

Clinical Trial Protocol

Iranian Registry of Clinical Trials

20 Jun 2026

The comparison of the effect of position change on the arterial oxygen saturation in different parts of the body in patients with and without cardiac and respiratory disorders

Protocol summary

Summary

The purpose of this study is to the comparison of the effect of position change on the arterial oxygen saturation in different parts of the body in patients with and without cardiac and respiratory disorders. Inclusion criteria are lack of nail varnish and glue on the location of the probes and the ability to position change. Exclusion criteria are request to withdraw from the study at any stage and low consciousness level. In this clinical trial 165 patients will be selected by using non randomized technique. At first, the oxygen saturation in different positions and in different parts of the body will be measured by pulse oximetry and will be recorded in the check list. Then the patient will be placed in semi-sitting position for 15 minutes and arterial blood oxygen saturation will be measured at the same time in the three organs earlobes, fingertips and the tip of toe. Then the the patient will be placed in the supine, prone and semi-sitting position and oxygen saturation will be measured in different organs at the same time. Also oxygen saturation in the three groups of patients normal, respiratory and cardiac patients will be measured.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016082817800N2**
Registration date: **2016-09-11, 1395/06/21**
Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-09-11, 1395/06/21

Registrant information

Name

Samane Najafi

Name of organization / entity

Gonabad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Gonabad University of Medical Sciences

Expected recruitment start date

2016-09-22, 1395/07/01

Expected recruitment end date

2016-11-21, 1395/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of the effect of position change on the arterial oxygen saturation in different parts of the body in patients with and without cardiac and respiratory disorders

Public title

The comparison of the effect of position change on the arterial oxygen saturation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: lack of nail varnish and glue on the location of the probes; the ability to position change.
Exclusion criteria: request to withdraw from the study at any stage; low consciousness level.

Age

From **16 years** old to **100 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **165**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

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, Next to the Asian Road, Gonabad, Khorasan Razavi, Iran, Islamic Republic Of.

City

Gonabad

Postal code

Approval date

2014-05-21, 1393/02/31

Ethics committee reference number

GMU.REC.1393.19

Health conditions studied

1

Description of health condition studied

Respiratory patients

ICD-10 code

J44.8, J45

ICD-10 code description

Other specified chronic obstructive pulmonary disease;
Asthma, unspecified

2

Description of health condition studied

Cardiac patients

ICD-10 code

I20.9, I21

ICD-10 code description

Angina pectoris, unspecified; Acute myocardial infarction, unspecified

Primary outcomes

1

Description

Arterial blood oxygen saturation

Timepoint

15 minutes

Method of measurement

Pulse oximetry device is a standard device to measure arterial blood oxygen saturation that for its reliability will be used equivalent reliability. For this purpose, its accuracy will be checked with another pulse oximetry device before the working every day.

Secondary outcomes

empty

Intervention groups

1

Description

At first, The patients without cardiac and respiratory disease will be placed in semi-sitting position for 15 minutes and arterial blood oxygen saturation will be measured at the same time in the three organs earlobes, fingertips and the tip of toe. Then the the patient will be placed in the supine, prone and semi-sitting position and oxygen saturation will be measured in different organs at the same time.

Category

Treatment - Other

2

Description

At first, In patient with cardiac and respiratory disease will be placed in semi-sitting position for 15 minutes and arterial blood oxygen saturation will be measured at the same time in the three organs earlobes, fingertips and the tip of toe. Then the the patient will be placed in the supine, prone and semi-sitting position and oxygen saturation will be measured in different organs at the same time.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

The 22 Bahman hospital

Full name of responsible person

Samane Najafi

Street address

Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Khorasan Razavi, Iran, Islamic Republic Of.

City

Gonabad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Gonabad University of Medical Sciences

Full name of responsible person

Dr. Ali Mohammadpour

Street address

Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Khorasan Razavi, Iran, Islamic Republic Of.

City

Gonabad

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, Gonabad 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

Gonabad University of Medical Sciences

Full name of responsible person

Dr. Ali Mohammadpour

Position

PhD in nursing education

Other areas of specialty/work

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MSc in nursing education

Other areas of specialty/work

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Position

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Other areas of specialty/work

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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