

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jul 2026

A clinical trial on the effectiveness of sensitivity and specificity of three-point compression ultrasonography with bedside and conventional methods in diagnosis of deep vein thrombosis

Protocol summary

Study aim

The comparison of sensitivity and specificity of three-point compression ultrasonography with bedside and conventional methods in diagnosis of deep vein thrombosis

Design

This clinical trial, 70 patients with deep vein thrombosis were assigned base on community-based setting

Settings and conduct

Totally 70 patients with suspected deep vein thrombosis at the Imam Khomeini Hospital, Sari, Iran, were chosen.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age higher than 18 years; patients with suspected deep vein thrombosis. Exclusion criteria: Having pulmonary embolism disease; previous doppler ultrasound.

Intervention groups

The intervention group I were diagnosis of deep venous thrombosis base on three-point compression ultrasonography with bedside method by emergency residents. The intervention group II were diagnosis of deep venous thrombosis base on three-point compression ultrasonography with conventional method by emergency residents.

Main outcome variables

Evaluation and comparison of disease diagnose time and imaging results of intravenous vessels of the lower limbs include common femoral, saphenous and popliteal veins base on Bedside and Conventional methods.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190309042978N1**

Registration date: **2019-03-18, 1397/12/27**

Registration timing: **prospective**

Last update: **2019-03-18, 1397/12/27**

Update count: **0**

Registration date

2019-03-18, 1397/12/27

Registrant information

Name

Hamed Jafarpour

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 11 3336 1700

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-03-21, 1398/01/01

Expected recruitment end date

2020-03-20, 1399/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A clinical trial on the effectiveness of sensitivity and specificity of three-point compression ultrasonography with bedside and conventional methods in diagnosis of deep vein thrombosis

Public title

Sensitivity and specificity of three-point compression ultrasonography in diagnosis of deep vein thrombosis

Purpose
Diagnostic

Inclusion/Exclusion criteria
Inclusion criteria:
 Age higher than 18 years Patients with suspected deep vein thrombosis
Exclusion criteria:
 Having pulmonary embolism disease Previous doppler ultrasound

Age
From **18 years** old

Gender
Both

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **70**

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 Mazandaran University of Medical Sciences

Street address

Vice Chancellor for Research, Mazandaran University of Medical Sciences, Farah Abad Road

City

Sari

Province

Mazandaran

Postal code

4815733971

Approval date

2018-07-31, 1397/05/09

Ethics committee reference number

IR.MAZUMS.REC.1397.84

Health conditions studied

1

Description of health condition studied

Deep vein thrombosis

ICD-10 code

I80.2

ICD-10 code description

Phlebitis and thrombophlebitis of other deep vessels of lower extremities

Primary outcomes

1

Description

Diagnose time

Timepoint

At the time of patient referral

Method of measurement

Base on Bedside and Conventional methods

2

Description

Imaging results of intravenous vessels of the lower limbs include common femoral, saphenous and popliteal veins

Timepoint

At the time of patient referral

Method of measurement

Base on Bedside and Conventional methods

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The intervention group I were diagnosis of deep venous thrombosis base on three-point compression ultrasonography with bedside method by emergency residents.

Category

Diagnosis

2

Description

Intervention group: The intervention group II were diagnosis of deep venous thrombosis base on three-point compression ultrasonography with conventional method by emergency residents.

Category

Diagnosis

Recruitment centers

1

Recruitment center

Name of recruitment center
Imam Khomeini Hospital
Full name of responsible person
Fateme Jahanian
Street address
Imam Khomeini Hospital, Amir Mazandarani Street
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Saeidi
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Vice Chancellor for Research, Mazandaran University
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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

Sari 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

Mazandaran University of Medical Sciences
Full name of responsible person
Fateme Jahanian
Position
Assistant Professor
Latest degree
Specialist
Other areas of specialty/work
Emergency Medicine
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Person responsible for scientific inquiries

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Person responsible for updating data

Contact

Name of organization / entity
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Medical student
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Other areas of specialty/work
Others

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Yes - There is 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

Not applicable

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is 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

Not applicable

Title and more details about the data/document

The total data to be included are the primary and secondary effects to be shared.

When the data will become available and for how long

6 months after printing results

To whom data/document is available

Our data will only be available to researchers working in science center and university.

Under which criteria data/document could be used

Our data will be available for scholars working in science center and university.

From where data/document is obtainable

Hamed Jafarpour provides the analysis code to the applicants via email: h.jafarpour@mazums.ac.ir

What processes are involved for a request to access data/document

Applicants can respond to the email of the respondent and receive a response within a week.

Comments