Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Bronchodilator Effect of Nebulized Hypertonic 3% Saline in Asthma Attack

Protocol summary

Summary

Objectives: Analysis of nebulization of hypertonic 3% Saline in Acute Asthma Exacerbation Design, setting and conduct: In this Clinical Trial study and will be done on 169 patients in case and 168 patients in control group, we'll give Saline 3% in addition to standard treatment to the case group and so the control group will receive standard treatment Major Inclusion and Exclusion criteria: Age above 18 years old; Clinically or Para-clinically Asthma History include and History of Cardiovascular Diseases; History of COPD; History of other pulmonary diseases; History of Smoking more than 10 years; Pregnant women; Systolic Blood Pressure less than 100 mmHg exclude Intervention: Saline 3% nebulization to case group outcome measures: Peak Flow Meter parameters will be assessed in two groups

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016060526630N2**
Registration date: **2016-06-21, 1395/04/01**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-06-21, 1395/04/01

Registrant information

Name

Arash Forouzan

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

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Email address

arash-forouzan@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice challencor for reasearch of Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2014-05-05, 1393/02/15

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Bronchodilator Effect of Nebulized Hypertonic 3% Saline in Asthma Attack

Public title

Bronchodilator Effect of Nebulized Hypertonic 3% Saline in Asthma Attack

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion Criteria: Acute Asthma Attack with: Age above 15 years old; Clinically or Para-clinically Asthma History Exclusion Criteria: History of Cardiovascular Diseases; History of COPD; History of other pulmonary diseases; History of Smoking more than 10 years; Pregnant women; Systolic Blood Pressure less than 100 mmHg

Age

From **15 years** old to **139 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **337**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single 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 Ahvaz University of Medical Sciences

Street address

Research Assistant, Next to central Building, Ahvaz Jundishapur University of Medical Sciences

City

Ahvaz

Postal code

Approval date

2014-05-03, 1393/02/13

Ethics committee reference number

ajums.rec.1393.120

Health conditions studied

1

Description of health condition studied

Acute Exacerbation of Asthma

ICD-10 code

J45

ICD-10 code description

Asthma

Primary outcomes

1

Description

Forced Expiratory Volume in First Second (FEV1)

Timepoint

Before intervention, 20 minutes after intervention, 40 minutes after intervention, 60 minutes after intervention

Method of measurement

Milliliter with use of Peak Flow Meter

2

Description

Peak Expiratory Flow Rate (PEFR)

Timepoint

Before intervention, 20 minutes after intervention, 40 minutes after intervention, 60 minutes after intervention

Method of measurement

Milliliter with use of Peak Flow Meter

Secondary outcomes

1

Description

Blood Pressure

Timepoint

Before Intervention

Method of measurement

Millimeter of Hg

Intervention groups

1

Description

Intervention Group: Salbutamol 2.5mg each 20 minutes via nebulizer Atrovent 2.5mg each 20 minutes via nebulizer Prednisolone 50mg one time by mouth MgSO4 2gr one time IV infusion in 20 minutes, 3% Saline 2.5cc via nebulizer

Category

Treatment - Drugs

2

Description

Control Group: Salbutamol 2.5mg each 20 minutes with nebulizer Atrovent 2.5mg each 20 minutes with nebulizer Prednisolone 50mg by mouth one time MgSO4 2g intravenous infusion in 20 minutes

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Khomeini Hospital

Full name of responsible person

Dr Arash Forouzan

Street address

Azadi Street

City

Ahvaz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice challencor for reasearch of Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Nader Saki

Street address

Vice chancellor for research, Ahvaz Jundishapur University of Medical Sciences

City

Ahvaz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice challencor for reasearch of Ahvaz Jundishapur 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

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Dr. Arash Forouzan

Position

Assistant Professor of Emergency Medcine

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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