Clinical Trial Protocol
Iranian Registry of Clinical Trials

27 Nov 2026

The evaluation of clinical changes after conservative tooth extraction with resorbable native collagen cone(Bone Protect Cone)

Protocol summary

Study aim
Determination of clinical changes after conservative tooth extraction with resorbable native collagen cone

Design
A clinical trial with two parallel groups, single blinded,randomized on 14 patients,simple randomization method with 14 folded papers (half for intervention group and half for control group)was used for randomization

Settings and conduct
A clinical trial consisting of 14 patients referred to the dental clinic of Bushehr University of Medical Sciences required posterior teeth extraction (premolar and molar) and implant placement. Patients were divided into two groups: 1) case group 2) control group then bone width and height in Both groups were measured and then the teeth were extracted conservatively.in test group sockets filled with Bone Protect Cone and sutured; in control group sockets just sutured without any Bone Protect Cone.horizontal and vertical dimensions of alveolar ridge in two groups were evaluated, considered and compared at least after three months.

Participants/Inclusion and exclusion criteria
People who are over 18 years old and are in healthy condition that need a posterior tooth extraction and replace it with implant

Intervention groups
Case group: A group of people who, after conservative tooth extraction, have conical Bone Protect Cone placed in their tooth sockets and implanted after three months Control group: A group of people who are implanted after three months after conservative tooth extraction without putting any substance in their tooth sockets

Main outcome variables
Alveolar ridge width Alveolar ridge height

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200924048829N1**
Registration date: **2021-01-07, 1399/10/18**
Registration timing: **retrospective**

Last update: **2021-01-07, 1399/10/18**
Update count: **0**

Registration date
2021-01-07, 1399/10/18

Registrant information

Name
Saman Mohammadzade

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 77 3332 3226

Email address
s.mohammadzadeh@bpums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-09-20, 1399/06/30

Expected recruitment end date
2020-09-23, 1399/07/02

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The evaluation of clinical changes after conservative tooth extraction with resorbable native collagen cone(Bone Protect Cone)

Public title
The evaluation of clinical changes after conservative tooth extraction with resorbable native collagen cone(Bone Protect Cone)
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Patients over 18 years old Patients with healthy systemic status Somebody who needs to extraction of a posterior tooth (premolar or molar) in the jaw(maxilla or mandible) and then place it with an implant The presence of a tooth adjacent to the tooth to be extracted
Exclusion criteria:
People who are immunocompromised Using immunosuppressive drugs Pregnant and lactating women With acute Periodontol disease People who are addicted,alcoholic and who are using drugs Smoking more than 10 cigarettes a day Patients with uncontrollable systemic disease People with mental health problems The presence of an abscess or pus adjacent to the tooth to be extracted
Age
From **18 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **14**
Randomization (investigator's opinion)
Randomized
Randomization description
For segmentation of patients into two groups of 7(intervention group: placing absorbable collagen cone (Bone Protect Cone) in sockets and suturing and control group: not placing any material in sockets and suturing) simple randomization was used. In this way, 14 folded papers, half of which belong to the intervention group and half to the control group, are given to the patient. And the patient takes a sheet out of the paper container and after opening it, the assigned group is identified. The expected process is performed by the surgeon. the assessor should not be aware of intervention that takes place for the individual.
Blinding (investigator's opinion)
Single blinded
Blinding description
The impact assessor is not aware of the intervention.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Boushehr University of Medical Science
Street address
Moalem street
City
Boushehr
Province
Boushehr
Postal code
۷۵۱۴۶۳۳۱۹۶
Approval date
2020-09-20, 1399/06/30
Ethics committee reference number
IR.BPUMS.REC.1399.104

Health conditions studied

1

Description of health condition studied
Socket preservation
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Alveolar ridge width
Timepoint
At the beginning and 3 months after using Bone Protect Cone
Method of measurement
Castroviejo caliper

2

Description
Alveolar ridge height
Timepoint
At the beginning and 3 months after using Bone Protect Cone
Method of measurement
Periodontal probe

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: In this group after extracting

tooth,put Bone Protect Cone in socket and it is sutured; after three months they visit to insert implant-Necessary measurements are taken before tooth extraction and three months later

Category

Treatment - Other

2

Description

Control group: in this group after extracting tooth,put nothing in socket and it is sutured; after three months they visit to insert implant-Necessary measurements are taken before tooth extraction and three months later

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Boushehr University of Medical Sience Dental Clinic

Full name of responsible person

Fatemeh Ghasemi

Street address

Shahid Heidari St,Emam Khomeini Ave,Dental Clinic of Boushehr University of Medical Sience

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Boushehr University of Medical Sciences

Full name of responsible person

Gholamreza Khamisipour

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Moalem Ave

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R.khamisipour@bpums.ac.ir

Web page address

Grant name

-

Grant code / Reference number

-

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

Yes

Title of funding source

Boushehr 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

Boushehr University of Medical Sciences

Full name of responsible person

Saman Mohammadzade

Position

Associated professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Boushehr University of Medical Sciences

Full name of responsible person

Saman Mohammadzade

Position

Associate professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

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Person responsible for updating data

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Position
Associate professor
Latest degree
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Other areas of specialty/work
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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