

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Jun 2026

Clinical and radiographic results of treatment of periodontal intrabony defects with porous titanium granules and xenograft with collagen membrane

Protocol summary

Summary

In this split-mouth randomized single-blind clinical trial, 15 moderate-to-severe chronic periodontitis patients with at least 1 pair intrabony non-adjacent lesions were entered. Pocket probing depth (PPD), clinical attachment level (CAL) and bone crest level was measured in the lesions prior to surgery. After the surgery; porous titanium granules (Natix) were implanted in the lesions at one side of the mouth and Bio-Oss + Bio-Gide membrane in the contralateral side. Clinical and radiographic parameters were again measured 4 months after the surgery and their changes were statistically analyzed by analysis of variance for repeated measures test.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015111425042N1**

Registration date: **2016-05-08, 1395/02/19**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-05-08, 1395/02/19

Registrant information

Name

Zahra Nateghi

Name of organization / entity

Shahid Beheshti

Country

Iran (Islamic Republic of)

Phone

+98 21 4433 5381

Email address

dr.nateghi@sbmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2015-09-23, 1394/07/01

Expected recruitment end date

2015-12-22, 1394/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical and radiographic results of treatment of periodontal intrabony defects with porous titanium granules and xenograft with collagen membrane

Public title

Clinical and radiographic results of treatment of periodontal intrabony defects with porous titanium granules and xenograft with collagen membrane

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: no systemic disease; moderate to advance chronic periodontitis; a pair of non adjacent intrabony defects in radiography in alveolar bone; good oral hygiene; frequent dental visit
Exclusion criteria: systemic disease; localized or generalized aggressive periodontitis; suprabony defects; poor oral hygiene; infrequent dental visit

Age

From **30 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked*No information***Sample size**Target sample size: **15****Randomization (investigator's opinion)**

Not randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Department of Periodontics Shahid Beheshti Dental School

Street address

tehran

City

tehran

Postal code**Approval date**

2011-02-10, 1389/11/21

Ethics committee reference number

IR.SBMU.RIDS.REC.1394.109

Health conditions studied**1****Description of health condition studied**

moderate to severe chronic periodontitis

ICD-10 code

B99

ICD-10 code description

B99

Primary outcomes**1****Description**

clinical attachment level measurement from CEJ to sulcular depth

Timepoint

Before intervention ,4 month after intervention

Method of measurement

Periodontal probe

2**Description**

pocket probing depth measurement from gingival margin to sulcular depth

Timepoint

Before intervention ,4 month after intervention

Method of measurement

Periodontal probe

Secondary outcomes**1****Description**

Quality of alveolar bone

Timepoint

Before intervention , 4 months after intervention

Method of measurement

Radiographic assesment

Intervention groups**1****Description**

Intervention group 1 :Porous Titanium Granules which is made in swiss without membrane used for treatment of intrabony defects

Category

Treatment - Surgery

2**Description**

Control group :Bio-Oss which is bovine xenograft with Bio-Gide which is porcine collagene membrane are used for treatment of intrabony defects

Category

Treatment - Surgery

Recruitment centers**1****Recruitment center****Name of recruitment center**

Shahid Beheshti Department of Periodontics

Full name of responsible person

zahra nateghi

Street address

tehran

City

tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

vice chancellor for Research of Dental School ,Shahid Beheshti University of Medical Science

Full name of responsible person

dr arash khojasteh

Street address

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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

vice chancellor for Research of Dental School ,Shahid Beheshti University of Medical Science

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

empty

Person responsible for general inquiries

Contact**Name of organization / entity**

Dental School, Shahid Beheshti University of Medical Sciences

Full name of responsible person

zahra nateghi

Position

resident

Other areas of specialty/work**Street address**

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post graduate student

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty