

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Comparison the Effect of Continuous and Intermittent Flushing on Maintaining Patency of the Arterial Complications after Coronary Artery Bypass Surgery

Protocol summary

Summary

This study is a randomized clinical trial with two-group that conducted on the patients who underwent CABG procedures off pump and hospitalized in intensive care unit open heart of Imam Reza hospital in Mashhad is done. The aim of this study is evaluation the efficacy of cleaning continuous and intermittent on maintaining openness and complications of arterial line. The main outcomes is time openness artery catheter, blocking the artery catheter, and incidence of complications (bleeding, hematoma) at the arterial catheter every 3 hours from the time of acceptance of the open heart ICU. Sample size is considered 30 patients in each group. In the intervention group washed artery catheter in a continuous manner using a cuff transfusion so that saline containing heparin in a pressure cuff is placed 300 mmHg and 3 ml of solution heparin infused in the catheter per hour. Catheter patency will be assessed with blood backward into the catheter and complications, including bleeding and hematoma checked every 3 hours. The result is entered in the checklist. In the control group artery catheter intermittent is flushed by a syringe 5 ml with 5 cc of saline with heparin every 3 hours. Complications of catheter and catheter patency and will be accessed similar intervention group and recorded in the checklist.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016050427741N1**

Registration date: **2016-08-09, 1395/05/19**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-08-09, 1395/05/19

Registrant information

Name

Sedigheh Arta

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 32566747

Email address

artas1@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Mashhad University of Medical Sciences, Vice chancellor for research

Expected recruitment start date

2016-06-21, 1395/04/01

Expected recruitment end date

2016-08-21, 1395/05/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the Effect of Continuous and Intermittent Flushing on Maintaining Patency of the Arterial Complications after Coronary Artery Bypass Surgery

Public title

Effect of Arterial Catheter Irrigation on the rate of Obstruction and its Complications

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Have consent to participate in the study; coronary artery bypass surgery is located off pump; have artery catheter; vascular disorders do not have; have been 18-70 years old; preoperative coagulation disorders have (Pt less than 13 seconds and ptt less than 45 seconds). Exclusion criteria: Unwillingness to continue to participate in the study; The incidence of coagulation disorders and testing ptt-pt is disrupted (According to the listed criteria); artery catheter is removed for any reason.

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

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

Ethics committee of Mashhad University of Medical Sciences

Street address

University of Medical Sciences Mashhad, Vice chancellor for research, Ghorashy Building, University St, Mashhad

City

Mashhad

Postal code

Approval date

2016-06-18, 1395/03/29

Ethics committee reference number

IR.MUMS.REC.1394.1271

Health conditions studied

1

Description of health condition studied

Obstruction and Complications of Arterial Line

ICD-10 code

Y61.6

ICD-10 code description

During aspiration, puncture and other catheterization

Primary outcomes

1

Description

Obstruction

Timepoint

Every 3 hours

Method of measurement

Back arterial catheter aspiration and view the monitor arterial pressure curve

Secondary outcomes

1

Description

bleeding

Timepoint

Every 3 hours

Method of measurement

Find bleeding at the insertion site

2

Description

Hematoma

Timepoint

Every 3 hours

Method of measurement

Find hematoma in the soft tissue surrounding the artery catheter

Intervention groups

1

Description

Wash the intervention group artery catheter for continuous infusion using 3 ml per hour with heparin saline done. The control group artery catheter with a syringe 5 ml every 3 hours 5 cc of saline Heparin alternate method and catheter patency and complications similar groups in the Czech list will be recorded every 3 hours.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Reza Hospital

Full name of responsible person

Seyed Reza Mazlom

Street address

Open Heart Department, Imam Reza Hospital, Ebne Sina St, Imam Reza Square, Mashhad

City

Mashhad

Phone

+98 51 3256 6747

Fax**Email**

artas1@mums.ac.ir

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

Mashhad Faculty of Nursing and Midwifery

Full name of responsible person

Seyed Reza Mazlom

Position

Assistant Professor in Nursing

Other areas of specialty/work**Street address**

Faculty of Nursing and Midwifery, Ebne Sina St, Doktora Crossroads

City

Mashhad

Postal code**Phone**

+98 51 3859 1511

Fax**Email**

Mazlomr[at]mums.ac.ir

Web page address**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

University of Medical Sciences Mashhad, Vice chancellor for research

Full name of responsible person

Mohsen Tafaghodi

Street address

University of Medical Sciences Mashhad, Vice chancellor for research, Ghoraishy Building, University St

City

Mashhad

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

Yes

Title of funding source

University of Medical Sciences Mashhad, Vice chancellor for research

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**

Mashhad Faculty of Nursing and Midwifery

Full name of responsible person

Sedigheh Arta

Position

Master of Science in Nursing

Other areas of specialty/work**Street address**

Mashhad Faculty of Nursing and Midwifery, Ebne Sina St, Doktora Crossroads Mashhad

City

Mashhad

Postal code**Person responsible for updating data****Contact****Name of organization / entity**

Mashhad Faculty of Nursing and Midwifery

Full name of responsible person

Sedigheh Arta

Position

Master of Science in Nursing

Other areas of specialty/work**Street address**

Mashhad Faculty of Nursing and Midwifery, Ebn-e Sina St, Doktora Crossroads

City

Mashhad

Postal code

9157997714

Phone

+98 51 3256 6747

Fax**Email**

Artas1@mums.ac.ir

Web page address**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