

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Effect of ondansetron on injection pain caused by Etomidate

Protocol summary

Summary

Etomidate causes pain when injected intravenously during induction of anesthesia. In this study we sought to determine if pretreatment by ondansetron reduces the pain on injection of etomidate. 20 patients of both sexes aged between 18 to 50 years of American Society of Anesthesiologists(ASA) physical status class I or II, whom were candidates for various elective surgical procedures requiring more than one intravenous access are enrolled in the study. On arrival to the operating room two 22 gauge cannulas are inserted into veins on the dorsum of both hands. Following the infusion of 100 mL normal saline into both hands, using an elastic band, venous drainage of hands are occluded at midarm. The patients are administered 8mg (2 mL) of ondansetron from one hand and 2ml of 0.9% saline from the other hand at the same time. The elastic band is removed after 1 minute and 2mg(1 mL) of etomidate is administered at the same rate simulataneously at both hands. The patients are asked to give a score of pain based on a verbal analogue scale (VAS) to each hand.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201106125140N4**

Registration date: **2012-09-25, 1391/07/04**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-09-25, 1391/07/04

Registrant information

Name

Omid Azimaraghi

Name of organization / entity

Tehran University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2012-05-01, 1391/02/12

Expected recruitment end date

2012-07-31, 1391/05/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of ondansetron on injection pain caused by

Etomidate

Public title

Pain on Injection

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion Criteria: Society of Anesthesiologists(ASA) physical status class I or II. Exclusion Criteria: patients with a history of thrombophebitis or vascular disease; chronic pain; diabetes mellitus; history of tumors or burns in either hands; history of addiction; any contraindications to injection of ondansetron or etomidate.

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: 20

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Used

Assignment
Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethic comittee, Faculty of Medicine of Tehran
university of Medical Sciences

Street address

Second floor, Faculty of Medicine, Tehran University
of Medical Sciences and Health Services

City

Tehran

Postal code

Approval date

2012-03-05, 1390/12/15

Ethics committee reference number

90/3451

Health conditions studied

1

Description of health condition studied

pain prevented in healthy subjects after injection

ICD-10 code

T80.9

ICD-10 code description

Unspecified complication following infusion, transfusion
and therapeutic injection

Primary outcomes

1

Description

Pain

Timepoint

2 minutes after injection

Method of measurement

visual analogue scale

Secondary outcomes

1

Description

urticaria

Timepoint

30 minutes after ondansetron

Method of measurement

documenting any urticaria on thorax and around the
neck

Intervention groups

1

Description

Intervention: 8mg (2 mL) of ondansetron was
administered from one hand.

Category

Prevention

2

Description

Control: 2ml of 0.9% saline from the other hand at the
same time.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Dr. Shariati Hospital

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Shahin Akhoondzadeh

Street address

Vice Chancellor for research , Tehran University of
Medical Sciences

City

Tehran

Grant name

Grant code / Reference number

Is the source of funding the same sponsor

organization/entity?

Yes

Title of funding source

Tehran 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**

Department of Anesthesiology, Dr. Shariati Hospital

Full name of responsible person

Dr. Ali Movafegh

Position

Professor of Anesthesiology

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Dr. Shariati Hospital

Full name of responsible person

Omid Azimaraghi

Position

Resident of Anesthesiology

Other areas of specialty/work**Street address****City****Postal code****Phone****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