

Clinical Trial Protocol

Iranian Registry of Clinical Trials

20 Jun 2026

Developing a comprehensive practical protocol for using point -of -care -ultrasonography in disposition of patients with acute non-traumatic dyspnea in emergency department

Protocol summary

Study aim

Developing a comprehensive practical protocol for using point -of -care -ultrasonography in disposition of patients with acute non-traumatic dyspnea in emergency department

Design

The design of the study is a randomized clinical trial. The randomization method is blocked. The sample size for each study group is 16.

Settings and conduct

In this research, all patients referred to the to the Emergency Department of Hazrate Rasool hospital in Tehran who suffered from acute dyspnea will be enrolled. Patients will be randomly divided into two groups based on 4 blocks. A total of 32 patients will be examined. Data analyzers will be blind.

Participants/Inclusion and exclusion criteria

All patients referred to the Emergency Department of Hazrate Rasool hospital in Tehran who suffered from acute dyspnea will be enrolled. Inclusion criteria: Patients with sudden dyspnea. Exclusion criteria: Patients under the age of 18, Patients with trauma, Patients with chest pain or suspected symptoms of ischemic heart disease.

Intervention groups

In the intervention group, in addition to the routine diagnostic protocol patients will be subjected to using point -of -care -ultrasonography upon arrival. IN control group: Diagnostic examinations and routine diagnostic protocol of the emergency department will be performed.

Main outcome variables

The first diagnosis , The final diagnosis, Time to disposition of patient

General information

Reason for update

Acronym

POCUS

IRCT registration information

IRCT registration number: **IRCT20111114008104N14**

Registration date: **2018-12-03, 1397/09/12**

Registration timing: **prospective**

Last update: **2018-12-03, 1397/09/12**

Update count: **0**

Registration date

2018-12-03, 1397/09/12

Registrant information

Name

Mohammad Amin Zare

Name of organization / entity

Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-12-21, 1397/09/30

Expected recruitment end date

2019-03-11, 1397/12/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Developing a comprehensive practical protocol for using point-of-care ultrasonography in disposition of patients with acute non-traumatic dyspnea in emergency department

Public title

The Effect of ultrasonography in disposition of patients

Purpose

Diagnostic

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients with sudden dyspnea

Exclusion criteria:

Patients under the age of 18
Patients with trauma
Patients with chest pain or suspected symptoms of ischemic heart disease

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **32**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients will be randomly assigned to two groups. In order to randomize, a random block method will be used. For this purpose, we formed blocks with 4 person. In each block, 2 individuals will be in intervention group and 2 will be in control group. A total of 8 blocks will be considered for sample size.

Blinding (investigator's opinion)

Single blinded

Blinding description

Data will analyze by person who is blind to study groups (single blind).

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Iran University of Medical Sciences

Street address

Iran University of Medical Sciences, Hemmat Highway, Tehran

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Tehran

Province

Tehran

Postal code

1449614535

Approval date

2017-07-21, 1396/04/30

Ethics committee reference number

IR.IUMS.REC.1396.31512

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

Point-of-care ultrasonography at the patient's arrival

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

The first diagnosis

Timepoint

At the arrival of the patient

Method of measurement

Based on the information in the patient file

2**Description**

The final diagnosis

Timepoint

After taking the medical treatment

Method of measurement

Based on the information in the patient file

3**Description**

Time to disposition of patient

Timepoint

The time of transfer to the ordinary wards of hospital, being discharged or being observed in ED.

Method of measurement

Based on the information in the patient file

Secondary outcomes

empty

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

Intervention group: In addition to the routine diagnostic protocol, patients will be subjected to using point-of-care ultrasonography upon arrival.

Category

Diagnosis

2**Description**

Control group: Diagnostic examinations and routine diagnostic protocol of the emergency department will be performed.

Category

Diagnosis

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

Hazrat Rasoul Akram hospital

Full name of responsible person

Mohammad Amin Zare

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Emergency department, Hazrate Rasool hospital,
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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

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Full name of responsible person

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

Yes

Title of funding source

Iran University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding*empty***Country of origin****Type of organization providing the funding**

Academic

Person responsible for general inquiries**Contact****Name of organization / entity**

Iran University of Medical Sciences

Full name of responsible person

Mohammad Amin Zare

Position

Associate Professor

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available