Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Comparison effect of Connective Tissue Graft (CTG) and Platelet Rich Fibrin in treatment of gingival recession.

Protocol summary

Study aim
The main aim is to compare the clinical effects of palatal grafting (Connective Tissue Graft) and Platelet Rich Fibrin in root coverage surgery

Design
The study is a double-blind split mouth clinical trial in which the patient and the evaluator in the study are blind.

Settings and conduct
This study will be conducted on patients referred to the Faculty of Dentistry, Islamic Azad University of Medical Sciences, Tehran. The surgery is performed bilaterally in each patient, on one side using fibrin rich in platelets (through centrifugation of the patient's blood) and on the other side, palatal connective tissue is taken.

Participants/Inclusion and exclusion criteria
Non-smoker and non-alcoholic; Systemically healthy; Age over 18 years; O'LEARY Index less than 20 percent; The presence of gingival erosion of Miller class 1 on the buccal surface of two non-adjacent anterior teeth of the upper and lower jaw; The depth of the probe is less than 3 mm; The amount of gingival recession is at least 2 mm; Thin periodontal biotype; The presence of attached gingiva at least 2 mm; Absence of cervical restoration in the treatment areas; No history of root coverage surgery ; No history of trauma

Intervention groups
Control: CTG Test:PRF

Main outcome variables
Pocket probing depth, Clinical attachment level, Recession depth, Gingival thickness, Keratinized Gingival Width, Percentage of root coverage, patient's esthetic score and patient sensitivity score

General information

Reason for update

Acronym
CTG, PRF

IRCT registration information
IRCT registration number: **IRCT20231211060331N1**
Registration date: **2023-12-17, 1402/09/26**
Registration timing: **prospective**

Last update: **2023-12-17, 1402/09/26**
Update count: **0**

Registration date
2023-12-17, 1402/09/26

Registrant information

Name
Mahsa Soleimani

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 2256 4571

Email address
m.soleimani@iautmu.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-02-12, 1402/11/23

Expected recruitment end date
2024-06-20, 1403/03/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison effect of Connective Tissue Graft (CTG) and Platelet Rich Fibrin in treatment of gingival recession.

Public title

Comparison effect of Connective Tissue Graft (CTG) and Platelet Rich Fibrin in treatment of gingival recession.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

No systemic disease Bilateral gingival recession Miller 1 Plaque index less than 20%

Exclusion criteria:

Systemic disease No existence of bilateral gingival recession Miller 1 Poor oral hygieny

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **13**

More than 1 sample in each individual

Number of samples in each individual: **2**

Bilateral gingival recession

Randomization (investigator's opinion)

Randomized

Randomization description

To reduce selection bias, the priority of treatment on the right and left side and which treatment should be performed on which side of the patient It is done with Random allocation of concealed using SNOSE (Sequentially numbered sealed opaque) envelopes, that is, sealed and numbered envelopes. (Because the envelopes are sealed, Allocational Concealment will also be done at the same time as Randomization itself.) Blocked randomization is not possible in small volumes. Therefore, the order of performing surgery on the right or left side is done by the method of numbered envelopes

Blinding (investigator's opinion)

Double blinded

Blinding description

In this study, there is no possibility of blinding the surgeon and only the evaluator during the measurements The studied parameters do not know the method performed on the right and left side (which treatment was performed on which side).

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Tehran Islamic Azad University of Medical Sciences

Street address

9th Neyestan St., Pasdaran St., Tehran

City

Tehran

Province

Tehran

Postal code

1946853314

Approval date

2023-11-25, 1402/09/04

Ethics committee reference number

IR.IAU.DENTAL.REC.1402.108

Health conditions studied

1

Description of health condition studied

Gingival recession

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pocket Probing Depth

Timepoint

Day 0 & month 3 & 6

Method of measurement

William probe

2

Description

Recession Depth

Timepoint

Day 0 & month 3 & 6

Method of measurement

William probe

3

Description

Width of keratinizted gingiva

Timepoint

Day 0 & month 3 & 6

Method of measurement

William probe

4

Description

Root Coverage percent

Timepoint

Day 0 & month 3 & 6

Method of measurement
Formula

5

Description
Patient Esthetic Score
Timepoint
Day 0 & month 3 & 6
Method of measurement
Visuagal Analog Score

6

Description
Sensitivity Score
Timepoint
Day 0 & month 3 & 6
Method of measurement
Visual Analog Score

7

Description
Clinical Attachment Level
Timepoint
Day 0 & month 3 & 6
Method of measurement
William prob

8

Description
Gingival Thickness
Timepoint
Day 0 & month 3 & 6
Method of measurement
Endodontic Reamer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Platelet Rich Fibrin
Category
Treatment - Surgery

2

Description
Control group: Connective Tissue Graft
Category
Treatment - Surgery

Recruitment centers

1

Recruitment center
Name of recruitment center
Tehran Islamic Azad University of Medical Sciences
Full name of responsible person
Dr. Mahsa Soleimani
Street address
N.9, 9th Neyestan St., Pasdaran St.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University
Full name of responsible person
Mahsa Soleimani
Street address
No. 9, 9th Neyestan St., Pasdaran St.
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Phone
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Email
Int.affairs@tms.iau.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Islamic Azad University
Proportion provided by this source
20
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
Islamic Azad University

Full name of responsible person
Mahsa Soleimani

Position
Associate professor

Latest degree
Specialist

Other areas of specialty/work
Dentistry

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Position
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
Only data related to results and outcomes will be published.

When the data will become available and for how long
At least 1 month after the end of the study

To whom data/document is available
People with relevant academic education

Under which criteria data/document could be used
Only the data related to the obtained results will be accessible.

From where data/document is obtainable
drsoleimani63@gmail.com

What processes are involved for a request to access data/document
At least 1 week after receiving the email

Comments