

Clinical Trial Protocol

Iranian Registry of Clinical Trials

28 Jun 2026

Comparison of the number of bacterial colonies among four types of sutures following periodontal surgery in patients with periodontics

Protocol summary

Study aim

Determination of mean bacterial colonies grown on 4 types of sutures following periodontal surgery in patients with periodontitis

Design

Twelve patients who needed flap treatment were included in the study. Each quadrant underwent flap surgery and one of the 4 types of sutures mentioned was used. One week after surgery, the sutures were removed, placed in buffer tubes, and transported to a laboratory. The contents of the tubes are grown in culture medium, finally, bacterial colonies associated with each suture were counted.

Settings and conduct

All surgeries were performed by a surgeon at the Ghaedi Dental Clinic in Isfahan.

Participants/Inclusion and exclusion criteria

Patients with periodontitis who require flap surgery in all 4 quadrants. Systemic health; Taking drugs that affect tissue inflammation. Smoking.

Intervention groups

After the periodontal flap surgery, one of the monocryl, monocryl plus, silk or nylon sutures is randomly used for each quadrant.

Main outcome variables

Mean bacterial colonies grown on 4 types of sutures

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220101053584N1**
Registration date: **2022-04-14, 1401/01/25**
Registration timing: **retrospective**

Last update: **2022-04-14, 1401/01/25**

Update count: **0**

Registration date

2022-04-14, 1401/01/25

Registrant information

Name

Samaneh Soltani

Name of organization / entity

Country

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2016-12-10, 1395/09/20

Expected recruitment end date

2017-04-21, 1396/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the number of bacterial colonies among four types of sutures following periodontal surgery in patients with periodontics

Public title

Number of bacterial colonies around periodontal sutures

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

The patients with moderate-to-severe periodontitis requiring periodontal flap surgery in 4 quadrants

Exclusion criteria:

Suffering from systemic diseases (diabetes, cardiovascular diseases, etc.) Use of anti-inflammatory drugs or any other drugs affecting tissue inflammation

Age

From **20 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **12**

More than 1 sample in each individual

Number of samples in each individual: **4**

One quadrant

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description

Only statistical analyzer

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Isfahan University of Medical Sciences

Street address

Isfahan University of Medical Sciences, hezarjarib street

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Isfahan

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Postal code

8174673461

Approval date

2016-10-22, 1395/08/01

Ethics committee reference number

395430

Health conditions studied**1****Description of health condition studied**

Chronic periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic periodontitis

Primary outcomes**1****Description**

Average of bacterial colonies grown on sutures

Timepoint

One week after periodontal surgery

Method of measurement

Count of cultured colonies

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Monocryl suture

Category

Treatment - Devices

2**Description**

Intervention group: Monocryl plus suture

Category

Treatment - Devices

3**Description**

Intervention group: Silk suture

Category

Treatment - Devices

4**Description**

Intervention group: Nylon suture

Category

Treatment - Devices

Recruitment centers**1****Recruitment center****Name of recruitment center**

Ghaedi dental clinic

Full name of responsible person

Narges Naghsh

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

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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

Esfahan 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**

Esfahan University of Medical Sciences

Full name of responsible person

Narges Naghsh

Position

Associate professor

Latest degree

Specialist

Other areas of specialty/work

Periodontics

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

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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