

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Incidence of radial artery occlusion in radial access angiography compared with access for angiography

Protocol summary

Study aim

Incidence of radial artery occlusion in radial access angiography compared with access for angiography

Design

Two arm parallel group randomised trial without blinded postoperative in 96patient

Settings and conduct

This study will be performed on 100 patients referred to the angiography department of Imam Khomeini Hospital in Ahvaz. All patients are free to participate in the study. Eligible patients enter the study after obtaining informed and written consent. Individuals are randomly divided into two groups. This study is performed on 100 consecutive patients who are candidates for coronary catheterization in Imam Medical Center. In this study, only the right distal transradial access (dTRA) is used. The demographic characteristics of the patients are fully recorded. Examined by ultrasound. Other side effects such as pain, hematoma and ischemic symptoms are also studied and recorded in the individual.

Participants/Inclusion and exclusion criteria

Inclusion criteria: patient to participate in the study, the presence of a normal heartbeat in the radial artery and snuffbox area. Exclusion criteria: Patients with unstable hemodynamic status at the beginning of the study, upper limb vascular disorders, prominent deformity in the hand, recent fracture of the scaphoid

Intervention groups

Control group: The group that undergoes angiography of the radial artery in the wrist area. Intervention group: The group undergoing radial artery angiography in the snuffbox

Main outcome variables

Radial artery thrombosis; hematoma; pain; ischemia

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20201119049437N1**

Registration date: **2021-01-06, 1399/10/17**

Registration timing: **registered_while_recruiting**

Last update: **2021-01-06, 1399/10/17**

Update count: **0**

Registration date

2021-01-06, 1399/10/17

Registrant information

Name

mohamadreza Afshani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 3222 8037

Email address

afshani-mr@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-12-10, 1399/09/20

Expected recruitment end date

2021-03-20, 1399/12/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Incidence of radial artery occlusion in radial access angiography compared with access for angiography

Public title

Incidence of radial artery occlusion in radial access angiography

Purpose
Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
All patient Refer to hospital and candidate for angiography
Exclusion criteria:
Patient discharged before 24hr from angiography and cannot sonography

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: 96

Randomization (investigator's opinion)
Randomized

Randomization description
Randomization method: Simple randomization Random unit: individual Randomization tool: Random number table How to randomize a random sequence: First, we predetermine the table numbers to read (up, down, left and right). The even or odd numbers are in the control group or the case group. Then we put them on one of the numbers and in one Moves in predetermined directions and records numbers and assigns them to different groups. Hiding: Using opaque envelopes sealed with a random sequence. First the random sequence is specified with a table of random numbers and then a number of envelopes are prepared and each random sequence is recorded on a card and the cards are inside the envelope. The letters are placed in order and finally pasted in envelopes and placed inside a box, and after each patient's visit, one of the envelopes is opened in order, the assigned group of the participant is revealed.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
No

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of ahvaz University of medical

Sciences
Street address
 West Azadegan
City
 Ahvaz
Province
 Khuzestan
Postal code
 6193673111

Approval date

2020-10-22, 1399/08/01

Ethics committee reference number

IR.AJUMS.HGOLESTAN.REC.1399.073

Health conditions studied

1

Description of health condition studied

Angiography radial access

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Radial artery thrombosis

Timepoint

Sonography of radial artery 24hr after angiography

Method of measurement

Sonography

Secondary outcomes

1

Description

Hematoma

Timepoint

24hr after angiography

Method of measurement

Sonography and observation

Intervention groups

1

Description

Intervention group: People who undergo snuff box angiography undergo radial ultrasound after 24 hours to assess radial artery thrombosis, and other complications such as pain, hematoma, and ischemic symptoms are observed. To reach the snuffbox area, patients' left hand is gently bent toward their right groin, and then the left hand is gently opened, with the thumb under the other four fingers and the sunken area is identified. The cardiologist is located on the patient's right side. After local anesthesia, it enters the radial artery using a 21 gauge needle at a 35 degree angle.

Category

Prevention

2**Description**

Control group: People who undergo transradial angiography undergo radial ultrasound after 24 hours to evaluate radial artery thrombosis and other complications such as pain, hematoma and ischemic symptoms are observed visually. In order to reach the radial area of the patient, the patient's left palm is placed upwards and next to the patient's groin. The cardiologist is located on the right side of the patient and after local anesthesia, enters the radial canal using a 21 gauge needle at a 35 degree angle from 2 to 3 cm proximal to the styloid appendage

Category

Prevention

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

Emam khomeini ahvaz hospital

Full name of responsible person

Seyed mohamadreza afshani

Street address

Azadegan Ave

City

Ahvaz

Province

Khouzestan

Postal code

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Phone

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Email

Hadiseeghtedari@yahoo.com

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

Ahvaz University of Medical Sciences

Full name of responsible person

Mohamad reza afshani

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Azadegan Ave

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Province

Khouzestan

Postal code

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Phone

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Email

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

No

Title of funding source

No

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**

Ahvaz University of Medical Sciences

Full name of responsible person

Hadise eghtedari salimi

Position

Residency

Latest degree

Medical doctor

Other areas of specialty/work

Cardiology

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

Ahvaz University of Medical Sciences

Full name of responsible person

Hadise eghtedari salimi

Position

Residency

Latest degree

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Person responsible for updating data

Contact

Name of organization / entity
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Full name of responsible person
Hadise eghtedari salimi
Position
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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

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

No - There is not a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

At the end of the study, all data can be shared after unidentified individuals and will be available through the registration of information and the results in the relevant scientific sites.

When the data will become available and for how long

From the year 1400

To whom data/document is available

Researchers working in academic institutions, physicians and medical students at different levels

Under which criteria data/document could be used

Cardiologists can access the results of our studies by email or in person or by phone to determine the angiographic procedure and the preferred method for vascular access.

From where data/document is obtainable

Mobile numbre for hadise eghtedari:09113411768

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

Making a phone call, if the requested person is identified, they will be provided with prompt information

Comments