

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

Evaluation and comparison of side effects of two suturing methods/simple and horizontal mattress/after mandibular third molar surgery in patients who refer to surgery ward

Protocol summary

Study aim

Determining the intensity of pain and the amount of edema and evaluating the occurrence of dehiscence in two suture models following the impacted wisdom tooth

Design

Patients who meet the criteria for entering the study will be divided into two groups (28 patients with simple suturing, 28 patients with horizontal matrix suturing) by random allocation method using double randomized blocks. They are simplified from suture surgery and the second group is examined with the horizontal matrix method.

Settings and conduct

Patients referring to maxillofacial surgery clinic for implanted wisdom teeth surgery after surgery will be classified according to the type of suture (28 patients sutured by simple method, 28 patients sutured by horizontal matrix method). The first group after simple suture surgery. and the second group is examined with the horizontal matrix method. The patient and the data analyzer do not know about the suture method.

Participants/Inclusion and exclusion criteria

1. Patient consent to participate in the study 2. Absence of systemic disease such as bone pathological conditions, hematological disorders, diabetes 3. Absence of pregnancy and breastfeeding

Intervention groups

The type of suture, which is simple or matrix, matrix intervention group and the control group will receive normal suture

Main outcome variables

Determining the intensity of pain and investigating the factors affecting it; determining the amount of swelling after surgery and investigating the factors affecting it Clinical observations will be used for each patient to determine the degree of dehiscence and check the factors affecting it.

General information

Reason for update

Acronym

بخیه زدن ساده و ماتریسی

IRCT registration information

IRCT registration number: **IRCT20230827059270N1**

Registration date: **2023-08-31, 1402/06/09**

Registration timing: **registered_while_recruiting**

Last update: **2023-08-31, 1402/06/09**

Update count: **0**

Registration date

2023-08-31, 1402/06/09

Registrant information

Name

Mehdi Askari

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 71 3621 8926

Email address

mehdiaskari@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-08-29, 1402/06/07

Expected recruitment end date

2023-09-24, 1402/07/02

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation and comparison of side effects of two suturing methods/simple and horizontal mattress/after mandibular third molar surgery in patients who refer to surgery ward

Public title

suturing methods/simple and horizontal mattress/after mandibular third molar surgery

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Patient consent to participate in the study . Absence of systemic diseases such as bone pathological conditions, hematological disorders, diabetes Absence of pregnancy and breastfeeding 4. The presence of a fully impacted tooth that requires surgery (wisdom teeth with mesiangular impact) No smoking

Exclusion criteria:

Patients who need anesthesia and other interventions for wisdom tooth surgery Patients who do not have wisdom teeth and can be treated with non-surgical methods

Age

From **18 years** old to **25 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size

Target sample size: **56**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients who meet the criteria for entering the study will be divided into two groups (28 patients with simple suturing, 28 patients with horizontal matrix suturing) by random allocation method using double randomized blocks. They are simplified from suture surgery and the second group is examined with the horizontal matrix method.

Blinding (investigator's opinion)

Double blinded

Blinding description

To increase the validity of the study, double-blinding method is used so that neither the patient nor the data analyst knows about the methods. The patient does not know the method of suturing. The data analyzer only analyzes the code and then the information is decoded.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Shiraz University of Medical Sciences

Street address

Zand sums center

City

Shiraz

Province

Fars

Postal code

71348-14336

Approval date

2023-08-27, 1402/06/05

Ethics committee reference number

IR.SUMS.DENTAL.REC.1402.047

Health conditions studied

1

Description of health condition studied

Suturing method after Mesioangular impacted wisdom tooth surgery

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Determining the intensity of pain

Timepoint

The first day of surgery until the tenth day

Method of measurement

Visual Analogue Scale

Secondary outcomes

1

Description

Complete recovery of the patient with pain: dehiscence and less swelling in the shortest possible time

Timepoint

The first day of surgery until the tenth day

Method of measurement

Visual Analogue Scale

Intervention groups

1

Description

In 1th intervention group , sulcular incision with ramus releasing is done.next aftet bone removal the wisdom tooth is removed.then gingiva is returned to previous position.next simple sutturing is done by silk 3_0 sutureabd 26 mm needle lenght.(made by SUPA company)

Category

Treatment - Surgery

2

Description

In 2th intervention group,sulcular incision with ramus releasing is done.next after bone removal the impacted wisdom tooth is removed.then gingive is returned to previous position.next horizontal mattress sutturing is done by 3-0 silk and 26 mm needle lenght (made by SUPA company)

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Shiraz dentistry university

Full name of responsible person

Farhad ghorbani

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

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

Yes

Title of funding source

Shiraz 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

Shiraz University of Medical Sciences

Full name of responsible person

Farhad

Position

Assistant professor

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for scientific inquiries

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Full name of responsible person

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

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

Study Protocol

Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be 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

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

Data Dictionary

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

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

Shiraz University of Medical Sciences

Full name of responsible person

Mehdi askari

Position

Student

Latest degree

Medical doctor

Other areas of specialty/work

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