

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Clinical Comparison Root coverage in Coronally Advanced Flap Technique with free Connective Tissue Graft and Platelet-Rich Fibrin in Patients with Root coverage candidates

Protocol summary

Study aim

Clinical comparison and root coverage in Coronally Advanced flap technique with free connective tissue graft and Platelet-Rich Fibrin

Design

Non-control group randomized, double-blind, placebo-controlled clinical trial

Settings and conduct

Department of Periodontology and Implantation, Faculty of Dentistry, Isfahan University of Medical Sciences

Participants/Inclusion and exclusion criteria

Patients under study were selected from the periodontology and implant department of Isfahan University of Medical Sciences, between the ages of 18 and 65 years, requiring gingival recession treatments in each of the incisors and mandibular incisors and premolars. Provided that the buccal level of analysis is classified in groups of 1 or 2, Miller does not rot or repair in the tooth in question and at least has an area requiring root coverage. Patients will be included in the study if they so choose. Patients with specific systemic conditions affecting recovery such as uncontrolled diabetes, immunodeficiency diseases, systemic or localized bone disease, history of alcohol use, addiction, smoking (currently), pregnancy, people taking immunosuppressive or anticoagulant drugs, Patients with poor cooperation and untreated active periodontal disease specimens and those who were unable to maintain oral health or who did not wish to maintain oral health were excluded. Also, in case of any repair or caries on buccal surface of the desired teeth or pathological abnormality in the teeth, the samples are excluded.

Intervention groups

Platelet-rich fibrin group derived from patient's blood and used for root coverage during surgery. The other group consists of connective tissue graft taken from the

patient's palate and used for root coverage surgery.

Main outcome variables

PD, CAL, WKT, RH, WH, TB

General information

Reason for update

Acronym

PRF

IRCT registration information

IRCT registration number: **IRCT20200329046889N1**

Registration date: **2020-06-28, 1399/04/08**

Registration timing: **registered_while_recruiting**

Last update: **2020-06-28, 1399/04/08**

Update count: **0**

Registration date

2020-06-28, 1399/04/08

Registrant information

Name

fatemeh ghorbani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 5437 5699

Email address

f.ghorbani69@dnt.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-12, 1399/03/23

Expected recruitment end date

2020-07-05, 1399/04/15

Actual recruitment start date

empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Clinical Comparison Root coverage in Coronally Advanced Flap Technique with free Connective Tissue Graft and Platelet-Rich Fibrin in Patients with Root coverage candidates

Public title
Effect of platelet-rich fibrin on root surface coverage

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Referrers to the periodontology and implant department of the School of Dentistry of Isfahan University of Medical Sciences, aged 18-60 years, who are seeking treatment for gingival recession in each of the incisors and maxillary or mandibular premolars, are selected. The type of Miller gingival recession is 1 or 2 and Teeth should not be decayed or filled and at least has two areas that require root coverage.
Exclusion criteria:
Patients with specific systemic conditions affecting recovery such as uncontrolled diabetes, immunodeficiency diseases, systemic or localized bone disease, history of alcohol use, addiction, smoking (currently), pregnancy, people taking immunosuppressive or anticoagulant drugs, Patients with poor cooperation and untreated active periodontal disease specimens and those who were unable to maintain oral hygiene or who did not wish to maintain oral hygiene were excluded. Also, in case of any repair or caries on buccal surface of the desired teeth or pathological mobility in the teeth, the samples are excluded.

Age
From **18 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Outcome assessor
- Data analyser

Sample size
Target sample size: **24**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description
In this study, surgeons and patients are aware of the type of treatment due to the use of connective tissue or PRF, which is taken from the patient's blood, but the outcome assessor and the analyst are not aware.

Placebo
Not used

Assignment
Factorial

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

Azadi Square ,Hezarjarib st.

City

Isfahan

Province

Isfahan

Postal code

73461-81746

Approval date

2020-06-10, 1399/03/21

Ethics committee reference number

IR.MUI.RESEARCH.REC.1399.128

Health conditions studied

1

Description of health condition studied

Gingival recession

ICD-10 code

K06.0

ICD-10 code description

Gingival recession (generalized)(localized)(post infective)(post-operative)

Primary outcomes

1

Description

Recession Height

Timepoint

3 and 6 month

Method of measurement

Michigan Probe

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The platelet-rich fibrin group is prepared from the patient's blood during the centrifugation process within 12 minutes

Category

Treatment - Surgery

2

Description

Intervention group: Connective tissue grafting group, which is prepared from the palate of each patient

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Department of Periodontology and Implantation,
Faculty of Dentistry, Isfahan University of Medical S

Full name of responsible person

Fatemeh Ghorbani

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Barazandeh street

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8193976468

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Mohamad tavakoli

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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

Fatemeh Ghorbani

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Dentistry

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Position

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Latest degree

Medical doctor

Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Fatameh Ghorbani
Position
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Latest degree
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Other areas of specialty/work
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Street address
Barazande
City
Esfahan
Province

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

Lack of time and budget

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