

Clinical Trial Protocol

Iranian Registry of Clinical Trials

22 Sep 2026

Histological evaluation of clinical effect of topical application of barberries dental gel on the gingival inflammation

Protocol summary

Summary

This study was aimed to evaluate the histological evaluation of the therapeutic effects and the clinical findings of the dental gel that included Berberis on gingival inflammation. In this study, 15 patients referred to the periodontology department of the Mashhad University of Medical Sciences, Iran and suffering from moderate to severe chronic periodontitis (according to AAP classification) were examined. Soft splint was provided for both jaws with the gap in central parts of teeth. Patients were asked to use semi-full splint of Berberis gel on one side and placebo gel on another side of jaw every night for two weeks. PI and GI were measured at the baseline, one and two weeks after intervention. Gum biopsy specimens were also obtained for the histological investigation.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138804302216N1**

Registration date: **2009-10-26, 1388/08/04**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2009-10-26, 1388/08/04

Registrant information

Name

Mahboobeh Shabzendedar

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 1882 9501

Email address

shabzendedarm@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellery for research, Mashhad University of Medical Sciences

Expected recruitment start date

2008-01-21, 1386/11/01

Expected recruitment end date

2008-10-22, 1387/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Histological evaluation of clinical effect of topical application of barberries dental gel on the gingival inflammation

Public title

Histological evaluation of clinical effect of topical application of barberries dental gel on the gingival inflammation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Patients suffering from moderate to severe chronic periodontitis (according to AAP classification) referred to the Periodontology, Department of Mashhad University of Medical Sciences, Iran. Exclusion criteria: Presence of immunodeficiency, presence of diabetes, consumption of antibiotic during 3 months prior to study, using antibacterial mouth rinse, use of contraceptive drugs, presence of hematologic disorder, smoking

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: 15

Randomization (investigator's opinion)

Randomized

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

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Mashhad University of Medical Sciences

Street address

Ghoreishi building, Mashhad University of Medical Sciences, Daneshgah St,

City

Mashhad

Postal code**Approval date**

empty

Ethics committee reference number

87023

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

Periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic periodontitis complex

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

Improvement of gingivitis

Timepoint

Two week after use of test gel

Method of measurement

Surgery area and gum-biopsy specimens were obtained for the histological investigation.

Secondary outcomes

empty

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

Placebo gel, in soft splint, every night for two weeks

Category

Treatment - Drugs

2**Description**

Berberin gel, in soft splint, every night for two weeks

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Periodontology deptment of Mashhad Dental School

Full name of responsible person

Dr Moeen Taghavi

Street address

Periodontology department, Dental School, Vakil abad Ave.

City

Mashhad

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice chancellor for research, Mashhad University of Medical Sciences

Full name of responsible person

Abass Makarem

Street address

Ghoreishi building, Daneshgah St., Vice chancellor for research, Mashhad University of Medical Sciences

City

Mashhad

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, Mashhad 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
Dental School
Full name of responsible person
Mahboobeh Shabzendedar
Position
Assistant professor
Other areas of specialty/work
Street address
Pediatric Department, Dental school, Vakil abad Ave
City
Mashhad
Postal code
91775-984
Phone
+98 51 1882 9501
Fax
Email
shabzendedarm@mums.ac.ir
Web page address
www.mums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Abass Makarem
Position
Professor
Other areas of specialty/work
Street address
Pediatric Department. Dental School , Vakil abad
Ave
City

Mashhad
Postal code
91775-984
Phone
+98 511882950115
Fax
+98 51 1842 0305
Email
makarema@mums.ac.ir
Web page address
www.mums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Dental School
Full name of responsible person
Mahboobeh Shabzendedar
Position
Assistant Professor
Other areas of specialty/work
Street address
Pediatric Department, Dental School, Vakil abad
Ave.
City
Mashhad
Postal code
91775-984
Phone
+98 51 1882 9501
Fax
Email
shabzendedarm@mums .ac.ir
Web page address
www.mums.ac.ir

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