

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The comparison of the effects of shallow and deep endotracheal suctioning methods on physiological indices and airway clearance in patients hospitalized in intensive care units of Al-Zahra Hospital in 2013.

Protocol summary

Summary

Objective: Comparison of the effects of shallow and deep endotracheal suctioning methods on physiological indices and airway clearance in patients hospitalized in intensive care units of Al-Zahra Hospital in 2013. Study design: Randomized clinical trial. Study population: patients admitted to the intensive care unit at Al-Zahra Hospital. Major inclusion criteria: age over than 18; obtaining informed consent; no blood clotting disorders; no chronic respiratory disease; intubation time between 48 hours and one week. Major exclusion criteria: patients who would discontinue voluntarily; extubation during the study; become unstable hemodynamic parameters such as bradycardia, arrhythmia, cyanosis, loss of arterial oxygen. Sample Size: 74 patients. Intervention: using shallow endotracheal suction in shallow suction group and deep endotracheal suction in deep suction group. Time of intervention: shallow and deep endotracheal suction will be performed for each group. Design variables will be taken immediately before, immediately after, 1, 2 and 3 minutes after endotracheal suctioning in both groups. Primary outcomes: changes in physiological indices.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012123111954N1**
Registration date: **2013-05-01, 1392/02/11**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-05-01, 1392/02/11

Registrant information

Name

Mohammad Abbasinia

Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Isfahan University of Medical Sciences

Expected recruitment start date

2013-04-09, 1392/01/20

Expected recruitment end date

2013-05-22, 1392/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of the effects of shallow and deep endotracheal suctioning methods on physiological indices and airway clearance in patients hospitalized in intensive care units of Al-Zahra Hospital in 2013.

Public title

The effects of endotracheal suctioning methods on physiological indices and airway clearance

Purpose

Supportive

Inclusion/Exclusion criteria

Major inclusion criteria: age over than 18; obtaining informed consent; no blood clotting disorders; no chronic respiratory disease; intubation time between 48 hours and one week. Major exclusion criteria: extubation during the study; become unstable hemodynamic parameters such as bradycardia, arrhythmia, cyanosis, loss of arterial oxygen

Age

From **19 years** old to **85 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

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 Isfahan university of medical sciences

Street address

Isfahan University of Medical Sciences, Azadi Square, Hezar-Jerib street, Isfahan. Postal cod: 81746-73461

City

Isfahan

Postal code

Approval date

2013-04-09, 1392/01/20

Ethics committee reference number

392015

Health conditions studied

1

Description of health condition studied

Respiratory conditions due to other specified external agents

ICD-10 code

J70.8

ICD-10 code description

Respiratory conditions due to other specified external agents

Primary outcomes

1

Description

Blood pressure

Timepoint

Immediately before, immediately after, and 1 and 2 min after endotracheal suctioning

Method of measurement

Vital signs monitor

2

Description

Heart Rate

Timepoint

Immediately before, immediately after, and 1 and 3 min after endotracheal suctioning

Method of measurement

Vital signs monitor

3

Description

Respiratory Rate

Timepoint

Immediately before, immediately after, and 1 and 3 min after endotracheal suctioning

Method of measurement

Vital signs monitor

4

Description

Spo2

Timepoint

Immediately before, immediately after, and 1 and 3 min after endotracheal suctioning

Method of measurement

Vital signs monitor

5

Description

Number of endotracheal suctioning

Timepoint

After each endotracheal suctioning

Method of measurement

Counting the number of endotracheal suctioning

Secondary outcomes

empty

Intervention groups

1

Description

In shallow suction group the suction catheter insert to the end of the endotracheal tube. Then negative pressure performs while pulling out the catheter.

Category

Prevention

2

Description

In deep suction group the suction catheter insert until resistance is met, then it withdraw by 1 cm before application of negative pressure.

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Al-Zahra Hospital

Full name of responsible person

Abbasynia Mohammad (student of MSc in critical care nursing)

Street address

Al-Zahra Hospital, Sofeh Avenue, Isfahan. Postal cod: 81746-75731

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Isfahan University of Medical Sciences

Full name of responsible person

Dr Peiman Adibi

Street address

Isfahan University of Medical Sciences, Azadi Square, Hezar-Jerib street, Isfahan. Postal cod: 81746-73461

City

Isfahan

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, Isfahan 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

Isfahan University of Medical sciences

Full name of responsible person

Abbasinia Mohammad

Position

student of MSc in critical care nursing

Other areas of specialty/work

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Full name of responsible person

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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