

# 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

#### Street address

Barazandeh street

#### City

Esfahan

#### Province

Isfahan

#### Postal code

8193976468

#### Phone

+98 31 5437 5699

#### Email

f.ghorbani69@dnt.mui.ac.ir

## Sponsors / Funding sources

## 1

### Sponsor

#### Name of organization / entity

Esfahan University of Medical Sciences

#### Full name of responsible person

Mohamad tavakoli

#### Street address

Barazandeh

#### City

Esfahan

#### Province

Isfahan

#### Postal code

8193976468

#### Phone

+98 31 3792 5570

#### Email

tavakoli@mui.ac.ir

#### 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

#### Street address

Barazandeh

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009854375699

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## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Esfahan University of Medical Sciences

#### Full name of responsible person

Fatameh Ghorbani

#### Position

Resident

#### Latest degree

Medical doctor

#### Other areas of specialty/work

Dentistry

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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**  
Resident  
**Latest degree**  
Medical doctor  
**Other areas of specialty/work**  
Dentistry  
**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