Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

City
ahvaz

Province
Khouzestan

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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Email
akbarizahra490@yahoo.com

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

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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