

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

comparative evaluation of platelet rich fibrin membrane and allograft membrane along with demineralized freeze dried bone allograft in the treatment of mandibular grade II furcation defects.

Protocol summary

Study aim

comparative evaluation of platelet rich fibrin membrane and allograft membrane along with demineralized freeze dried bone allograft in the treatment of mandibular grade II furcation defects.

Design

two arm parallel group randomized trial with blind postoperative care and outcome assessment

Settings and conduct

This study is a double blinded randomized clinical trial that will conduct on 30 Grade II mandibular furcation defects in the Department of Periodontology, Dental College, Mashhad University of Medical Sciences. In Control Group followed by open flap debridement (OFD), placement of DFDBA material and collagen membrane (Regen™) will be done. For Test Group placement of DFDBA material and PRF membrane will be done. All clinical parameters such as Gingival index (GI), probing depth (PD), vertical clinical attachment level (VCAL), horizontal clinical attachment level (HCAL), and gingival marginal level (GML) will be recorded at baseline and after 6-month postoperative.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Patient with Grade II furcation involvement in one of their mandibular molars, the horizontal depth defect with minimum 3 mm. Exclusion criteria: Patients with complicated medical history, pregnant and/or lactating females, Patients with a habit of using tobacco products and smoking, teeth with Grade II mobility, The presence of cervical lesions, cervical restoration, cervical enamel pearls.

Intervention groups

use of PRF with DFDBA material in test group and use of allograft membrane along with DFDBA in control group

Main outcome variables

comparison horizontal clinical attachment level at baseline and six months postoperative.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20191129045539N1**

Registration date: **2020-01-01, 1398/10/11**

Registration timing: **prospective**

Last update: **2020-01-01, 1398/10/11**

Update count: **0**

Registration date

2020-01-01, 1398/10/11

Registrant information

Name

Mohsen Kashani nejad

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3846 0502

Email address

kashaninezhadm971@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-02-04, 1398/11/15

Expected recruitment end date

2020-08-05, 1399/05/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparative evaluation of platelet rich fibrin membrane and allograft membrane along with demineralized freeze dried bone allograft in the treatment of mandibular grade II furcation defects.

Public title

Effect of PRF membrane in treatment of furcation defects

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patient whit Grade II furcation involvement in one of their mandibular molars the horizontal depth defect with minimum 3 mm

Exclusion criteria:

Patients with complicated medical history pregnant and/or lactation females Patients with a habit of using of tobacco products and smoking teeth with Grade II mobility The presence of cervical lesions,cervical restoration, cervical enamel pearls

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 30

Randomization (investigator's opinion)

Randomized

Randomization description

in our study randomization take place using randomization.com website and random number has insreted in pocket.

Blinding (investigator's opinion)

Double blinded

Blinding description

in this study because of our intervention include using prf in one group,er are not capable to blind surgeon so in our study blindness perform for outcome assessor and data analyzer

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Mashhad University of Medical Sciences

Street address

Vakil abad Blvd,Mashhad,dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Approval date

2019-06-26, 1398/04/05

Ethics committee reference number

IR.MUMS.DENTISTRY.REC.1398.066

Health conditions studied

1

Description of health condition studied

periodontal disease

ICD-10 code

K05.6

ICD-10 code description

Periodontal disease, unspecified

Primary outcomes

1

Description

Horizontal clinical attachment level

Timepoint

at baseline and after 6-month postoperative

Method of measurement

with use periodntal probe

Secondary outcomes

1

Description

probing depth

Timepoint

at baseline and after 6-month postoperative

Method of measurement

using periodontal probe

2

Description

vertical clinical attachment level

Timepoint

at baseline and after 6-month postoperative

Method of measurement

using periodontal probe

3

Description

ایندکس لثه ای

Timepoint

at baseline and after 6-month postoperative

Method of measurement

using periodontal probe

Intervention groups

1

Description

Intervention group: The furcation defects by placement of PRF membrane and DFDBA material will graft

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Mashhad University of Medical Sciences

Full name of responsible person

Mohsen kashani nejad

Street address

Vakil abad Blvd, Mashhad dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Phone

+98 51 3846 0502

Email

kashaninezhadm971@mums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Reza Zare Mahmoodabadi

Street address

Vakil abad Blvd, Mashhad, dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Phone

+98 51 3806 7257

Email

kashaninezhadm971@mums.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Mashhad 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

Mashhad University of Medical Sciences

Full name of responsible person

Mohsen Kashani nejad

Position

resident

Latest degree

Medical doctor

Other areas of specialty/work

Dentistry

Street address

Vakil abad Blvd, Mashhad, dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Phone

+98 51 3806 7257

Email

kashaninezhadm971@mums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Mohsen Kashani nejad

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Dentistry

Street address

Vakil abad Blvd, Mashhad, dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Phone

+98 51 3806 7257

Email

kashaninezhadm971@mums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Mohsen Kashani nejad

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Dentistry

Street address

Vakil abad Blvd,Mashhad,dental faculty

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948959

Phone

+98 51 3806 5257

Email

kashaninezhadm971@mums.ac.ir

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