

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

comparative evaluation of plaque control following tooth brushing with three different dentifrices and without dentifrice

Protocol summary

Summary

The present study is used to evaluate the plaque removal efficacy of dentifrice alone during the manual tooth brushing. The study population consisted of 30 student volunteers of dental school of Isfahan medical university. Inclusion criteria: age > 18 years and at least 5 evaluable teeth per quadrant. Exclusion criteria are: orthodontic appliances, removable denture, pregnancy, smoking, periodontitis, any systemic disease that may affect the oral condition and hypersensitivity to the components of the dentifrices. Study design: in a double blinded cross over study 30 subjects, after 48 hours plaque accumulation have brushed randomly with one of the four study methods (brushing with one of the 3 dentifrices that differs with respect to the relative dentin abrasivity (RDA) and without dentifrice), under supervision for 2 minutes. Study was applied in 4 sessions and each subject experienced brushing with all of the methods at the end of the 4th session. Difference in plaque score before and after tooth brushing constitute the plaque reduction. Plaque scores were assessed according to the Quigley and Hein index (Turskey and Loben modification) and they were recorded, analyzed and compared.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201102234877N3**

Registration date: **2011-09-04, 1390/06/13**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-09-04, 1390/06/13

Registrant information

Name

Jaber Yaghini

Name of organization / entity

Isfahan University of Medical Sciences and Health Services

Country

Iran (Islamic Republic of)

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+98 31 1434 2136

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Recruitment status

Recruitment complete

Funding source

Isfahan University of Medical Sciences

Expected recruitment start date

2010-10-23, 1389/08/01

Expected recruitment end date

2011-02-20, 1389/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparative evaluation of plaque control following tooth brushing with three different dentifrices and without dentifrice

Public title

comparison of efficacy of tooth brushing with three different dentifrices and without dentifrice in plaque removal.

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: age > 18 years and at least 5 evaluable

teeth per quadrant; Exclusion criteria: orthodontic appliances; removable denture; pregnancy; smoking; periodontitis; any systemic disease that may affect the oral condition; hypersensitivity to the components of the dentifrices;

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 30

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Crossover

Other design features**Secondary Ids**

empty

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

Isfahan medical university

Street address

Periodontology department-Dental faculty-Isfahan medical university-Hezar jerib avenue-

City

Isfahan

Postal code

81746 -73461

Approval date

2010-09-23, 1389/07/01

Ethics committee reference number

390148

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

dental plaque

ICD-10 code

K03.6

ICD-10 code description

Deposits [accretions] on teeth

Primary outcomes**1****Description**

Dental plaque

Timepoint

Before brushing and after brushing

Method of measurement

Disclosing tab

Secondary outcomes

empty

Intervention groups**1****Description**

In the third session, the first step is type 3; ORIGINAL SENSODINE to all of the volunteers and ask them to brush with the new toothbrush and toothpaste for a week in order to be familiar to them. Then ask them not to use any kind of plaque control method for 48 hours. The next step is measuring of plaque and then ask them to brush with their new tooth brush and tooth paste for 2 minutes. In the next step, examiner measures the post brushing plaque and amount of plaque reduction and record it.

Category

Prevention

2**Description**

The last session is asking volunteers not to use any kind of plaque control method for 48 hours. Then measuring of plaque and then ask them to brush with their new tooth brush and without any toothpaste for 2 minutes. In the next step, examiner measures the post brushing plaque and amount of plaque reduction and record it.

Category

Prevention

3**Description**

The first step is giving the same toothbrush (gum 411) and toothpaste type 1; WHITENING POONE to all of the volunteers and ask them to brush with the new toothbrush and toothpaste for a week in order to be familiar to them. Then ask them not to use any kind of plaque control method for 48 hours. The next step is measuring of plaque and then ask them to brush with their new tooth brush and tooth paste for 2 minutes. In the next step, examiner measures the post brushing plaque and amount of plaque reduction and record it.

Category

Prevention

4

Description

In the next session, first step is giving the toothpaste type2; 3DWHITE CREST to all of the volunteers and ask them to brush with the new toothbrush and toothpaste for a week in order to be familiar to them. Then ask them not to use any kind of plaque control method for 48 hours. The next step is measuring of plaque and then ask them to brush with their new tooth brush and tooth paste for 2 minutes. In the next step, examiner measures the post brushing plaque and amount of plaque reduction and record it.

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Isfahan University of Medical Sciences

Full name of responsible person

Dr jaber yaghini

Street address

Periodontology department, Dental faculty, Isfahan University of Medical Sciences

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Isfahan University of Medical Sciences

Full name of responsible person

Dr Omid Savabi

Street address

Periodontology Department, Dental Faculty, Isfahan University of Medical Sciences

City

Isfahan

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, Isfahan University of Medical Sciences

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 University of Medical Sciences

Full name of responsible person

Dr Jaber Yaghini

Position

Assistant professor

Other areas of specialty/work

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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