

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 May 2026

Comparison the effect of two left internal mammary artery harvesting techniques skeletonization and pedicle on post coronary artery bypass surgery pain and bleeding ;a Randomized Double Blind Clinical Trail

Protocol summary

Summary

A total of 60 patients undergoing elective, Coronary artery bypass graft requiring Left internal mammary artery harvest were screened for eligibility and were included into the study. Emergency surgery, a history of cardiac surgery, a history of receiving medication with antiplatelet agents, a left ventricular ejection fraction less than 20%, preoperative renal dysfunction, preoperative hepatic dysfunction, electrolyte imbalance, Inability to return for follow-up visits, premature mortality, neurological complications, and use of intra-aortic balloon pump were the exclusion criteria. The patients were categorized into two equal groups by computer: skeletonized harvesting method and pediculate harvesting method. All post-operative assessment were performed by the medical staff who were blinded to the group of the patients. post-operative bleeding were evaluated in the first 24 hours postoperatively. Each patient's pain was assessed by visual analogue scoring at the third day post operative and at 1-year follow-up.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015121320112N5**

Registration date: **2016-01-14, 1394/10/24**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-01-14, 1394/10/24

Registrant information

Name

Pooya Derakhshan

Name of organization / entity

Birjand Univesity of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Birjand University of Medical Sciences

Expected recruitment start date

2014-01-01, 1392/10/11

Expected recruitment end date

2015-06-01, 1394/03/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the effect of two left internal mammary artery harvesting techniques skeletonization and pedicle on post coronary artery bypass surgery pain and bleeding ;a Randomized Double Blind Clinical Trail

Public title

Comparison the effect of two left internal mammary artery harvesting techniques skeletonization and pedicle on post coronary artery bypass surgery pain and bleeding

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria: elective Coronary Artery Bypass Graft requiring; American association of anesthesiologist class 2 and 3; age between 30 to 70 years old . exclusion criteria: Emergency surgery; a history of cardiac surgery; a history of receiving medication with antiplatelet agents; a left ventricular ejection fraction less than 20%; preoperative renal dysfunction ; preoperative hepatic dysfunction; preoperative electrolyte imbalance; Inability to return for follow-up visits; premature mortality; neurological complications; and use of intra-aortic balloon pump.

Age

From **30 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Birjand univercity of medical sciences

Street address

Birjand, South Khorasan, Ghafariavn Avenue, Birjand
University of Medical Sciences and Health Services

City

Birjand

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

1393-09-05

Health conditions studied

1

Description of health condition studied

Ischaemic heart diseases

ICD-10 code

I20-I25

ICD-10 code description

Ischaemic heart diseases

Primary outcomes

1

Description

pain

Timepoint

the third day post operation

Method of measurement

Visual Analuge Scale

2

Description

Post oprative bleeding

Timepoint

24 hour post operation

Method of measurement

chest tube bottle

Secondary outcomes

1

Description

pain

Timepoint

1 year follow-up

Method of measurement

visual analogue scoring

Intervention groups

1

Description

left internal mammary artery harvesting techniques
pedicle in coronary artery bypass surgery

Category

Treatment - Surgery

2

Description

left internal mammary artery harvesting techniques
skeletonization in coronary artery bypass surgery

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Vali Asr Hospital

Full name of responsible person

Dr Pooya Derakhshan

Street address

Birjand, Taleghani Blvd, Emam Reza Hospital

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Birjand

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

Birjand University Of Medical Sciences

Full name of responsible person

Dr Asghar Zarban

Street addressVice chancellor for research, Birjand University of
Medical Science, Birjand**City**

Birjand

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

Yes

Title of funding source

Birjand University Of Medical Sciences

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**

Iran University of medical science

Full name of responsible person

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Position

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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*