Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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 radiograghy in alveular bone؛ good oral hygine؛ frequent dental visit Exclusion criteria:systemic disease؛ localized or generalized aggressive periodontitis؛ suprabony defects؛ poor oral hygine؛ 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 measurment 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
Radiografic 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 Deparment 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

tehran

City

tehran

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

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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