

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of ceno bone biomaterial with dbm putty on the preservation of the alveolar ridge and soft tissue after tooth extraction

Protocol summary

Study aim

Comparison of ceno bone with DBM putty on the preservation of alveolar ridge and soft tissue after tooth extraction

Design

Clinical trial with control group, parallel groups, double-blind, randomized, on 36 patients. Envelopes were used for randomization.

Settings and conduct

in the periodontology department of Jundi Shapur University of Ahvaz the tooth will be removed atraumatically., then the width and height of the ridge will be measured. Only the surgeon is aware of the type of material used in each group A and B, and as a result, the evaluations and measurements are performed in a double-blind manner. 36 envelopes of the same color and size are prepared and a code is written inside each envelope and one of the envelopes is randomly selected for each patient. CenoBone or demineralized putty will be randomly compressed in the socket of the tooth. Then collacone is placed and the wound will be sutured with 0-4 silk . 4 months after tooth extraction , a new measurement will be made similar to what was done after tooth extraction.

Participants/Inclusion and exclusion criteria

Patients who visited the periodontology department of Jundi Shapur University of Ahvaz for tooth extraction and implant placement. exclusion: systemic disease, diabetes, pregnancy, periodontitis, They did not have a history of radiation therapy, use of steroids, use of drugs other than those considered in the study, smoking, known allergy to the materials used in the study, need for antibiotic prophylaxis

Intervention groups

CenoBone or demineralized putty will be randomly compressed in the socket of the tooth. Then collacone is placed and the wound will be sutured with 0-4 silk . 4 months after tooth extraction , a new measurement will be made.

Main outcome variables

Comparison of buccolingual and vertical dimension of bone in 3 groups

General information

Reason for update

Acronym

dbm putty

IRCT registration information

IRCT registration number: **IRCT20221128056649N1**

Registration date: **2023-04-15, 1402/01/26**

Registration timing: **prospective**

Last update: **2023-04-15, 1402/01/26**

Update count: **0**

Registration date

2023-04-15, 1402/01/26

Registrant information

Name

Zahra Akbari

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 3731 3891

Email address

akbarizahra490@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-04-21, 1402/02/01

Expected recruitment end date

2023-08-06, 1402/05/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of ceno bone biomaterial with dbm putty on the preservation of the alveolar ridge and soft tissue after tooth extraction

Public title

Comparison of ceno bone biomaterial with dbm putty on the preservation of the alveolar ridge and soft tissue after tooth extraction

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients who visited the periodontology department of Ahvaz Jundishapur University for tooth extraction and implant placement.

Exclusion criteria:

Systemic disease, diabetes, pregnancy, periodontitis, history of radiation therapy, use of steroids, smoking, known allergy to the materials used in the study, need for antibiotic prophylaxis.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Data analyser

Sample size

Target sample size: **36**

Randomization (investigator's opinion)

Randomized

Randomization description

30 envelopes with the same color and size are prepared and a code is written inside each envelope that belongs to one of the groups and one of the envelopes is randomly selected for each patient in such a way that only surgeons will be known about substance consumed in each group and the evaluator is not aware of the type of substance consumed.

Blinding (investigator's opinion)

Double blinded

Blinding description

30 envelopes with the same color and size are prepared and a code is written inside each envelope that belongs to one of the groups and one of the envelopes is randomly selected for each patient in such a way that only surgeons will be known about substance consumed in each group and the evaluator is not aware of the type of substance consumed.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of Jundishapur University of Ahvaz

Street address

4 East Kian Abad St., Masih Building, No. 150, 2nd Floor

City

ahvaz

Province

Khouzestan

Postal code

6155655938

Approval date

2022-07-13, 1401/04/22

Ethics committee reference number

IR.AJUMS.REC.1401.422

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

resorption of alveolar ridge after tooth extraction

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

alveolar ridge width and hight after tooth extraction

Timepoint

after tooth extraction and 4 months after intervention

Method of measurement

depth gauge and caliper

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

Soft tissue dimensions

Timepoint

after tooth extraction and 4 months after intervention

Method of measurement

cs3600 scanner

Intervention groups

1

Description

Intervention group: DFDBA with the trade name CenoBone in the form of cortical cancellus demineralized powder with size 500-1000 made by Kish Tissue Replicator Company will be compressed in the socket of the tooth to the level of the alveolar crest. Then a collacone made by Khosrow Medisa Teb will be placed. The wound will be sutured without attempt to primary closure

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Dentistry Unit of Jundishapur University of Ahvaz

Full name of responsible person

zahra akbari

Street address

4 East Kian Abad St., Masih Building, No. 150, 2nd Floor

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Postal code

6155655938

Phone

+98 61 3442 5639

Email

akbarizahra490@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ahvaz University of Medical Sciences

Full name of responsible person

hojatolah yousefimanesh

Street address

4 East Kian Abad St., Masih Building, No. 150, 2nd Floor

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ahvaz

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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

Ahvaz 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

Ahvaz University of Medical Sciences

Full name of responsible person

zahra akbari

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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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is 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

Title and more details about the data/document

all collected deidentified IPD

**When the data will become available and for how
long**

starting 6 months after publication

To whom data/document is available

is this only available for people working in academic
institutions

Under which criteria data/document could be used

In the framework of ethics committee rules

From where data/document is obtainable

akbarizahra490@yahoo.com

**What processes are involved for a request to access
data/document**

After acceptance of proposal related to the research
topic and getting the code of ethics and sending the
request to the mentioned email

Comments