VAS) Form of pain

2

Description

Pethedine/Morphine Consumption

Timepoint

First 24 hours after surgery

Method of measurement

Pethidine/Morphine consumption doses

Secondary outcomes

1

Description

Time of surgery

Timepoint

From induction of anesthesia time to extubation

Method of measurement

Time observation

2

Description

Pregabalin and Paracetamol Side Effects

Timepoint

First 24 hours after surgery

Method of measurement

Examination and observation of the patient

Intervention groups

1

Description

Intervention group: Administration One hour before surgery, a single dose of pregabalin 300 mg orally. And 30 minutes before the end of surgery Paracetamol 1 gr per 100cc of normal saline 0.9% diluted are given as an infusion. Also they will receive 1 gr Paracetamol per 100 cc N/S 0.9% diluted as an infusion per 6 to 24 hours after surgery

Category

Treatment - Drugs

2

Description

Intervention group: Administration a single dose of pregabalin 300 mg orally, One hour before surgery

Category

Treatment - Drugs

3

Description

Control group: Administration of placebo, One hour before surgery

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Ali hospital

Full name of responsible person

HosseinAli Soltani

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Emam Ali hospital, Bojnourd, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Bojnourd University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Bojnourd University of Medical Sciences

Full name of responsible person

Hossein Zeraati

Position

Assistant Professor

Latest degree

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no further information

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available