

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

Comparison of two methods of using suture and diode laser tissue soldering on closing incisions created after alar resection surgery.

Protocol summary

Study aim

Comparison of two methods of using suture and diode laser tissue soldering on closing incisions created after alar resection surgery

Design

A clinical trial with a control group with a parallel-group design, double-blind; randomized; Phase 2-3, on 23 patients. Block randomization method will be used for randomization.

Settings and conduct

This controlled clinical trial study is conducted in 2023 at the Basth Hospital in Hamedan. Incisions created after nasal resection surgery are compared to two laser and suture procedure.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 18 years and more; The first experience with nose surgery; Requires surgical resection of the nasal bridge. Exclusion criteria: Trauma patients, Congenital defects

Intervention groups

Intervention group: On one side of the nose, the incision site is sutured with a diode laser (808 nm, 0.5 W in 5 seconds), and on the other side, the incision site is sutured with Supa 6 zero nylon thread.

Main outcome variables

The quality of the cut closure, Infection, and Dehiscence

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160523028008N28**

Registration date: **2023-06-17, 1402/03/27**

Registration timing: **prospective**

Last update: **2023-06-17, 1402/03/27**

Update count: **0**

Registration date

2023-06-17, 1402/03/27

Registrant information

Name

Mohammad Faryadras

Name of organization / entity

Hamadan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 81 3428 9706

Email address

m.faryadras@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-07-06, 1402/04/15

Expected recruitment end date

2023-09-22, 1402/06/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of two methods of using suture and diode laser tissue soldering on closing incisions created after alar resection surgery.

Public title

Using suture and diode laser tissue soldering on closing incisions created after alar resection surgery.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Eighteen years and older. The first experience of nose surgery Requires surgical resection of nasal bridge

Exclusion criteria:

Trauma patients Congenital defects

Age

From **18 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **23**

Randomization (investigator's opinion)

Randomized

Randomization description

Block randomization will randomly assign the cases to intervention and control groups. For this purpose, we will prepare four sheets of paper, writing on two sheets the name of the intervention and on the other two sheets the name of the control. The paper sheets will be pooled, placed in a container, and randomly drawn one at a time for each patient without replacement until all four sheets are removed. The four paper sheets will be then placed back into the container, and this action will be repeated until the sample size is reached.

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

Research Ethic Committee of Hamadan University of Medical Sciences

Street address

Vice-chancellor of Research the Technology, Hamadan University of Medical Sciences, Shahid Fahmideh

City

Hamadan

Province

Hamadan

Postal code

6517838695

Approval date

2023-05-20, 1402/02/30

Ethics committee reference number

IR.UMSHA.REC.1402.183

Health conditions studied

1

Description of health condition studied

alar resection surgery

ICD-10 code

Z41.1

ICD-10 code description

Encounter for cosmetic surgery

Primary outcomes

1

Description

The quality of the cut closure

Timepoint

A week, a month and 6 months later

Method of measurement

Examination of the incision site with Stony Brook Scar Evaluation Scale

2

Description

Infection

Timepoint

Examination of the incision site

Method of measurement

Examination of the incision site

3

Description

Dehiscence

Timepoint

Examination of the incision site

Method of measurement

Examination of the incision site

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: On one side of the nose, the cutting site is treated with a diodes laser (808 nm, 0.5W in 5 seconds).

Category

Treatment - Devices

2

Description

Control group: On one side of the nose, the incision is sutured with Supa 6 zero nylon thread.

Category

Recruitment centers

1

Recruitment center

Name of recruitment center

Besat Hospital

Full name of responsible person

Mohammad Reza Jamalpour

Street address

Hamedan-Fatemi Blvd.

City

Hamadan

Province

Hamadan

Postal code

6517838677

Phone

+98 81 3265 0030

Email

jamalpour1972@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Reza Shokohei

Street address

Vice-chancellor of Research the Technology,
Hamadan University of Medical Sciences, Shahid
Fahmideh street

City

Hamdan

Province

Hamadan

Postal code

6517838695

Phone

+98 81 3838 0717

Email

vc_research@umsha.ac.ir

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

Yes

Title of funding source

Hamedan 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

Hamedan University of Medical Sciences

Full name of responsible person

Mohammad Mehdi Rezvani

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

General Surgery

Street address

Hamedan-Fatemi Blvd

City

Hamdan

Province

Hamadan

Postal code

6514845411

Phone

+98 81 3264 0064

Email

erfanrezvanisy@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Mohammad Reza Jamalpour

Position

Associate professor

Latest degree

Specialist

Other areas of specialty/work

Ear, Nose, and Throat

Street address

Hamedan-Fatemi Blvd.

City

Hamadn

Province

Hamadan

Postal code

6517838677

Phone

+98 81 3838 1059

Email

jamalpour1972@gmail.com

Person responsible for updating data

Contact

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Mohammad Mehdi Rezvani

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Ear, Nose, and Throat

Street address

Hamedan-Fatemi Blvd.

City

Hamadan

Province

Hamadan

Postal code

6514845411

Phone

+98 81 3264 0064

Email

erfanrezvanisy@gmail.com

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

No - There is not a plan to make this available

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available