

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jun 2026

Evaluation The Effect of Heparin Density unit 1000 with 5000 in Blood Sampling on the Results of Arterial Blood Gases in Intensive care unit in hospitals of sabzevar city in 1396.

Protocol summary

Summary

The present study is a double-blind randomized (patient and researchers) clinical trial. The aim of this study was to determine and compare the effects of heparin 1000 and 5000 units on arterial blood gas findings with inclusion criteria, willingness to participate in The study was suitable for appropriate arterial blood supply, aged 18 to 70 years, traumatic patients undergoing mechanical ventilation up to one week, and exclusion criteria, inadequate blood supply to the site of bleeding, lesion or surgical shunt (Presence of fistula in that limb), evidence of peripheral vascular disease in the area around the hand of the site of bleeding, the presence of coagulopathy or counter-treatments Moderate to high doses, other patients hospitalized in other parts, active infection in the arterial pathway, and any damage to the organs including fracture, dislocation, and burn, deterioration of the patient, death or discharge from the department, and trauma of the shelf Breast in the intensive care unit of the Shahid Beheshti Hospital, Sabzevar University of Medical Sciences in 1396 will be performed. In this study, arterial blood samples were collected from 152 samples (n = 76, n = 76, control group) from the research community. Blood samples were equally distributed (50 units) in two 100-unit insulin syringes impregnated with 1000 and 5000 heparin units, and then the samples were sent to the lab, after receiving the answer, compared with each other. In this study, the measured variables included heparin 1000 units, heparin 5000 units, and, PH, Pao₂, Paco₂, Hco₃, BEe, Beb, Na, Ca, K.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017091836266N1**

Registration date: **2017-10-28, 1396/08/06**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date
2017-10-28, 1396/08/06

Registrant information

Name
Reza Borabadi
Name of organization / entity
Sabzevar University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

" Sabzevar University of Medical Sciences"

Expected recruitment start date

2017-10-27, 1396/08/05

Expected recruitment end date

2018-02-04, 1396/11/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation The Effect of Heparin Density unit 1000 with 5000 in Blood Sampling on the Results of Arterial Blood

Gases in Intensive care unit in hospitals of sabzevar city in 1396.

Public title

Evaluation The Effect of Heparin Density unit 1000 with 5000 in Blood Sampling on the Results of Arterial Blood Gases in Intensive care unit in hospitals of sabzevar city in 1396.

Purpose

Treatment

Inclusion/Exclusion criteria

Entry criteria Inclination to participate in appropriate blood flow to the affected arteries 18 to 70 years of age Patients underwent trauma under mechanical ventilation up to one week Standard for insufficient bleeding in the blood collection site Lesion or surgical shunt (presence of fistula in it Limb) evidence of peripheral vascular disease in the surrounding area of the cochlear region Coagulopathy or anticoagulant treatment with a moderate to high dose of other patients admitted to other parts of the body Active infection in the arterial pathway and any damage to the limbs include: fracture, dislocation, and Death burn or deterioration of the chest trauma section

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **152**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

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, Towhid Town

City

Sabzevar

Postal code

Approval date

2017-08-13, 1396/05/22

Ethics committee reference number

IR.MEDSAB.REC.1396.62

Health conditions studied

1

Description of health condition studied

Heparine Sodium

ICD-10 code

T45.9

ICD-10 code description

Primarily systemic and haematological agent, unspecified

Primary outcomes

1

Description

Heparin 1000 unit

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

2

Description

Sodium

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

3

Description

Kalium

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

4

Description

Calcium

Timepoint

Onse

Method of measurement

lab Test

5

Description

Pao2

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

6

Description

Paco2

Timepoint

Onse

Method of measurement

lab Test

7

Description

Hco3

Timepoint

Onse

Method of measurement

lab Test

8

Description

Buffer Base

Timepoint

Onse

Method of measurement

lab Test

9

Description

Base Exese

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

10

Description

pH

Timepoint

One day on the first day, the second day, the third day

Method of measurement

Laboratory, arterial blood gas meter

Secondary outcomes

1

Description

Heparin 5000 unit

Timepoint

one day, second day,

Method of measurement

Laboratory, arterial blood gas meter

Intervention groups

1

Description

Equalize insulin syringes (manufactured by Iran Medical Company) with a 1000-heparin solution (for intervention group) for 1000 heparin units. One heparin injection of 5000 units of the Alborz Drug Company with four cc distilled water in one The 5-cc syringe of the Iran-Tehran Medical Product was diluted and delivered to the 5 th cc, of which every thirty thousand equals 1,000 units), at 0.1 MI heparinized.

Category

Treatment - Drugs

2

Description

In the control group, based on the status quo, heparin ampoules of 5,000 units were found to be 0.1ml To insert the insulin syringes used for blood sampling, arterial blood gas was used

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Beheshti Relief Hospital, West Razi Street, Sabzevar

Full name of responsible person

Reza Borabadi

Street address

No. 9, Fayyaz 6, Fayyaz Street, Sabzevar

City

Sabzevar

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Sabzevar University of Medical Sciences

Full name of responsible person

Doctor Ali Mohammad Zadeh

Street address

Sabzevar University of Medical Sciences, Towhid Town Sabzevar

City

Sabzevar

Grant name

Grant code / Reference number

IR. MEDSAB.REC.1396.62

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

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

Sabzevar University of Medical Sciences, Sabzevar
Towhid Town

Full name of responsible person

Reza BORABADI

Position

Nursse in intensive care unit

Other areas of specialty/work

Street address

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Person responsible for scientific inquiries

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Name of organization / entity

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Towhid Town

Full name of responsible person

Reza Borabadi

Position

Masters student

Other areas of specialty/work

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Person responsible for updating data

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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