

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jul 2026

Comparing the aesthetic results of different types of umbilical cord reconstruction methods in abdominal operations: Mercedes incision versus inverted V incision in patients referred to Hazrat Fatemeh Hospital for umbilical cord reconstruction

Protocol summary

Study aim

Comparison of patients' and plastic surgeons' satisfaction with the aesthetic results of various types of umbilical reconstruction methods in abdominal operations: Mercedes incision in reverse V

Design

This study consists of two groups, in one group, the Mercedes surgery method is used, and the other one, the inverted V surgery method is used. There were 30 participants in each group and the method of blinding was a single-blind method, where the participant did not know about the surgical procedure and the researcher knew what the procedure was and what the results were like.

Settings and conduct

The research is carried out in Hazrat Fatima Hospital. Photographs are taken of patients before and three months after the operation so that the results of the operation can be compared. The patients are followed up for three months, and after that, they are surveyed and the level of satisfaction in terms of shape, size, and natural appearance is checked by them and ten surgical professors.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Females over 18 years old and candidates for abdominoplasty surgery or breast reconstruction with abdominal flap/Exclusion criteria: no previous cosmetic surgery

Intervention groups

The first group in which the Mercedes method is used in such a way that a marking with methylene blue on the two lateral and upper wings between 0.5 and 1.0 cm from the central point is determined, forming the "Y" suggested in this technique. At this stage, the skin is cut above the Y mark. In the second group, in which the inverted V method is used, the arms of the cut are

approximately 1.5 to 2 cm and an inverted V-shaped skin flap is raised at a predetermined, palpated umbilical point

Main outcome variables

The level of patient satisfaction; Complication rate; Aesthetic; The success rate of the operation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20221111056465N1**

Registration date: **2023-02-20, 1401/12/01**

Registration timing: **registered_while_recruiting**

Last update: **2023-02-20, 1401/12/01**

Update count: **0**

Registration date

2023-02-20, 1401/12/01

Registrant information

Name

Vahab Rezaee

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 8871 7272

Email address

vahab_rezaee@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-02-19, 1401/11/30
Expected recruitment end date
 2023-08-21, 1402/05/30
Actual recruitment start date
 empty
Actual recruitment end date
 empty
Trial completion date
 empty

Scientific title
 Comparing the aesthetic results of different types of umbilical cord reconstruction methods in abdominal operations: Mercedes incision versus inverted V incision in patients referred to Hazrat Fatemeh Hospital for umbilical cord reconstruction

Public title
 Comparison of aesthetic results of different types of umbilical reconstruction methods in abdominal operations: Mercedes incision versus inverted V incision

Purpose
 Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
 People over 18 years old A candidate for Abdominoplasty or Breast Reconstruction Surgery Female
Exclusion criteria:
 Performing navel cosmetic surgery in the past

Age
 From **18 years** old to **50 years** old

Gender
 Female

Phase
 N/A

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size
 Target sample size: **60**

Randomization (investigator's opinion)
 Randomized

Randomization description
 Simple randomization method is used in randomization. An envelope contains 60 pieces of paper on which groups A and B are written, and there are 30 pieces of each group in the envelope. Group A is assigned to the Mercedes surgery method and group B is assigned to the inverted V surgery method. Before performing the surgery, the surgeon takes out a paper from the envelope for each patient and the surgical method is selected based on the type of group

Blinding (investigator's opinion)
 Single blinded

Blinding description
 Before the operation, after choosing the type of operation, the surgeon and the researcher are aware of the type of operation, but after the surgery and subsequent examinations and data reporting, other residents of the center are used for examination, who

are assigned a code for each type of operation. It is possible that only the researcher is aware of it

Placebo
 Not used
Assignment
 Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
 Ethics Committee of Iran University of Medical Sciences
Street address
 Seyed JamalodinAsadabadi St.
City
 Tehran
Province
 Tehran
Postal code
 1433933111
Approval date
 2023-02-08, 1401/11/19
Ethics committee reference number
 IR.IUMS.FMD.REC.1401.644

Health conditions studied

1

Description of health condition studied
 Patients referred for abdominoplasty and breast reconstruction with abdominal flap
ICD-10 code
 Z42.1
ICD-10 code description
 Encounter for breast reconstruction following mastectomy

Primary outcomes

1

Description
 aesthetics evaluation
Timepoint
 Three months after surgery
Method of measurement
 Observation and direct question from the patient

Secondary outcomes

1

Description

Umbilical necrosis

Timepoint

Three months after surgery

Method of measurement

Direct observation

2

Description

Umbilical stenosis

Timepoint

Three months after surgery

Method of measurement

Direct observation

Intervention groups

1

Description

Intervention group: In this group, the Mercedes surgical method is used, where a marking with methylene blue on the two lateral and upper wings between 0.5 and 1.0 cm from the central point is determined, and they form the "Y" suggested in this technique. At this point, the skin is cut above the Y mark. To prevent umbilical stenosis, two "cuts" are removed from the side flaps of the Y to allow the umbilical suture to fit better

Category

Treatment - Surgery

2

Description

Control group: In this group, we use the inverted V surgery method, where the arms of the incision are approximately 1.5 to 2 cm and are separated by a distance of approximately 1.5 to 2.5 cm at the base. An inverted V-shaped skin flap is raised at a predetermined, palpated umbilical point

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Hazrat Fatemeh Hospital

Full name of responsible person

Vahab Rezaee

Street address

Seyed Jamalodin Asadabadi St.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Hosseini Keyvani

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Hemat Highway

City

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Province

Tehran

Postal code

۱۴۳۹۶۱۴۵۳۵

Phone

+98 21 8670 2503

Email

keyvani.h@iums.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

No

Title of funding source

Hazrate Fatemeh Hospital

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

Iran University of Medical Sciences

Full name of responsible person

Vahab Rezaee

Position

Specialist assistant

Latest degree

Specialist

Other areas of specialty/work

General Surgery

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Person responsible for scientific inquiries

Contact

Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Reza Vaghardoost
Position
Associate professor
Latest degree
Subspecialist
Other areas of specialty/work
plastic and reconstructive surgery
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Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

No - There is not 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

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

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The written informed consent form will be provided to the participants after the procedure and will be included in the thesis. We have also published it in the Pajuheshyar system The data of the study also includes the results of the variables, including the level of satisfaction with the form of not causing complications

When the data will become available and for how long

The consent form will be placed in the attachments section after the thesis is printed. Also, the data of the participants is included in the thesis

To whom data/document is available

All people who have access to the full text of the thesis

Under which criteria data/document could be used

It can be modeled in similar studies

From where data/document is obtainable

Email to the general supervisor of the thesis Dr. Vahab Rezaee vahab_rezaee@yahoo.com

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

After sending the email to the general supervisor, the thesis can be received within 1 week

Comments