# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 2026

## Comparison of the Effects of Lidocaine Sprays and Ecupressure on Muscle Pain Injection

### Protocol summary

**Study aim**
Comparison of the Effects of Lidocaine Sprays and Ecupressure on Muscle Pain Injection

**Design**
A clinical trial with a control group with parallel group design of 252 patients, one blind, randomized control group

**Settings and conduct**
This study is randomized clinical trial. The research population is the patients who visit the emergency department of Neyshabour 22 Bahman Hospital for intramuscular injection. A demographic questionnaire and a VAS visual analogue instrument will be used to collect the data. The instrument complement will not be aware of the type of injection. Before injection, the method of determining the amount of pain will be taught to the patients and oral consent will be obtained from the patients. Patients in Groups A, B, and C are divided into the following simple random sampling, with the following characteristics: Group A: Intramuscular injection without any intervention Group B: Use of lidocaine sprays before muscle injection Group C: Performing intramuscular injection and performing medicine Pressure in the area (UB 31).

**Participants/Inclusion and exclusion criteria**
At least 15 years old؛ The desire to participate in the study

**Intervention groups**
Group A: Muscle infusion without any intervention Group B: Use of lidocaine spray before intramuscular injection Group C: Perform acupressure before muscle injection

**Main outcome variables**
Reducing pain in patients

### General information

**Reason for update**

**Acronym**

**IRCT registration information**
IRCT registration number: **IRCT20180110038300N1**
Registration date: **2019-05-25, 1398/03/04**
Registration timing: **prospective**

Last update: **2019-05-25, 1398/03/04**
Update count: **0**

**Registration date**
2019-05-25, 1398/03/04

**Registrant information**

**Name**
Arezoo Davarinia Motlagh Quchan

**Name of organization / entity**

**Country**
Iran (Islamic Republic of)

**Phone**
+98 51 4429 0161

**Email address**
a.davarinia@yahoo.com

**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2019-07-01, 1398/04/10

**Expected recruitment end date**
2020-03-01, 1398/12/11

**Actual recruitment start date**
empty

**Actual recruitment end date**
empty

**Trial completion date**
empty

**Scientific title**
Comparison of the Effects of Lidocaine Sprays and Ecupressure on Muscle Pain Injection

**Public title**
Comparison of the Effects of Lidocaine Sprays and

Ecupressure on Muscle Pain Injection

**Purpose**

Prevention

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Age more than 15 years The desire to participate in the study

**Exclusion criteria:**

**Age**

From **15 years** old

**Gender**

Both

**Phase**

3

**Groups that have been masked**

- Participant
- Outcome assessor

**Sample size**

Target sample size: **252**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Patients are divided into 3 groups A, B and C by permutation blocks. Group A intramuscular injection without any intervention Group B: Use of lidocaine spray before muscle injection Group C: Acupressure before intramuscular injection

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

In this study, the participants were blinded and do not know which of the 3 study groups would be.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**

Sabzevar University of Medical Sciences

**Street address**

Sabzevar University of Medical Sciences

**City**

Sabzevar

**Province**

South Khorasan

**Postal code**

9617913114- 96179131

**Approval date**

2019-03-02, 1397/12/11

**Ethics committee reference number**

IR.MEDSAB.REC.1397.115

## Health conditions studied

### 1

**Description of health condition studied**

**ICD-10 code**

**ICD-10 code description**

### 2

**Description of health condition studied**

Lidocaine spray

**ICD-10 code**

**ICD-10 code description**

## Primary outcomes

### 1

**Description**

Reduse pain of intramuscular injection

**Timepoint**

Immediately after intramuscular injection

**Method of measurement**

Visual Analuge Score

## Secondary outcomes

### 1

**Description**

Determine of Satisfaction

**Timepoint**

After muscle injections

**Method of measurement**

check list

## Intervention groups

### 1

**Description**

Acupressure

**Category**

Treatment - Other

### 2

**Description**

Lidocaine Spray

**Category**

Treatment - Drugs

## Recruitment centers

### 1

**Recruitment center**

**Name of recruitment center**

22 Bahman Neyshabour Hospital

**Full name of responsible person**

Arezoo DavariniaMotlagh Quchan

**Street address**

hekmat

**City**

Sabzevar

**Province**

Razavi Khorasan

**Postal code**

9617913114- 96179131

**Phone**

+98 51 4441 7594

**Email**

a.davarinia@yahoo.com

## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**

Sabzevar University of Medical Sciences

**Full name of responsible person**

Arezoo Davarinia Motlagh Quchan

**Street address**

Hekmat

**City**

sabzevar

**Province**

Razavi Khorasan

**Postal code**

: 9617913114- 961791

**Phone**

+98 51 4441 8356

**Email**

a.davarinia@yahoo.com

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Sabzevar 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**

Sabzevar University of Medical Sciences

**Full name of responsible person**

Arezoo Davarinia Motlagh Quchan

**Position**

Faculty member

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

Hekmat

**City**

Sabzevar

**Province**

Razavi Khorasan

**Postal code**

: 9617913114- 961791

**Phone**

+98 51 4441 8356

**Email**

a.davarinia@yahoo.com

## Person responsible for scientific inquiries

**Contact**

**Name of organization / entity**

Sabzevar University of Medical Sciences

**Full name of responsible person**

Arezoo Davarinia Motlagh Quchan

**Position**

lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

Hekmat

**City**

Sabzevar

**Province**

Razavi Khorasan

**Postal code**

: 9617913114- 961791

**Phone**

+98 51 4441 8356

**Email**

a.davarinia@yahoo.com

## Person responsible for updating data

**Contact**

**Name of organization / entity**

Sabzevar University of Medical Sciences

**Full name of responsible person**

Arazoo Davarinia Motlagh Quchan

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

No 7, Hekmat Ave

**City**
Sabzevar
**Province**
Razavi Khorasan
**Postal code**
: 9617913114- 961791
**Phone**
+98 51 4441 8356
**Email**
a.davarinai@yahoo.com

## 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**
No more information
**Study Protocol**
No - There is not a plan to make this available
**Statistical Analysis Plan**
Not applicable
**Informed Consent Form**
Yes - There is a plan to make this available
**Clinical Study Report**
Yes - There is 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
**Title and more details about the data/document**
All information obtained will be unidentified.
**When the data will become available and for how long**
After printing the results
**To whom data/document is available**
Researchers working in medical science universities
**Under which criteria data/document could be used**
There is no other condition.
**From where data/document is obtainable**
Student research Comitee
**What processes are involved for a request to access data/document**
There is no process
**Comments**