

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Jun 2026

Evaluation of Legionella pneumophila prevalence in patient with Ventilator associated pneumonia on two humidification system in intensive care unit of Shahid Bahonar hospital

Protocol summary

Summary

Ventilator associated pneumonia is the respiratory infection in patient who have been intubated more than 48 hours and went under mechanical ventilator. Among different infectious causes of Ventilator associated pneumonia the Legionella pneumophila infection is more important because the water supply of hospital are the most important source of this pathogen. Two system are used for humidifying and warming the inspiratory gas. These systems include heated humidifier and heat & moisture exchanger. To identifying the pathogenic cause of Ventilator associated pneumonia in ICU patients and also finding the way to decrease the incidence of this infection it is necessary to asses the prevalence of Ventilator associated pneumonia related to Legionella and then the role of two different humidifier as preventing agent be evaluated.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201403255426N7**

Registration date: **2014-04-14, 1393/01/25**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2014-04-14, 1393/01/25

Registrant information

Name

Mehdi Ahmadinejad

Name of organization / entity

Anesthesiology department, Kerman University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 34 0223 5011

Email address

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Recruitment status

Recruitment complete

Funding source

Kerman University of Medical Sciences

Expected recruitment start date

2014-04-04, 1393/01/15

Expected recruitment end date

2014-06-05, 1393/03/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of Legionella pneumophila prevalence in patient with Ventilator associated pneumonia on two humidification system in intensive care unit of Shahid Bahonar hospital

Public title

Evaluation of Legionella pneumophila prevalence in patient with Ventilator associated pneumonia on two humidification system in intensive care unit of Shahid Bahonar hospital

Purpose

Prevention

Inclusion/Exclusion criteria

Including criteria: traumatic intubated patients between 17 to 70 years old. Excluding criteria: patients who had been admitted with previous pneumonia diagnosis and

have been shown sign of pneumonia less than 48 hours of admission. Patients with lung contusion or underlying disease such as cystic fibrosis and COPD. Patients with renal failure and false positive and negative of urinary Legionella test and patient that receive antibiotics that affect Legionella. Patient who have positive urinary antigen when admitted to ICU.

Age

From **17 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)

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**

Kerman University of Medical Sciences

Street address

Somaye cross road

City

Kerman

Postal code**Approval date**

2014-02-26, 1392/12/07

Ethics committee reference number

501/92/K

Health conditions studied**1****Description of health condition studied**

Legionella pneumonia

ICD-10 code

A48.1

ICD-10 code description

Legionnaires disease

Primary outcomes**1****Description**

Legionella Urinary Antigen

Timepoint

48 h

Method of measurement

Urinary Antigen Kit

Secondary outcomes

empty

Intervention groups**1****Description**

Application of Heated Humidifier and Heat and moisture exchanger

Category

Treatment - Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shahid Bahonar Hospital

Full name of responsible person

Mehi Ahmadinejad

Street address

Garani Street, Shahid Bahonar Hospital, ICU

City

Kerman

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Kerman University of Medical Sciences

Full name of responsible person

Abbas Pardakhty

Street address

Somaye cross road

City

Kerman

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Kerman 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

Kerman University of medical sciences

Full name of responsible person

Mehdi AhmadiNejad

Position

Assistant Professor

Other areas of specialty/work

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Mehdi AhmadiNejad

Position

Assistant Professor

Other areas of specialty/work

Street address

Shahid Bahonar Hospital

City

Kerman

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