Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Jun 2026

Comparison of the begning of anesthesia induced by two methods of using lidocaine in intravenous regional anesthesia of the upper limb

Protocol summary

Study aim
Comparison of the begning of anesthesia induced by two methods of using lidocaine in intravenous regional anesthesia of the upper limb

Design
Clinical trial of a single-blind, control group with a sample size of 40 people

Settings and conduct
Meanwhile to explaining the intervention and Taking consent from the patient, amount of 20-15 ml of lidocaine 1% is injected Intravenous method with respect to the maximum dose of 3 mg per kilogramt, and the results will be checked.

Participants/Inclusion and exclusion criteria
1- Patients undergoing upper limb (hand and forearm) surgery less than 90 minutes 2. Patients are classified in the American Association of Anesthesiologists in Classes 1 and 2 3- Age of patients between 18 and 60 years 4. Patients who do not have the tendon to close the tourniquet in the limbs (sickle cell disease, rhinitis, history of lidocaine allergy, history of favism, seizure) Non-arrival conditions: 1. Failure to get the venous line in the corresponding limb 2- Drain the tourniquet after injection of the drug for any reason 3- The length of the surgery is more than 90 minutes

Intervention groups
Use of 20-15 ml of lidocaine 1% based on the maximum dose of 3 mg kg of anesthetized upper limb pation

Main outcome variables
Anesthesia time and systolic and diastolic blood pressure

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20181124041740N1**
Registration date: **2020-04-14, 1399/01/26**
Registration timing: **retrospective**
Last update: **2020-04-14, 1399/01/26**
Update count: **0**

Registration date
2020-04-14, 1399/01/26

Registrant information

Name
Alireza Talai

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 51 5725 1002

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talaee.a@gmu.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-01-21, 1397/11/01

Expected recruitment end date
2019-08-22, 1398/05/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison of the begning of anesthesia induced by two methods of using lidocaine in intravenous regional anesthesia of the upper limb

Public title
Comparison of the begning of anesthesia induced by two methods of using lidocaine in intravenous regional anesthesia of the upper limb

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients undergoing upper limb (hand and forearm) surgery should be under 90 minutes Patients are classified in the American Association of Anesthesiologists in Classes 1 and 2 The age of the patients is between 18 and 60 years Patients who do not have the ability to close the tourniquet in the limbs (sickle cell disease, rhinitis, history of lidocaine allergy, history, favism, seizure)

Exclusion criteria:

Failure to get the venous line in the relevant limb Drain the tourniquet after injection of the drug for any reason The length of the surgery is longer than 90 minutes

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

All participants were described as having anesthesia but were unaware of the amount and concentration of the drug

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Gonabad University of Medical Sciences

Street address

Gonabad University of Medical sciences , Dr Mehdizade street , Pardise

City

Gonabad

Province

Razavi Khorasan

Postal code

9691793718

Approval date

2015-10-14, 1394/07/22

Ethics committee reference number

IR.GMU.REL.1394.42

Health conditions studied

1

Description of health condition studied

Evaluation of the time to reach complete upper limb anesthesia with intravenous anesthesia

ICD-10 code

ICD-10 code description

موضوع مورد مطالعه بیماری نیست

Primary outcomes

1

Description

DurationTime to start numbness

Timepoint

every minute immediately after intravenous administration of lidocaine

Method of measurement

Pinprick

Secondary outcomes

1

Description

blood pressure

Timepoint

before icision and immediately after incision

Method of measurement

Mercury pressure gauge

Intervention groups

1

Description

Intervention group: In the first group, 40 ml lidocaine half a percent was injected intravenous

Category

Treatment - Drugs

2

Description

Intervention group: In the second group, 20 ml lidocaine one percent was injected intravenous

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
15 khordad hospital
Full name of responsible person
Alireza Talai
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Gonabad University of Medical Sciences
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Grant name
0
Grant code / Reference number
0
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Gonabad University of Medical
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
Gonabad University of Medical Sciences
Full name of responsible person
Alireza Talai
Position
MSC
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
No - There is not a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be 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