

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Jun 2026

Comparison of Granisetron and Dexmedetomidine and Lidocaine in reduce Etomidate injection pain in elective surgery

Protocol summary

Summary

Aim of this study is comparison of Granisetron and Dexmedetomidine and lidocaine in reduce pain of Etomidate injection. This study is clinical trial and double blind. 132 patients enter in this study. Inclusion criteria: 18 to 50 years; ASA I and II. Exclusion criteria: lack of control blood pressure; history of vascular disease; addiction to opioids; incidence of tromboflebite; diabetes ; chronic pain; history of tumor; burns in two hands; contraindication for injection Granisetron and Dexmedetomidine and Lidocaine. We put a tourniquet on the one arm. We will inflate tourniquet to 250 to 350 millimeter Hg. We will block venous drainage of both two hands. We will divide patients to four groups. We will inject 6 milligram Granisetron (2 milliliter Granisetron in one hand and 2 milliliter Normal saline 0/9 % in other hand simultaneously)in Granisetron group. We will inject 2 milligram Lidocain(40 milligram Lidocain in one hand and 2 milliliter Normal saline 0/9 % in other hand simultaneously)in Lidocain group. We will inject 5 micro grams (20 milliliter Dexmedetomidine in one hand and 2 milliliter Normal saline 0/9 % in other hand simultaneously) in Dexmedetomidine group. We inject 2 milliliter Normal saline 0/9 % in other hand simultaneously for intervention hand in control group. We will open tourniquet 2 minute after intervention and we will inject 2 milligram Etomidate in two hands simultaneously in all patients. We will record pain in two hands by Visual Analog Scale after inject drugs and 5 minute after inject drugs for all patients.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016122720258N21**

Registration date: **2017-04-10, 1396/01/21**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-04-10, 1396/01/21

Registrant information

Name

Fariba Farokhi

Name of organization / entity

Arak University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 86 3222 2003

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Recruitment status

Recruitment complete

Funding source

Vice challore of Research, Arak University of Medical Scinces

Expected recruitment start date

2016-10-21, 1395/07/30

Expected recruitment end date

2018-10-22, 1397/07/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of Granisetron and Dexmedetomidine and Lidocaine in reduce Etomidate injection pain in elective surgery

Public title

Comparison of Granisetron and Dexmedetomidine and Lidocaine in reduce Etomidate injection pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 18 to 50 years; ASA I and II Exclusion criteria: lack of control blood pressure; history of vascular disease; addiction to opioids; incidence of thrombolytic; diabetes ; chronic pain; history of tumor; burns in two hands; contra-indicated for injection Granisetron and Dexmedetomidine and Lidocaine

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **132**

Randomization (investigator's opinion)

Randomized

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

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features

Randomize by table of random numbers

Secondary Ids

empty

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

Ethics committee Arak University Of Medical Sciences

Street address

Arak, Sardasht, Basij Square, Payambar Azam Complex, Reaserch Center

City

Arak

Postal code

38149578558

Approval date

2016-10-17, 1395/07/26

Ethics committee reference number

IR.ARAKMU.REC.1395.273

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

General surgery

ICD-10 code

Z41.9

ICD-10 code description

Procedure for purposes other than remedying health state, unspecified

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

Pain

Timepoint

After injection drug and 5 minute after injection

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

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

Intervention group: We inject 6 milligram Granisetron : we inject 2 milliliter Granisetron in one vein of hand and 2 milliliter Normal saline 0/9 % in other vain of hand simultaneously.

Category

Treatment - Drugs

2**Description**

Intervention group: We inject 2 milligram Lidocain: we inject 40 milligram Lidocain in one vein of hand and 2 milliliter Normal saline 0/9 % in other vein of hand simultaneously.

Category

Treatment - Drugs

3**Description**

Intervention group: We inject 5 microgram: we inject 20 milliliter Dexmedetomidine in one vein of hand and 2 milliliter Normal saline 0/9 % in other vein of hand simultaneously.

Category

Treatment - Drugs

4**Description**

In control group: We inject 2 milliliter Normal saline 0/9 % in other hand simultaneously for intervention hand in control group

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Valiasr hospital

Full name of responsible person

Dr Hesamodin Modir

Street address

Valiasr hospital, Valiasr square

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Shahid Shirodi street, Valiasr square, Valiasr hospital

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modir.he@gmail.com

Web page address

-

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Arak University of Medical Sciences

Full name of responsible person

Dr Mohammad Rafiee

Street address

Vice chancellor for research, Payambar Azam Complex, Basij square, Sardasht, Arak, Iran

City

Arak

Grant name

-

Grant code / Reference number

-

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

Yes

Title of funding source

Vice chancellor for research, Arak 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

Arak University of Medical Sciences

Full name of responsible person

Dr Esmaeel Moshiri

Position

Faculty, Anesthesiologist

Other areas of specialty/work

Street address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Arak University of Medical Sciences

Full name of responsible person

Dr Hesamodin Modir

Position

Faculty, Anesthesiologist

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Person responsible for updating data

Contact

Name of organization / entity

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Full name of responsible person

Samira Soltani

Position

medicine 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