

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparative Evaluation of Manual Cross-action and Powered Cross-action Toothbrushes in Control of Plaque and Soft Tissue Inflammation Around Implants Supporting Mandibullar Overdentures.

Protocol summary

Summary

This study was a cross over clinical trial to determine the efficacy of powered and manual toothbrush in the control of plaque and soft tissue inflammation around the mandibullar overdenture supporting implants. Samples involved 10 edentulous subject, aged 47-72 years, having removable mandibullar overdenture which supported by 2 unsplinted implant, and all of them were using maxillary complete denture. Study consisted of two 4-weeks periods that were separated by a 2-week interval as wash out phase. In each phase subjects were randomly assigned to one of the intervention groups (type of toothbrushes). 2 days prior to the start of each phase implants were polished. Plaque index and bleeding index before and after brushing were recorded. Data analyzed by SPSS software and with T-test.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201104054877N4**
Registration date: **2011-04-26, 1390/02/06**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-04-26, 1390/02/06

Registrant information

Name

Jaber Yaghini

Name of organization / entity

Isfahan University of Medical Sciences and Health Services

Country

Iran (Islamic Republic of)

Phone

+98 31 1434 2136

Email address

j_yaghini@dnt.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Research Chancellery of Isfahan Faculty of Dentistry

Expected recruitment start date

2009-01-07, 1387/10/18

Expected recruitment end date

2009-07-27, 1388/05/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative Evaluation of Manual Cross-action and Powered Cross-action Toothbrushes in Control of Plaque and Soft Tissue Inflammation Around Implants Supporting Mandibullar Overdentures.

Public title

Comparative Evaluation of Manual and Powered Toothbrushes in Control of Plaque and Soft Tissue Inflammation Around Implants Supporting Overdentures.

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Is not smoker From 3 months before; using no antibiotic or antimicrobial mouthwash; Have not any medical problems such as soft tissue problems; Exclusion criteria; Use of other hygienic regimen except which researcher is explaining; and afflict to malady that

needs use of antibiotics and affects soft tissue; lack of cooperation by the patient

Age

From **47 years** old to **72 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Chancellery of Isfahan Faculty of Dentistry

Street address

Isfahan Faculty of Dentistry

City

Isfahan

Postal code

Approval date

2009-03-20, 1387/12/30

Ethics committee reference number

388113

Health conditions studied

1

Description of health condition studied

Mandibular Implants

ICD-10 code

Z96.5

ICD-10 code description

Presence of Tooth-root and Mandibular Implants

Primary outcomes

1

Description

Plaque Measurement

Timepoint

2weeks

Method of measurement

Modified Plaque Index

Secondary outcomes

1

Description

Bleeding Measurement

Timepoint

2weeks

Method of measurement

Modified Sulcus Bleeding Index

Intervention groups

1

Description

Use of Manual Cross-action Toothbrush

Category

Other

2

Description

Use of Power Cross-action Toothbrush

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Isfahan Faculty of Dentistry

Full name of responsible person

Dr.Ahmad Moghareabed

Street address

Department of Periodontology - Isfahan Faculty of Dentistry

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Chancellery of Isfahan Faculty of Dentistry

Full name of responsible person

Dr. Omid Savabi

Street address

Research Chancellery of Isfahan Faculty of Dentistry

City

Isfahan

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Research Chancellery of Isfahan Faculty of Dentistry
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
Isfahan Faculty of Dentistry
Full name of responsible person
Dr.Jaber Yaghini
Position
Periodontologist-Assistant Professor
Other areas of specialty/work
Street address
Department of Periodontology-Isfahan Faculty of Dentistry
City
Isfahan
Postal code
Phone
+98 31 1792 2842
Fax
Email
J_Yaghini@dnt.mui.ac.ir
Web page address

Person responsible for scientific

inquiries

Contact
Name of organization / entity
Isfahan Faculty of Dentistry
Full name of responsible person
Dr.Ahmad Moghareabed
Position
Periodontologist-Associated Professor
Other areas of specialty/work
Street address
Isfahan Faculty of Dentistry-Department of Periodontology
City
Isfahan
Postal code
Phone
+98 31 1792 2842
Fax
Email
Moghareabed@dnt.mui.ac.ir
Web page address

Person responsible for updating data

Contact

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