Clinical Trial Protocol
Iranian Registry of Clinical Trials

31 May 2026

Comparison of the complications of two hemostasis methods (classic and patent) in patients undergoing transradial coronary angiography

Protocol summary

Study aim
To compare the complications of two hemostasis methods (classic and patent) after transradial coronary angiography

Design
Clinical trial consists of two parallel groups, nonblinded, randomized

Settings and conduct
Location: BU-ALI Hospital, Qazvin, Iran. The number of 234 patients undergo transradial angiography. After that, the patients are randomly divided to 2 equal groups for hemostasis. In the first group, hemostasis is performed by classic method, and it is done by patent method in second group.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Patients candidate for coronary arteries angiography Exclusion criteria: Unstable hemodynamic; Severe renal failure; Fracture of the bones wrist; Raynaud disease; Carpal tunnel syndrome; Coagulation disorders

Intervention groups
To perform homeostasis, in first group, classic method is applied and in second group, patent method is applied.

Main outcome variables
Incidence of radial artery occlusion; Hemostasis time; Mean of pain score

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210305050585N1**
Registration date: **2021-05-07, 1400/02/17**
Registration timing: **registered_while_recruiting**

Last update: **2021-05-07, 1400/02/17**
Update count: **0**

Registration date
2021-05-07, 1400/02/17

Registrant information
Name
Ahmad Kiarad
Name of organization / entity
Country
Iran (Islamic Republic of)
Phone
+98 28 3333 6001
Email address
dr.ahamdkiarad@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-04-04, 1400/01/15

Expected recruitment end date
2021-05-21, 1400/02/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison of the complications of two hemostasis methods (classic and patent) in patients undergoing transradial coronary angiography

Public title
Comparison of the complications of two hemostasis after transradial coronary angiography

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Patients candidate for transradial coronary arteries

angiography

Exclusion criteria:

Unstable hemodynamic Severe renal failure Fracture of the bones wrist Raynaud disease Carpal tunnel syndrome Coagulation disorders

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **234**

Randomization (investigator's opinion)

Randomized

Randomization description

Assignment of individuals to study groups was done in a randomized block method using 4 blocks. This work was done with "https://app.studyrandomizer.com". In each block, there were 2 people belonging to group A and two people belonging to group B. In each block, number of treatment group and control group is equal and situation of each block with other block is different. With using opaque envelopes, sealed, sequentially numbered which recorded each of the random sequences created on a card and the cards are placed in the letter envelopes in order.

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 Qazvin University of Medical Sciences

Street address

Shahid Beheshti Blvd

City

Qazvin

Province

Qazvin

Postal code

1391134156

Approval date

2020-04-25, 1399/02/06

Ethics committee reference number

IR.QUMS.REC.1399.022

Health conditions studied

1

Description of health condition studied

Homeostasis methods in coronary arteries angiography

ICD-10 code

I25

ICD-10 code description

Chronic ischemic heart disease

Primary outcomes

1

Description

Incidence of radial artery occlusion

Timepoint

2, 4 and 6 hours after angiography

Method of measurement

Clinical examination

Secondary outcomes

1

Description

Hemostasis time

Timepoint

After radial artery sheath removal until cession of bleeding

Method of measurement

Based on minute

2

Description

Mean of pain score

Timepoint

Immediately,1 hour and 4 hours after angiography

Method of measurement

Based on VAS scale

Intervention groups

1

Description

Intervention group: In classic hemostasis method, homeostasis is performed by using an inflatable air filled wrist bracelet named as TR band at the distal forearm and radial artery site. At first, TR cuff is blowing with 15 cc of air until the radial artery blood flow was completely stopped. When primary hemostasis is occurred, TR cuff pressure is reduced and the band is removed.

Category

Treatment - Other

2

Description

Intervention group: In patent hemostasis method,

homeostasis is performed by using an inflatable air filled wrist bracelet named as TR band at the distal forearm and radial artery site. At first, TR cuff is blowing with 15 cc of air until the radial artery blood flow was completely stopped. After that, TR cuff pressure is reduced (in about 10 cc air) until a little bit of blood leakage and patient was placed under supervision as long as primary hemostasis.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Bu-Ali Sina Hospital
Full name of responsible person
Ahmad kiarad
Street address
Department of Cardiology, Bu-Ali Sina Hospital, Bu-Ali Blvd
City
Qazvin
Province
Qazvin
Postal code
1391134156
Phone
+98 28 3333 6001
Email
dr.ahmadkiarad@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Qazvin University of Medical Sciences
Full name of responsible person
Mohammad Mehdi Emamjomeh
Street address
Research Department of Qazvin University of Medical Sciences, Shahid beheshti Blvd
City
Qazvin
Province
Qazvin
Postal code
3415613911
Phone
+98 28 3333 7006
Email
research.dpt@qums.ac.ir

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Qazvin 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
Qazvin University of Medical Sciences
Full name of responsible person
Ahmad Kiarad
Position
Resident of cardiology
Latest degree
Medical doctor
Other areas of specialty/work
Cardiology
Street address
Department of Cardiology, Bu-Ali Sina Hospital, Bu-Ali Blvd
City
Qazvin
Province
Qazvin
Postal code
1391134156
Phone
+98 28 3333 6001
Email
dr.ahmadkiarad@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Qazvin University of Medical Sciences
Full name of responsible person
Majid Hajikarimi
Position
Assistant professor
Latest degree
Subspecialist
Other areas of specialty/work
Cardiology
Street address
Department of Cardiology, Bu-Ali Sina Hospital, Bu-Ali Blvd
City
Qazvin
Province
Qazvin
Postal code

1391134156

Phone

+98 28 3333 6001

Email

m.hajikarimi@qums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Qazvin University of Medical Sciences

Full name of responsible person

Ahmad Kiarad

Position

Resident of cardiology

Latest degree

Medical doctor

Other areas of specialty/work

Cardiology

Street address

Department of Cardiology, Bu-Ali Sina Hospital, Bu-Ali Blvd

City

Qazvin

Province

Qazvin

Postal code

1391134156

Phone

+98 28 3333 6001

Email

dr.ahmadkiarad@gmail.com

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

Undecided - It is not yet known if there will be 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

Yes - There is a plan to make this available

Data Dictionary

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

Title and more details about the data/document

Non-identifiable patient data including patient information and analysis in journal publications or sending to academic researchers

When the data will become available and for how long

After publishing the article according to journal rules

To whom data/document is available

Academic Researchers

Under which criteria data/document could be used

For similar researches

From where data/document is obtainable

Corresponding authors

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

Request to corresponding author email

Comments