Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 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
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Samaneh Soltani
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Iran (Islamic Republic of)
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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

City
Isfahan

Province
Isfehan

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

Street address
Jahan nama Alley, Imam Hossein Square
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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
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Person responsible for updating data

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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